McClellan-Palomar Airport
FAR Part 150 Study Update

Noise Exposure Maps
Volume 1 of 2

Prepared For:

McClellan-Palomar Airport

URS Project No. 27653003.01301

Accepted by the FAA on
April 26, 2005

McCLELLAN-PALOMAR AIRPORT
FAR PART 150 STUDY UPDATE

NOISE EXPOSURE MAPS
VOLUME 1 OF 2

Prepared for

McClellan-Palomar Airport
2198 Palomar Airport Road
Carlsbad, CA 92008-4814

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SPONSOR'S CERTIFICATION

The Noise Exposure Maps for McClellan-Palomar Airport, hereby submitted in accordance with 14 CFR Part 150, were prepared with the best available information and are certified as true and complete to the best of my knowledge and belief. The assumptions and activity levels used to develop the Existing Condition Noise Exposure Map are based on data from 2002. The most recent 12-month period of available data, calendar year 2004, represents an approximate two percent increase in annual average daily operations relative to the data period used for the 2004 Existing Condition Noise Exposure Map. Thus, the data for the 2004 Existing Condition Noise Exposure Map are representative of existing conditions, as of the date of this submission.

The assumptions and activity levels used to develop the 2009 Noise Exposure Map representing the 5-year future condition are based on reasonable forecasts and other planning assumptions, and the map is for the fifth calendar year after the year of submission.

The Noise Exposure Maps were prepared in consultation with state and public agencies and planning agencies whose area, or any portion of whose area, of jurisdiction is within the 65 dBA Community Noise Equivalent Level contours depicted on the Noise Exposure Maps. The consultation also included federal officials having local responsibility and regular aeronautical users of the airport. It is further certified that adequate opportunity has been afforded interested persons to submit their views, data and comments concerning the correctness and adequacy of the Noise Exposure Maps and the supporting documentation and forecasts. The 2004 Noise Exposure Map and supporting data are fair and reasonable representations of existing conditions at McClellan-Palomar Airport.

2/11/05
Date of Signature

Peter Drinkwater
Airports Director
County of San Diego
Department of Public Works

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AEE	Office of Environmental Energy
AIA	Airport Influence Area
AIM	Aeronautical Information Manual
AIP	Airport Improvement Program
ALP	Airport Layout Plan
ALPA	Airline Pilots Association
ANCA	Aviation Noise and Capacity Act
ANSI	American National Standards Institute
AOPA	Aircraft Owners and Pilots Association
ARTCC	Air Route Traffic Control Centers
ASDA	Available Accelerated Stop Distance
ASNA	Aviation Safety and Noise Abatement Act
ASOS	Automated Surface Observation System
ATC	Air Traffic Control
ATCT	Airport Traffic Control Tower
CCR	California Code of Regulations
CLUP	Comprehensive Land Use Plan
CNEL	Community Noise Equivalent Level
CRQ	McClellan-Palomar Airport
CUP	Conditional Use Permit
CY	Calendar Year
dBA	A-weighted decibels
DME	Distance Measuring Equipment
DNL	Day-Night Average Sound Level
EPA	Environmental Protection Agency
FAA	Federal Aviation Administration
FAR	Federal Aviation Regulations
FBO	Fixed Base Operators
FICAN	Federal Interagency Committee on Aviation Noise
FICON	Federal Interagency Committee on Noise
FICUN	Federal Interagency Committee on Urban Noise
FOIA	Freedom on Information Act
GA	General Aviation
GEMS	Global Environmental Management System
GPS	Global Positioning System
HUD	Department of Housing and Urban Development
Hz	Hertz
IFR	Instrument Flight Rules
ILS	Instrument Landing System
INM	Integrated Noise Model
LC	Limited Control
LDA	Available Landing Distance
Lmax	Maximum Sound Level
MALS-R	Medium Density Approach Lighting System
MCAS	Marine Corps Air Station

MSL	Mean sea level
NAS	National Airspace System
Navaids	Navigation Aids
NBAA	National Business Aircraft Association
NCDC	National Climactic Data Center
NCP	Noise Compatibility Program
NDB	Non Directional Beacon
NEM	Noise Exposure Map
NHRP	National Register of Historic Places
NINA	Noise Impact Notification Area
NLR	Noise Level Reduction
NOAA	National Oceanographic and Atmospheric Administration
NPIAS	National Plan of Integrated Airport Systems
OAG	Official Airline Guide
OS	Open Space
PAAC	Palomar Airport Advisory Committee
SANDAG	San Diego Association of Governments
SDCRAA	San Diego County Regional Airport Authority
SEL	Sound Exposure Level
SLUCM	Standard Land Use Coding Manual
SPL	Sound Pressure Level
sq ft	Square feet
TACAN	Tactical Air Navigation
TNG	Touch and Go
TODA	Available Takeoff Distance
TORA	Available Takeoff Run
TRACON	Terminal Radar Approach Control
UA	Unplanned Areas
URS	URS Corporation
VA	Veterans Affairs
VFR	Visual Flight Rules
VHF	Very High Frequency
VOR	VHF Omni-Directional Range
VORTAC	VHF Omni-Directional Beacon

SECTION 1 INTRODUCTION

Aircraft noise and the subsequent impacts on people have been a major concern in the United States and worldwide for some time. With the general trend of increasing activity at airports, it is important for airport operators to be aware of the noise exposure or potential future impacts caused by aircraft activity at their facilities. The airport operator has a responsibility to help educate the public and possibly mitigate noise exposure around the airport. Local communities surrounding the airport have an equal responsibility to educate their constituents, develop and implement adequate land use planning and land use controls, and adopt regulatory measures to ensure that long-term aviation noise exposure are minimized in their jurisdictions. At most airports, noise exposure will continue to increase, making it imperative that local governments and the respective airports work together to develop acceptable noise mitigation solutions that satisfy all parties. In many cases, this cooperative effort has a positive impact on the community perception and confidence in their local leaders that the noise issues are being addressed in best interest of all concerned parties.

A Part 150 Study is a voluntary effort by an airport to achieve the greatest possible compatibility and facilitate the best possible relationship between an airport and its surrounding communities. Part 150 specifies the methodology and procedures governing the development and implementation of the two major components: Noise Exposure Maps (NEMs) and Noise Compatibility Programs (NCP)

This report presents the NEMs for McClellan-Palomar Airport (CRQ). This section contains a description of the Part 150 process (Section 1.1), a description of NEM documentation (Section 1.2), status of the previous Part 150 Study (Section 1.3), and the roles and responsibilities of the Study's parties. Section 2 provides a history and description of the airport, a description of the local climate, and a description of the airspace and air traffic control. Section 3 presents a description of the aircraft noise exposure methodology. Section 4 presents a discussion of local land use planning and regulatory framework within the study area. Sections 5, 6, and 7 present the NEMs for 2004, 2009, and 2014, respectively, along with supporting air traffic activity data and forecasts. Section 8 contains a discussion on the consultation with the public, airports users, and outside agencies. Section 9 provides a list of the Study's references. Appendix A is the FAA's NEM checklist completed specifically for this Part 150 Study Update.

1.1 THE PART 150 PROCESS

The Aviation Safety and Noise Abatement Act (ASNA) was established by Congress in 1979 as a means to address the impact of aircraft noise on communities, to provide assistance, and to assure continued safety in aviation. Under ASNA, the Secretary of Transportation was charged with the responsibility to establish a single system of measuring noise at airports, determine noise exposure, and identify compatible land uses. Thus, in 1981, the FAA established Part 150 Airport Noise Compatibility Planning.

Part 150 implements the provisions in the ASNA for airport noise compatibility planning. The program provides a comprehensive approach to both prevention and mitigation of airport noise in a community, seeks recommendations from interested parties throughout the development of the program, and provides for funding of eligible items through the Federal Airport Improvement Program (AIP).

Through the ASNA, airport operators voluntarily prepare airport NEMs and NCPs and submit these materials to the FAA for approval. Federal funding is available to the Airport Sponsor to conduct this work. The NEM depicts noise exposure around an airport in the current and 5-year future operational conditions. The five-year map must be based on forecast operations at the airport for the fifth calendar year beginning after the year of submission, or must be representative of the five-year forecast conditions. Based on the NEM, an NCP is prepared that sets forth a series of measures to reduce existing non-compatible land uses and minimize additional non-compatible land uses on and around the airport. These measures may include both airport and aircraft operational measures that are intended to directly reduce noise. Land use measures may be implemented to mitigate existing non-compatible land uses and prevent the creation of additional non-compatible land uses.

In addition to minimizing aviation noise impacts, this regulation sets forth the Community Noise Equivalent (sound) Level, abbreviated as CNEL, for measuring noise exposure[1] and the Integrated Noise Model (INM) as the standard noise modeling methodology.

Under the Part 150 process, the FAA will indicate, upon receipt, whether the NEMs are in compliance with the requirements of the program. If they are in compliance, a notice is published in the Federal Register. Once the NEMs are found to be in compliance and the NCP is submitted to the FAA, the NCP will undergo a 180-day FAA review period, and the FAA will determine which elements of the program will be approved or disapproved.

1.2 NOISE EXPOSURE MAP DOCUMENTATION

This report contains the NEMs for CRQ. The NEMs contained in this report represent a revision to the CRQ NEMs that were determined by the FAA to be incompliance with Part 150 on December 20, 1991. Part 150, §150.21 requires the submission of two maps, an existing condition map and a five-year map. In accordance with §150.21, the existing condition map must be based on current data as of the year of submission to the FAA, or must be representative of existing conditions. This NEM document was submitted during the second quarter of 2004. The 2004 Existing Condition NEM was based on average annual daily aircraft operations during calendar year (CY) 2002. As the bulk of the analysis performed to generate the 2004 Existing Condition NEM was performed in 2003, CY2002 data was used. As stated in the Sponsor's Certification, the CY2004 number of annual average daily operations only differs by two percent relative to the CY2002 annual average daily operations. Due to this negligible difference in annual average daily operations and because the types of operations, aircraft, and overall mission of the airport has not significantly changed between CY2002 and CY2004, the County of San Diego (County) has certified that aircraft operations during CY2002 are representative of 2004, thus the 2004 Existing Condition NEM is expected to accurately represent the existing conditions as of the date of submission.

The five-year map must be based on forecast operations at the airport for the fifth calendar year beginning after the year of submission, or must be representative of five-year forecast conditions. The 2009 Future Condition NEM was based on forecast operations at the airport for CY 2009. The forecast map developed for CY 2009, referred to as the 2009 Future Condition NEM, accurately represents the five-year forecast from the year of submission (2004 + 5 = 2009).

[1] According to FAA Order 5050.4A, Airport Environmental Handbook, CNEL may be used in place of DNL in California.

Although not required by the FAA, the County requested that URS Corporation (URS) also develop a ten-year map, i.e., based on forecast operations at the airport for the tenth CY beginning after the year of submission. The 2014 Future Condition NEM was based on forecast operations at the airport for CY 2014.

1.3 PROJECT ROLES AND RESPONSIBILITIES

The control of aircraft noise exposure is a complex issue, with several parties sharing in the responsibility: the federal government, state and local governments and planning agencies, the airport operator, civilian and military airport users, and local residents. All interests must be considered in the noise compatibility process. Groups having roles in this Part 150 process are described below.

1.3.1 Federal

The federal government has assumed the role of coordinator and regulator of the nation's aviation system. Congress has assigned administrative authority of the FAA. The specific responsibilities of the FAA include:

- The regulation of air commerce in order to promote its development and safety and to fulfill the requirements of national defense;
- The promotion, encouragement and development of civil aeronautics;
- The control of the use of navigable airspace and the regulation of civil and military aircraft operations to promote the safety and efficiency of both; and
- The development and operation of a common system of air traffic control for both military and civilian aircraft.

As part of the Part 150 process, the FAA Western Pacific Region Airports Division located in Hawthorne, California, has the responsibility to review the NEM and related documentation and indicate whether they are in compliance with applicable requirements. The FAA publishes a notice of compliance for each NEM and related documentation in the Federal Register. Acceptance of NEMs by the FAA is required prior to approval of the NCP.

The FAA is responsible for the control of navigable airspace and operation of air traffic control systems at the nation's airports. Airport proprietors have no direct control over airspace management and air traffic control including the movement of air traffic on the ground at the airport. The FAA reviews any proposed changes in flight procedures, such as flight tracks or runway use programs proposed for noise abatement on the basis of safety of flight operations, efficient use of navigable airspace, management and control of the national airspace and traffic control systems, affect on security, and compliance with applicable laws and regulations.

1.3.2 State of California

The State of California (State) does not have administrative responsibility in the Part 150 process. However, through California Code of Regulation (CCR) Title 21, the State has recognized the effects of noise in the vicinity of airports and developed regulations to provide a positive basis to accomplish

resolution of existing noise problems in communities surrounding airports and to prevent the development of new noise problems. The regulations establish a quantitative framework within which airport operators, aircraft operators, and local communities can work together to reduce noise and prevent airport problems.

1.3.3 County of San Diego

The County owns and operates CRQ as a public utility. As the 'airport operator,' the County has responsibility of the entire Part 150 Study Update. The Palomar Airport Advisory Committee (PAAC) has been designated as the citizen's review committee for this study.

1.3.4 Consulting Team

The County retained the consultant team of URS Corporation (URS) and Katz and Associates in December 2002, to prepare the Part 150 Study Update. URS provides airport environmental planning services, and has overall responsibility for the technical elements, documentation, and project management. Katz and Associates, a public affairs consulting firm, has responsibility for all aspects of public involvement.

SECTION 2 AIRPORT SETTING

Figure 2-1 shows the vicinity of CRQ. CRQ is located within the corporate limits of the City of Carlsbad (City), approximately four miles southeast of downtown Carlsbad, in San Diego County, California. Palomar Airport Road bounds the airport to the south. El Camino Real bisects airport property and serves as a landmark to the east of the airport. With 255 acres owned and operated by the County, CRQ serves as a major general aviation facility for the North County region. The airport is named for aviator Gerald McClellan, a north County community leader. Figure 2-1 also depicts the schools, hospitals and places of worship in the vicinity of CRQ along with the Noise Impact Notification Area (NINA) and the Airport Influence Area (AIA). The NINA and the AIA are discussed in Section 4.

The airport site was acquired in 1957 as a replacement for Del Mar Airport. CRQ opened in 1959 with a runway 3,700 feet in length and 100 feet in width. The runway was later expanded to 4,700 feet in length and 150 feet in width in 1961. Since 1973, an FAA Airport Traffic Control Tower (ATCT) has been in daily operation from 7:00 a.m. to 10:00 p.m. The airport was annexed into the City of Carlsbad in 1978. Scheduled passenger service (air taxi) began in 1991 (County of San Diego, 2002).

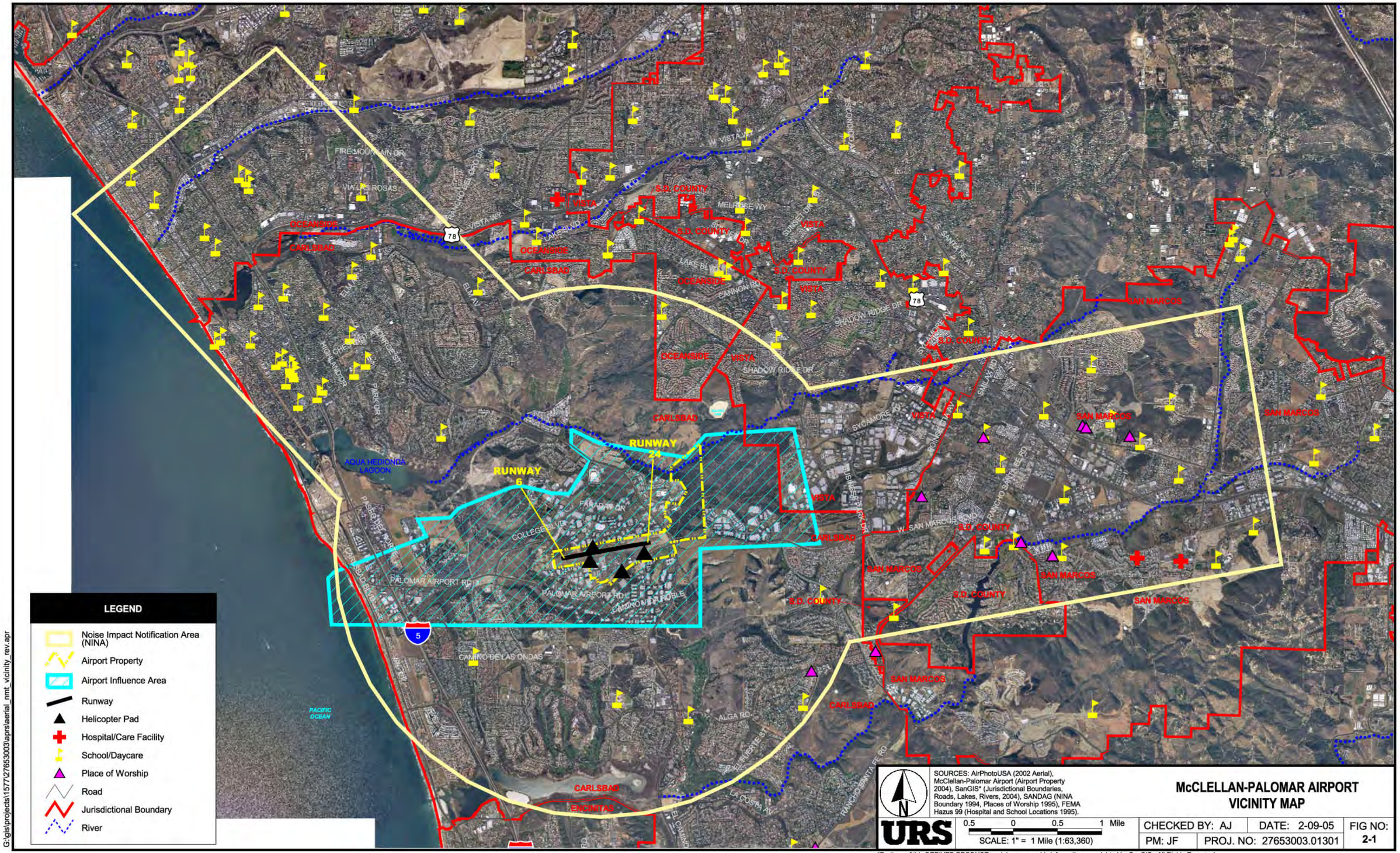
In the FAA National Plan of Integrated Airports Systems (NPIAS), which defines the role of an airport, CRQ is classified as a B2 airport enplaning more than 51,800 passengers per annum (FAA, 2003).

2.1 AIRSPACE AND AIR TRAFFIC CONTROL

In the U.S., only the FAA has the authority to regulate and exercise control over the National Airspace System (NAS) used by aircraft. Pilots operating aircraft in the Carlsbad area have to communicate and coordinate their flights with the U.S. Air Traffic Control (ATC). In the U.S., the NAS is grouped into three areas: enroute, terminal, and oceanic. Terminal air traffic control is further divided into two parts: Terminal Radar-Approach Control (TRACON) and Airport Traffic Control Tower (ATCT) operations at airports. The Air Route Traffic Control Centers (ARTCC) manage the enroute aircraft moving between different parts of the U.S. airspace. The Los Angeles ARTCC located 110 miles north of CRQ near Palmdale California provides enroute services relevant to aircraft from/to CRQ. The TRACON receives traffic from the ARTCC and routes it to a specific airport located within the area they control. Generally, the Southern California TRACON located near Marine Corps Air Station (MCAS) Miramar, then hands over traffic to the ATCT of the destination airport.

The ATCT controls the airspace within a specified area around an airport. The ATCT monitors, supervises, and directs arrival and departure aircraft at the airport. They are also responsible for managing the traffic that traverses their airspace. The ATCT exercises movement control of aircraft on the runways and taxiways, issues clearances to departing aircraft, and informs pilots of the basic meteorological data needed for flying.

Figure 2-2 depicts the airspace in the vicinity of CRQ. The airspace around CRQ is categorized as Class D airspace. It extends out three nautical miles from the center of the airfield and extends upward to an altitude of 2,800 feet above mean sea level (MSL). The Class D airspace is active and controlled during periods when the ATCT is in operation. The ATCT, operated by the FAA, is attended between 07:00 a.m.



SOURCES: AirPhotoUSA (2002 Aerial), McClellan-Palomar Airport (Airport Property 2004), SanGIS* (Jurisdictional Boundaries, Roads, Lakes, Rivers, 2004), SANDAG (NINA Boundary 1994, Places of Worship 1995), FEMA Hazus 99 (Hospital and School Locations 1995).

URS

0.5 0 0.5 1 Mile

SCALE: 1" = 1 Mile (1:63,360)

McCLELLAN-PALOMAR AIRPORT VICINITY MAP

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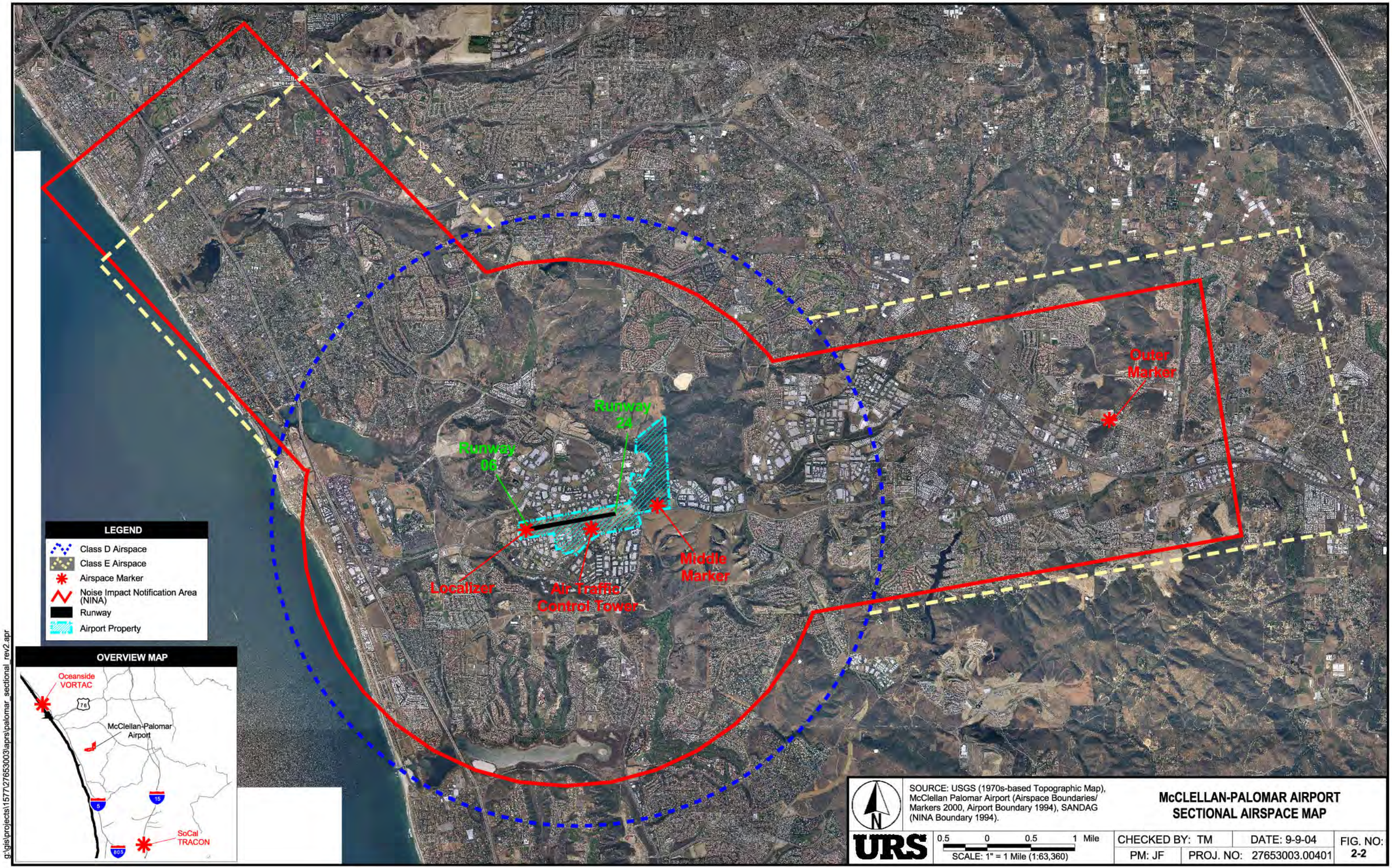


McCLELLAN-PALOMAR AIRPORT SECTIONAL AIRSPACE MAP

through 10:00 p.m., Monday through Sunday. During the period the ATCT is not being operated, the airspace around the airport is uncontrolled Class G airspace with a floor of 700 feet MSL.

Palomar has two Class E extensions. During the time the ATCT is operational, the Palomar Class E extensions become part of the Palomar surface area. The extension to the northwest provides protection for the Palomar VOR-A approach, and the extension to the east provides protection for the Palomar ILS Runway 24 approach.

2.2 AIRFIELD LAYOUT

Figure 2-3 shows a diagram of the airport. At an average elevation of 328 feet MSL, CRQ has one paved operational runway -- 06-24. In the 06 direction, Runway 06-24 allows for departures and approaches to the east. In the 24 direction, Runway 06-24 allows for departures and approaches to the west. The pavement for Runway 06-24 is 4,900 feet in length and 150 feet wide. The runway has pavement strengths of 60,000 pounds single wheel gear, 80,000 pounds dual wheel gear, and 110,000 pounds dual tandem gear (Airnav, 2004).

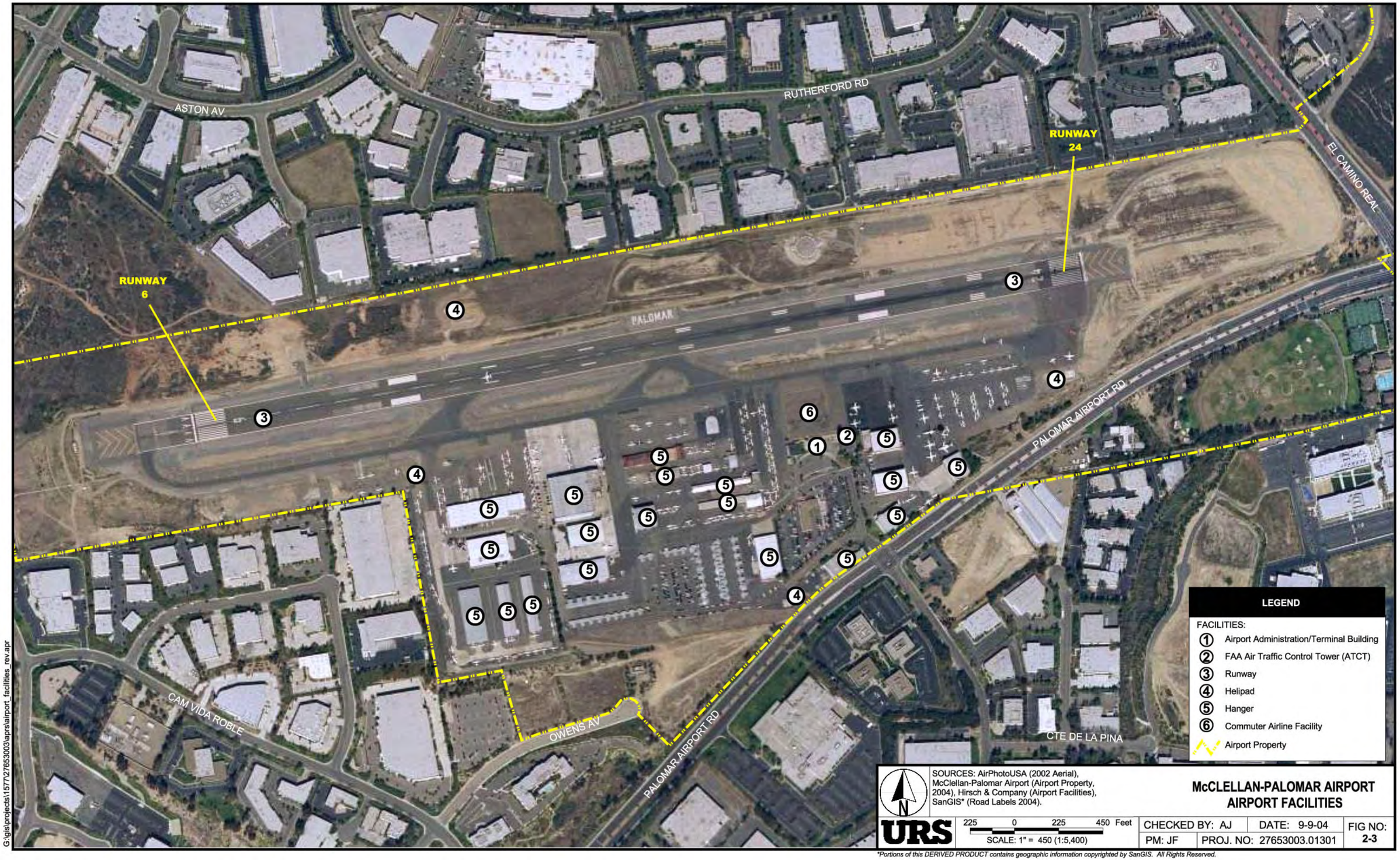
Although the pavement has a length of 4,900 feet, not all 4,900 feet of the runway can be used in both directions for all purposes. Runway 06 has a displaced departure and arrival threshold of approximately 300 feet yielding available landing (LDA) and stopping distances of 4,600 feet. However, the available takeoff run (TORA), available takeoff distance (TODA), and available accelerate-stop distance (ASDA) are 4,900 feet. It is not equipped with an instrument approach. Runway 24 is equipped with an Instrument Landing System (ILS, Category I) approach and all declared distances (TORA, TODA, LDA, and ASDA) are 4,600 feet.

The current magnetic declination (the difference between magnetic north and true geographic north) is 13 degrees east as of March 2003 (NOAA). The ATC and pilots use magnetic headings to direct and fly aircraft. Magnetic declination is also related to aircraft/engine run-ups.

2.3 NAVIGATIONAL AIDS

There are two types of navigational aids (Navaids) at airports: electronic and visual. Both types have been installed on the runways at CRQ to facilitate safe and efficient use of the airport. Table 2-1 shows the Navaids available on each runway. In addition, a lighted wind cone and a segmented circle are situated north of the runway and north of the ATCT. This facility assists pilots during visual weather conditions.

The Navaids located on the airport provide specific guidance for an aircraft to a specific runway. For an aircraft to be flown to a location near the airport where onsite Navaids can be used, the pilot must navigate using en route Navaids. These devices are strategically located and installed by the FAA to provide navigational assistance to pilots flying across the country and have varying capabilities and uses. The two most common types of electronic navigational aids are the Non-Directional Beacon (NDB) and the Very High Frequency (VHF) Omni-Directional Range (VOR) Station.



McCLELLAN-PALOMAR AIRPORT
AIRPORT FACILITIES

URS

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Table 2-1
Navigational Aids
McClellan-Palomar Airport

Runway	Electronic	Visual
06	None	4-light Precision Approach Path Indicator on left
24	Instrument Landing System (ILS)	Medium Intensity Approach Lighting System (MALS-R)
24	Glide Slope	4-light Precision Approach Path Indicator on left
24	Localizer	NA

Source: FAA Form 5010, January 3, 2001

A VHF Omni-Range Radio Beacon (VORTAC) aids navigation to or through the CRQ area. The City of Oceanside VORTAC is a combination of the Tactical Air Navigation (TACAN) providing an ultra-high frequency aid, and VOR located approximately 9.7 nautical miles northwest of CRQ. The VOR generates a signal that is translated by airborne equipment into an azimuth reading. The TACAN portion of the facility provides distance to station information using the aircraft's distance measuring equipment (DME). CRQ has an ILS (precision) approach to Runway 24, a Global Positioning System (GPS, non-precision) approach to Runway 24 and a precision VOR approach. The VOR approach is associated with the Oceanside VORTAC. CRQ does not have any NDB approaches.

2.4 WEATHER

Weather has a significant impact on noise exposure and propagation. Runway use and the operational characteristics of aircraft are heavily influenced by weather. The following two subsections detail modeled weather conditions and their impacts on aircraft operations.

2.4.1 Temperature and Pressure

Temperature is an important factor in aircraft performance. High temperatures increase takeoff distance and reduce climb performance, and generally result in increased noise exposure. As computed from monthly National Oceanographic and Atmospheric Administration (NOAA) climatological data from its McClellan-Palomar Airport Weather Station (Automated Surface Observation System) (derived from average daily values), the annual average daily 24-hour temperature for 2002 was 61 degrees Fahrenheit (^{o}F). This value was used in the INM and is standard atmospheric temperature, adjusted for airport elevation (National Climatic Data Center [NCDC], 2003). The annual average daily pressure for 2002 was 29.6 inches of mercury.

2.4.2 Wind

Wind speed and direction primarily determine runway selection and operational flow. Aircraft generally takeoff and land into the wind (known as a headwind) when possible. Headwinds reduce an aircraft's required takeoff and landing distance and increase climb rate. Aircraft can operate with considerable crosswinds (a wind blowing at the side of the aircraft) of up to approximately 20 knots for a typical air carrier aircraft.

Aircraft can operate with limited tailwinds (a wind blowing on the rear of the aircraft) up to 10 knots for a typical air carrier aircraft. Tailwinds increase required takeoff and landing distance. Winds in excess of crosswind and tailwind limits generally force aircraft to use a different runway. The winds at CRQ are generally out of the west and favor operations on Runway 24. During infrequent 'Santa Ana wind' conditions, the winds are out of the east and favor operations on Runway 06. The annual average daily wind speed for 2002 was 4 knots at a direction of 212 degrees from true north (NCDC, 2003).

2.5 TERRAIN

The terrain around CRQ varies significantly. In general, the terrain rises to the east and falls to the west towards the ocean. CRQ itself sits on a plateau. Northwest and southwest of CRQ, residential areas line the crests of the hillsides and some have views of the airport and surrounding areas.

The terrain modeling features of INM Version 6.1 were employed for this study. INM adjusts the height of ground-based receptors based on their local elevation relative to the altitudes of the aircraft.

SECTION 3 AIRCRAFT NOISE EXPOSURE METHODOLOGY

3.1 COMMUNITY NOISE EQUIVALENT LEVEL (CNEL)

Part 150 requires the use of standard methodologies and metrics for analyzing and describing noise. It also establishes guidelines for the identification of land uses that are incompatible with noise of different levels.

CNEL is the primary noise descriptor of this Part 150 Study. As described in detail in Appendix C (along with a general treatise on noise and its effects), CNEL is a 24-hour time-weighted-average noise metric expressed in A-weighted decibels (dBA) which accounts for the noise levels of all individual aircraft events, the number of times those events occur, and the time of day at which they occur. CNEL has three time periods: daytime (7:00 a.m. to 7:00 p.m.), evening (7:00 p.m. to 10:00 p.m.), and nighttime (10:00 p.m. to 7:00 a.m.). In order to represent the added intrusiveness of sounds occurring during evening and nighttime hours, CNEL 'penalizes' or weights events occurring during the evening and nighttime periods by 5 dBA and 10 dBA, respectively. Due to the CNEL descriptor's close correlation with the degree of community annoyance from aircraft noise (also discussed in Appendix C), CNEL and Day-Night Average Sound Level (DNL), have been formally adopted by most federal agencies for measuring and evaluating aircraft noise for land use planning and noise impact assessment.

Part 150 also requires that the annual average 65, 70 and 75 CNEL *contour lines* (or contours), for annual average daily operations, be depicted. CNEL contours are lines of equal noise exposure. The significance of the CNEL values is discussed in Sections 5, 6, and 7. CNEL contours are analogous to topographic contours, which are lines of equal elevation. In order to create CNEL contours, the CNEL must be assessed for many points on the ground. Measurements of CNEL are practical only for obtaining values for a relatively limited number of points, and in the absence of a permanently installed noise monitoring system, only for relatively short time periods. Although CRQ has a permanent noise monitoring system that collects data year round, only four noise monitors have been deployed. Instead, many airport noise studies, including this document, are based on estimates of CNEL using a FAA-approved computer-based noise model. The model used for this document is discussed in greater detail in the next section.

Not only is the CNEL descriptor required by Part 150, CNEL is specified by and consistent with CCR Titles 21 and 24 and is specified by the City and County Noise Elements of their General Plans. For Part 150-related studies, as a minimum, CNEL contours of 65, 70 and 75 dBA are developed. This NEM update also includes the 60 CNEL contour because it has been historically depicted by CRQ and the City.

3.2 FAA INTEGRATED NOISE MODEL

According to the Part 150 rules, analyses of subsonic aircraft noise exposure and compatible land uses around civilian airports can be accomplished using a computer-based program called the INM. Version 6.1 was the version used for this NEM update (FAA, 1999; 2003)

INM incorporates the number of annual average daily daytime (7:00 a.m. to 7:00 p.m.), evening (7:00 p.m. to 10:00 p.m.), and nighttime (10:00 p.m. to 7:00 a.m.) flight and run-up events, flight paths, run-up locations, and flight/run-up profiles of the aircraft, along with its extensive internal database of aircraft noise and

performance information, to calculate the overall daily sound level (e.g., CNEL) at many points on the ground around an airport. From a plotted grid of points, contours of equal daily sound level are plotted by INM for overlay onto land use maps. INM also has the flexibility of calculating daily sound levels at any specified point so that noise exposure at representative locations around an airport can be obtained.

The results of the INM analysis provide a relative measure of noise exposure around airfield facilities. When the calculations are made in a consistent manner, INM is most accurate for comparing before and after noise effects resulting from forecast changes or alternative noise control actions. It allows noise predictions for such proposed actions without the actual implementation and noise monitoring of those actions.

Version 6.1 of INM features enhancements that enable it to produce more accurate noise predictions than previous versions. INM V6.1 also has the capability to compute noise levels from aircraft engine run-ups and to create dispersed tracks, which more accurately represent actual flight tracks.

Noise contours generated by INM do not depict a strict demarcation of where the noise levels end or begin. Their purpose is to describe the generally expected noise exposure. It must be recognized that although INM is the current state-of-the-art aircraft noise modeling software, input variables to INM require several simplifying assumptions to be made, such as: aircraft types flown, flight track utilization, day-night operational patterns, and arrival/departures profiles flown. Furthermore, the noise contours represent average annual conditions rather than single event occurrences. Noise exposure on any one day may be greater or less than the average operational day. INM is useful for comparison of noise impacts and provides a consistent and reasonable method to conduct airport noise compatibility planning.

Although the INM database provides a large selection of aircraft to model, it does not contain every aircraft in the worldwide commercial, general aviation, and military aircraft fleet. For this reason, the FAA developed an official aircraft substitution list that allows the user to substitute similar aircraft when necessary for modeling purposes. These substitutions represent a very close estimate of the noise produced by the actual aircraft. Despite the large number of aircraft types in the database and approved substitutions, some airports require modeling of unique aircraft types not found in the database/substitution list. When this occurs, a user-defined aircraft may be used in INM, with prior FAA, Office of Environment and Energy (AEE-120) approval. Generating a user-defined aircraft requires detailed noise and performance data, which is an extensive undertaking and not within the scope of this Part 150 study. For this study's NEMs, all aircraft modeled are either a true representative of an aircraft type or an acceptable FAA-approved substitution. Table D-1 of Appendix D provides a description of all of the representative INM-modeled aircraft types used in this study.

The INM V6.1 contains a database of takeoff and approach profiles for a variety of aircraft. These profiles contain information on an aircraft's altitude, distances from the runway threshold, airspeed, flap settings, climb rates, engine power settings, etc. Each of the elements in a profile affects the level of noise generated along an aircraft's flight path. These profiles are critical to noise modeling because of their effect on the amount of noise that reaches the ground. In general, the closer aircraft are to the ground, the louder their noise levels. Aircraft with poor climb characteristics may generate greater noise impacts on departure than aircraft with good climb characteristics, if all other factors such as airspeed and engine power settings are constant. User-defined flight profiles may be used in INM, with prior FAA AEE-120 approval. For most aircraft operations at CRQ, INM standard database departure, arrival, and touch-and-go (TNG) profiles were used. This study's FAA-approved user-defined flight profiles are the subject of Appendix E.

Because aircraft noise and performance vary with departure trip length, INM has up to seven standard takeoff profiles relating to trip distance of most fixed-wing air carrier and jet cargo aircraft types in its database. Table 3-1 lists the ranges of trip distances in INM, termed "Stage length." INM contains only the first stage length for departures of most air taxi and general aviation aircraft types.

Table 3-1
Stage Length Description

Stage Length	Distance (Nautical Miles)
1	Less than 500
2	500 – 1,000
3	1,000 – 1,500
4	1,500 – 2,500
5	2,500 – 3,500
6	3,500 – 4,500
7	Greater than 4,500

For CRQ, modeling of military aircraft and helicopters was also required. Stage length does not apply to military aircraft – standard database default profiles can be used or user-defined profiles subject to FAA AEE-120 approval may be generated. Stage length also does not apply to helicopters -- user-defined profiles subject to FAA AEE-120 approval must be generated.

As shown in Table 3-1, stage lengths 1 through 6 cover trip distances up to 4,500 nautical miles. Stage length 7 is reserved for trip distances greater than 4,500 nautical miles. As stage length increases, aircraft require more fuel to conduct the operation. At longer stage lengths, the aircraft operator tries to maximize the economies of scale, usually by increasing the cargo and/or passenger loads. The increase in cargo, passengers, and fuel quantity increases the aircraft's weight resulting in increased runway length requirements for take-off and decreased aircraft performance during take-off and climb. The lower operating performance of aircraft is marked by a slower rate of climb that requires greater distances across the ground to obtain normal operating altitudes. The resulting noise impacts are greater because the aircraft produces noise closer to the ground for a longer period of time.

SECTION 4 LAND USE AND COMPATIBILITY GUIDELINES

4.1 INTRODUCTION

This section documents existing land uses and noise sensitive sites, and describes future land use trends in the vicinity of CRQ. It also addresses the land use controls in the County and the City. The land use data described and illustrated in this section are based on aerial photography, zoning and land use information obtained from the Carlsbad General Plan (1994), and field surveys.

CRQ is located within the City of Carlsbad (Figure 2-1). The City of San Marcos is located approximately four miles east of CRQ and the community of La Costa is located approximately two miles southeast of CRQ. The cities of Vista and Oceanside are also located adjacent to the City of Carlsbad. Existing surrounding land uses are depicted on Figure 4-1. The areas immediately north, south, and east of CRQ are primarily occupied by industrial parks. Much of the additional surrounding land is vacant. Residential development pressure has intensified on all sides of CRQ over the past several years.

4.2 REGULATORY FRAMEWORK

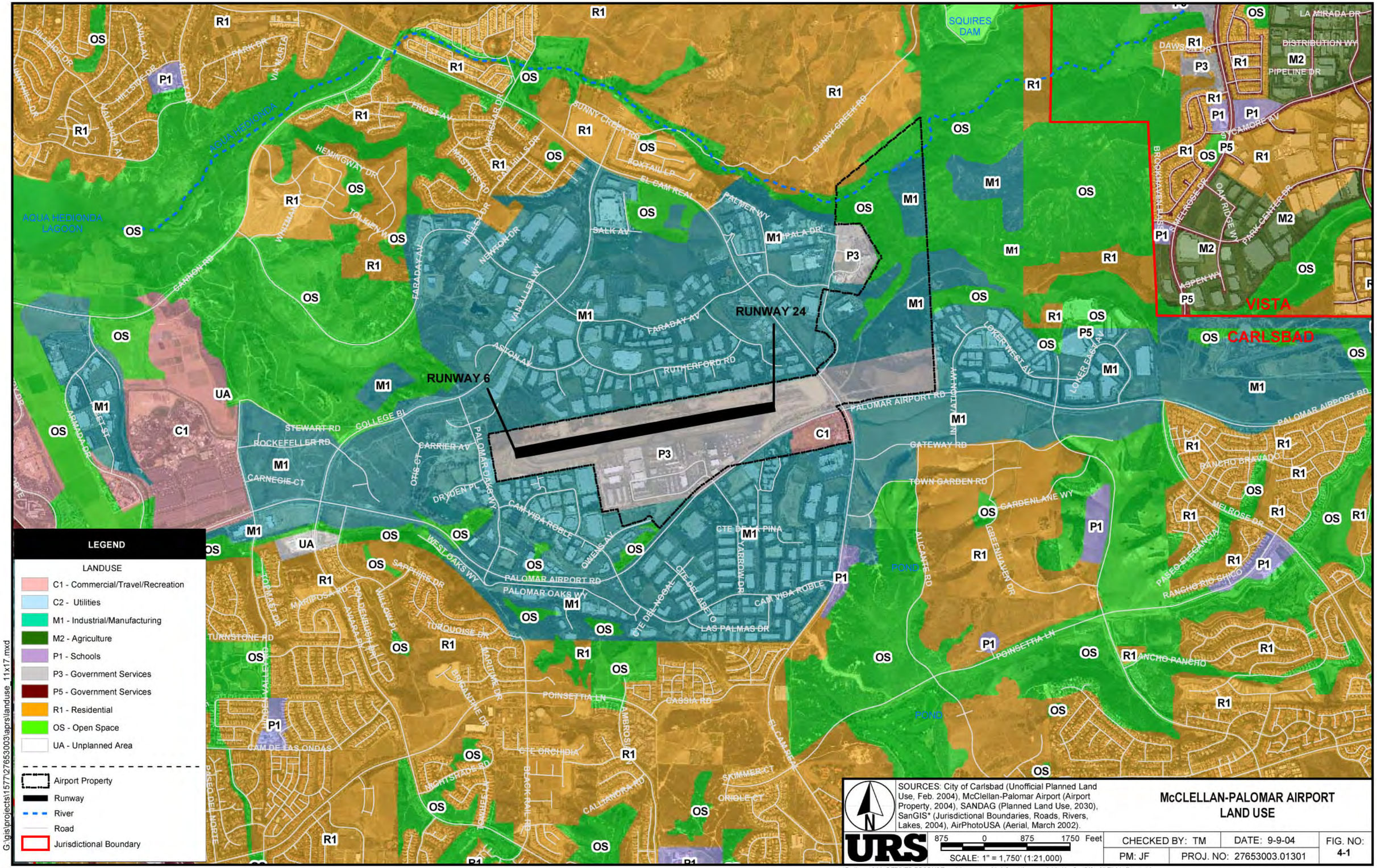
Land use planning and the adoption, administration, and enforcement of zoning regulations are an exclusive authority of local governments within each of their jurisdictions. This includes authority for airport-compatible land use planning. Neither the FAA nor the Airport has the authority to exercise land use control in a local government's jurisdiction. Land use planning and zoning authority for the areas effected by CRQ is the responsibility of the city of Carlsbad.

Airport noise compatible land use is needed to promote public health and welfare while preserving airport operation capability. Non-compatible development can be prevented and further development controlled by limiting noise-impacted or noise-sensitive uses. Establishing overlay zoning to limit noise-sensitive land uses near airports provides noise compatibility. Controls should address current and future land use within specific areas of exposure to aircraft-generated noise.

The primary non-regulatory policy document, which typically influences development, is the General Plan. The General Plan provides the basis for the zoning ordinance and sets forth guidelines for future development. The zoning ordinance regulates the types of uses, building height, bulk, and density permitted in various locations. Building codes are also used to regulate development.

4.2.1 Comprehensive Land Use Plan

The San Diego County Regional Airport Authority (SDCRAA), as the region's Airport Land Use Commission (ALUC), is currently preparing an update of the CRQ Comprehensive Land Use Plan (CLUP). The CLUP reflects the anticipated growth of CRQ for the next 20 years. The intent is "to provide for the orderly growth of each public airport and ... [to] safeguard the general welfare of the inhabitants within the vicinity of the airport and the public in general" (Section 21675, Public Utility Code).



LEGEND

LANDUSE

- C1 - Commercial/Travel/Recreation
- C2 - Utilities
- M1 - Industrial/Manufacturing
- M2 - Agriculture
- P1 - Schools
- P3 - Government Services
- P5 - Government Services
- R1 - Residential
- OS - Open Space
- UA - Unplanned Area

- Airport Property
- Runway
- River
- Road
- Jurisdictional Boundary

G:\gis\projects\1577\27653003\aprs\landuse_11x17.mxd

SOURCES: City of Carlsbad (Unofficial Planned Land Use, Feb. 2004), McClellan-Palomar Airport (Airport Property, 2004), SANDAG (Planned Land Use, 2030), SanGIS* (Jurisdictional Boundaries, Roads, Rivers, Lakes, 2004), AirPhotoUSA (Aerial, March 2002).

URS

875 0 875 1750 Feet

SCALE: 1" = 1,750' (1:21,000)

McCLELLAN-PALOMAR AIRPORT LAND USE

CHECKED BY: TM	DATE: 9-9-04	FIG. NO: 4-1
PM: JF	PROJ. NO: 27653003.01301	

*Portions of this DERIVED PRODUCT contains geographic information copyrighted by SanGIS. All Rights Reserved.

The original land use plan for CRQ was prepared by the San Diego Association of Governments (SANDAG) and was adopted in 1974 and a revised plan was adopted in 1986. The plan was adopted to assist in ensuring compatible land use development in the area surrounding CRQ and identifies areas likely to be affected by noise and flight activity created by aircraft operations at CRQ. These affected areas include the CRQ Airport Influence Area (AIA), Noise Impact Notification Area (NINA), projected noise contours, clear zone, and flight activity zone.

The AIA (Figure 2-1) encompasses those areas adjacent to CRQ, which could be impacted by noise levels exceeding the California State Noise Standards or where height restrictions would be needed to prevent obstructions of navigable airspace. Depending upon location, compatible land uses within the AIA include non-residential uses such as office, industrial, commercial, or low density residential uses such as a single-family dwellings. A record of the AIA must be filed in the office of the County Recorder. The record serves to notify owners or potential purchasers of property in the AIA that property in the area is currently subject to aircraft noise and aircraft overflights. Typically, real estate professionals and companies contract with a hazard research company that researches a specific property for potential hazards, such as proximity to landfills, proximity to an AIA, etc. The hazard research companies inform the real estate professional of potential hazards and the real estate professional is required to inform the prospective purchaser.

The NINA is the area most impacted by aircraft operations to and from CRQ. Physically, the NINA is composed of a three mile radius around the airport, as well as the VOR and ILS corridors to the west and the east, respectively, and extends both horizontally and vertically due to terrain consideration (Figure 2-1). All new residential projects located within the NINA are required to record to deed a notice concerning aircraft environmental impacts, clarifying that the property is subject to aircraft overflight, sight and sound of aircraft from CRQ.

4.2.2 Carlsbad General Plan

As required by State law, Carlsbad's General Plan must comply with the CRQ CLUP. If the City chooses to overrule a finding of the Airport Land Use Commission as stated in the CLUP, it may do so by a two-thirds vote if it makes a specific finding that the General Plan and the CLUP are consistent.

Carlsbad adopted their current General Plan in 1994. The General Plan is comprised of a “Vision and Introduction” Section and eight elements: Land Use Element, Circulation Element, Housing Element, Open Space and Conservation Element, Noise Element, Public Safety Element, Parks and Recreation Element, and Arts Element. Issues relevant to noise in the study area are described within several Elements.

To limit noise exposure on noise sensitive land uses, the City has designated areas surrounding CRQ for predominately planned industrial uses. To accomplish this, a significant amount of non-residential land has been designated on the plan, possibly exceeding what is needed to serve and accommodate future residential uses located exclusively in Carlsbad. As such, future re-designation of planned residential areas to non-residential uses to accommodate future CRQ growth would not be supported. The Land Use Element within the General Plan classifies some areas near CRQ as an “Unplanned Area” (UA) and the General Plan states that these areas are not appropriate for residential uses.

While the Circulation Element encourages the continued operation of CRQ, it also prohibits the expansion of CRQ unless approved by a majority vote of the Carlsbad electorate as required by the Carlsbad Municipal Code. This Element encourages coordination with FAA and other interested parties (the San Diego Regional Airport Authority), "to protect public health, safety and welfare by ensuring the orderly operation of the Airport and the adoption of land use measures that minimize the public's exposure to excessive noise and safety hazards within areas around the airport."

The Noise Element states that, "in general, land in the immediate vicinity of the Airport or under the take off or landing approach is subject to noise levels which are unsuitable for residential development, schools, hospitals, or other similar noise sensitive uses."

Land Use Policy, C-5 within the Noise element, recommends 60 CNEL as the exterior noise level to which all residential units should be mitigated. The 65 CNEL is the maximum noise level to which residential units subject to noise from CRQ should be permitted. Additional disclosure actions (easements, deed restrictions, recorded notice, etc.) may be required of developers/sellers of noise impacted residential units. For new residential properties identified as requiring a noise study, a study shall be prepared by an acoustical professional. This study shall document the projected maximum exterior noise level and mitigate the projected exterior noise level to a maximum allowable noise level as identified in this policy. Interior noise levels should be mitigated to 45 CNEL when openings to the exterior of the residence are open or closed. If openings are required to be closed to meet the interior noise standard, then mechanical ventilation shall be provided. If the acoustical study shows that exterior noise levels cannot be mitigated to the level allowable as identified in this policy or less, the development should not be approved without one or more of the following findings:

- Changes or alterations have been required in, or incorporated into, the project, which avoid or substantially lessen the significant environmental effect (noise).
- Changes or alterations to avoid or substantially lessen the significant environmental effects (noise) are within the responsibility and jurisdiction of another public agency and not the City of Carlsbad. Such changes have been adopted by such other agency or can and should be adopted by such other agency.
- Specific economic, social, or other considerations make infeasible the mitigation measures or project alternatives to avoid or substantially lessen the significant environmental effect (noise).
- If a project is approved with exterior noise levels exceeding the level allowable pursuant to this policy, all purchasers of the impacted property shall be notified in writing prior to purchase, and by deed disclosure in writing, that the property they are purchasing is, or will be, noise impacted and does not meet Carlsbad noise standards for residential property. Notwithstanding project approval, no residential interior CNEL should exceed 45 dBA.

The General Plan also requires that a Noise Study be submitted with all discretionary applications for residential projects of five or more single family dwelling units or any multiple family dwelling units located within or 500-feet beyond the 60 CNEL noise contour lines.

4.2.3 Carlsbad Zoning Ordinance

The City requires discretionary review of all proposed development projects within the AIA. All parcels must process a site development plan, planned industrial permit, or other discretionary permit.

Although the area surrounding CRQ is primarily industrial, opportunities for residential development do exist. The “PM” zoning district allows multifamily residential development of up to 40 units per acre provided it serves with or is built in conjunction with adjoining industrial development. Any multifamily development within the 65 CNEL is subject to a noise study and mitigation measures. Additionally, commercial land uses that may include, hotels, motels, or semi-transient commercial housing structures such as Single Room Occupancy Hotels are also allowed surrounding CRQ. Transient Shelters are also allowed in industrial areas with a Conditional Use Permit (CUP).

4.2.4 Oceanside General Plan

The 1974 City of Oceanside General Plan is the primary source of long-range planning and policy direction that will be used to guide growth and preserve the quality of life within the City of Oceanside. This General Plan contains 10 elements: Land Use Element, Circulation Element, and Recreational Trails Element, Housing Element, Environmental Resources Management Element, Public Safety Element, Noise Element, Community Facilities Element, Hazardous Waste Management Element, and Military Reservation Element.

The Noise Element does not specifically address CRQ. The Element does have a goal of minimizing the effects of excessive noise in the City of Oceanside and recommends the adoption of a new noise ordinance, the planning of land uses to avoid noise impacts, and the establishment of quiet zones.

4.2.5 Vista General Plan

The 1983 Vista General Plan has several elements. The Land Use Element forms the key to the entire General Plan document. The Noise Element refers to the CLUP regarding airport noise and land use compatibility.

4.2.6 County of San Diego Plan, Noise Element of General Plan, Revised 1980

The major issues addressed within the Noise Element include the County's role in enforcing the California Airport Noise Standards, the need for an integrated land use and transportation planning program, and the importance of acoustical insulation techniques in urban development policies.

Aircraft Noise

Urban development is continuing to occur adjacent to general aviation airports operated by the County.

The Findings chapter within the Noise Element is based on the present state of scientific knowledge about noise. Unanimous agreement does not exist in this area of science; however, agreement is widespread enough that the following factual information has been accepted by the Congress as a basis for protecting

the public health and welfare with an adequate safety margin. Relevant findings within the 1980 Noise Element are outlined below:

- Finding 7: There is no one noise standard or set of noise standards that is universally applicable in San Diego County. The California Airport Noise Standard is 65 CNEL. The requirement for residential soundproofing is effective at a level of 60 dB(A) CNEL.
- Finding 14: Existing federal policy proposes to reduce aircraft noise by reducing engine noise of current models, controls on future type aircraft, changes in aircraft operational procedures and extensive technical research, and to formulate airport noise certification regulations.
- Finding 15: The Environmental Protection Agency's Report to Congress on Aircraft Noise, has indicated its intention to propose regulations to require retrofitting of existing aircraft with quieter engines, to lower the permissible noise levels for future aircraft, to require the use of noise abatement takeoff, landing, and flight procedures, and to develop airport noise certification regulations (the Agency's term for a cumulative airport noise control system similar to the California Airport Noise Standards).
- Finding 21: The California Airport Noise Standards require a progressive reduction of noise at airports until no adjacent resident experiences a CNEL greater than 65 dBA by 1986. The responsibility for implementing this policy is divided between the State and its counties that are delegated specific review and enforcement functions. This policy requires the San Diego Board of Supervisors to determine which public and private civilian airports exceed the maximum noise levels and have a "noise problem." The Board is also required to notify the airport proprietor to begin a noise monitoring program in peripheral areas for frequency and level of aircraft noise within six months, validate the airport proprietor's noise monitoring data, submit quarterly reports to the Department of Transportation's Division of Aeronautics, and review the airport's noise monitoring plan.
- Finding 24: The Comprehensive Planning Organization, acting as the Airport Land Use Commission, is required to prepare land use plans for all areas adjacent to each public airport which could exceed the State airport noise standards and for which building height restrictions are needed to maintain navigable airspace.

4.2.7 Building Code

The California Building Code Noise (CCR Title 24, Division II, Sound Transmission Control) requires that multifamily dwellings located in an area exceeding 60 CNEL have an acoustical analysis conducted showing that the proposed design will limit interior noise in habitable to 45 CNEL or below. Worst-case noise levels, either existing or future, must be used. Future noise levels must be predicted at least 10 years from the time of the building permit application.

4.2.8 State Of California Aircraft Noise/Land Use Compatibility Guidelines

Although the State does not administer the Part 150 process, the State has established acceptability criteria for evaluating airport noise levels. California Code of Regulation Title 21 (Division 2.5 Division

of Aeronautics, Chapter 6. Noise Standards) established 65 CNEL as the acceptable noise level for persons residing in the vicinity of an airport.

4.3 FAA AIRCRAFT NOISE/LAND USE COMPATIBILITY GUIDELINES

In a Part 150 study, CNEL estimates have the following two principal uses:

- Provide a basis for comparing existing noise conditions to the effects of noise abatement procedures and/or forecast changes in airport activity, and
- Provide a quantitative basis for identifying aircraft noise not compatible with a given land use.

Both of these functions require the application of objective criteria for evaluating aircraft noise. The FAA has adopted guidelines regarding the compatibility of land uses with various noise levels in the DNL metric (CNEL in California). These guidelines are contained in Part 150. The development of these guidelines was intended to establish a consistent process (for all airports nationwide) for estimating noise compatibility and for considering federal funding for noise compatibility program implementation. The County may consider adopting a designation of incompatibility that is different from the guidelines in Part 150. However, any such modification to standards should be based on public input and the ability to maintain existing compatible land uses for future airport growth.

Table 4-1 identifies the land use compatibility standards from Federal Aviation Regulation (FAR) Part 150 (14 CFR Part 150) recommended for adoption by the County of San Diego. It indicates that all land uses are considered to be compatible with airport noise levels less than 65 CNEL. This limit is supported formally by standards adopted by the U.S. Department of Housing and Urban Development (HUD). The HUD standards address whether sites are eligible for Federal funding support. These standards, set forth in 24 CFR Part 51, define areas with DNL (or CNEL) exposure not exceeding 65 dBA as acceptable for funding. Areas exposed to noise levels between 65 and 75 DNL are “normally unacceptable,” and require special abatement measures and review. Those at 75 DNL and greater are “unacceptable” except under limited circumstances.

The cumulative nature of CNEL means that the same level of noise exposure can be achieved in an infinite number of ways. For example, a reduction in a small number of relatively noisy operations may be counterbalanced by a much greater increase in relatively quiet flights, with no net change in CNEL.

With these cautions in mind, the Part 150 guidelines can be applied to the CNEL contours to identify the potential types, degrees, and locations of incompatibility. Measurement of the land areas involved can provide a quantitative measure of exposure that allows a comparison of at least the gross effects of existing or forecast aircraft operations.

Noise-sensitive land uses such as residences and schools are considered non-compatible with CNEL of 65 dBA or greater in accordance with local guidelines. Where the community determines that residential or school uses must be allowed, acoustical treatments designed to achieve indoor levels of 45 CNEL or less should be incorporated into the structures. Other noise-sensitive land uses such as churches, hospitals, and nursing homes are considered generally compatible with CNEL of greater than or equal to 65 dBA, provided that their structure is designed with, or contains, adequate measures to achieve reduction in noise levels (i.e.,

sound insulation). Figure 2-1 shows the noise sensitive locations in the vicinity of the airport, all of which are outside of the 65 CNEL noise contours identified for the 2004, 2009 and 2014 NEMS shown later in this Study. Land uses that are less sensitive to noise, such as office buildings, are considered compatible with CNEL less than 70 dBA without sound insulation and less than 80 CNEL with sound insulation.

Table 4-1
FAR Part 150 Land Use Compatibility Guidelines

Land Use	Yearly Community Noise Equivalent Level (CNEL)					
	Less Than 65 Decibels	65-69 Decibels	70-74 Decibels	75-79 Decibels	80-84 Decibels	Greater Than 85 Decibels
Residential						
Residential (Other than mobile homes & transient lodges)	Y	N[1]	N[1]	N	N	N
Mobile Home Parks	Y	N	N	N	N	N
Transient Lodging	Y	N[1]	N[1]	N[1]	N	N
Public Use						
Schools	Y	N[1]	N[1]	N	N	N
Hospitals, Nursing Homes	Y	25	30	N	N	N
Churches, Auditoriums, Concert Halls	Y	25	30	N	N	N
Governmental Services	Y	Y	25	30	N	N
Transportation	Y	Y	Y[2]	Y[3]	Y[4]	Y[4]
Parking	Y	Y	Y[2]	Y[3]	Y[4]	N
Commercial Use						
Offices, Business & Professional	Y	Y	25	30	N	N
Wholesale & Retail Building Mtls, Hardware & Farm Equipment	Y	Y	Y[2]	Y[3]	Y[4]	N
Retail Trade - General	Y	Y	25	30	N	N
Utilities	Y	Y	Y[2]	Y[3]	Y[4]	N
Communications	Y	Y	25	30	N	N
Manufacturing & Production						
Manufacturing, General	Y	Y	Y[2]	Y[3]	Y[4]	N
Photographic and Optical	Y	Y	25	30	N	N
Agriculture (Except Livestock) & Forestry	Y	Y[6]	Y[7]	Y[8]	Y[8]	Y[8]
Livestock Farming & Breeding	Y	Y[6]	Y[7]	N	N	N
Mining & Fishing, Resource Production & Extraction	Y	Y	Y	Y	Y	Y
Recreational						
Outdoor Sports Arenas, Spectator Sports	Y	Y[5]	Y[5]	N	N	N
Outdoor Music Shells, Amphitheaters	Y	N	N	N	N	N
Nature Exhibits & Zoos	Y	Y	N	N	N	N
Amusement, Parks, Resorts, Camps	Y	Y	Y	N	N	N
Golf Courses, Riding Stables, Water Recreation	Y	Y	25	30	N	N

NOTE: The designations contained in this table do not constitute a Federal determination that any use of land covered by the program is acceptable or unacceptable under Federal, State or Local law. The responsibility for determining the acceptable and permissible land use remains with the local authorities. FAA determinations under Part 150 are not intended to substitute Federally determined land use for those determined to be appropriate by local authorities in response to locally-determined needs and values in achieving noise-compatible land uses.

KEY TO TABLE:

SLUCM	Standard Land Use Coding Manual.
Y (Yes)	Land Use and related structures compatible without restrictions.
N (No)	Land Use and related structures are not compatible and should be prohibited.
NLR	Noise Level Reduction (outdoor to indoor) to be achieved through incorporation of noise attenuation into design and construction of the structure.
25, 30 or 35	Land use and related structures generally compatible; measures to achieve NLR of 25, 30 or 35 must be incorporated in design and construction of structure.

1 Where the community determines that residential or school uses must be allowed, measures to achieve outdoor to indoor NLR of at least 25 dB and 30 dB should be incorporated into building codes and be considered in individual approvals. Normal construction can be expected to provide a NLR of 20 dB, thus, the reduction requirements are often stated as 5, 10 or 15 dB over standard construction and normally assumes mechanical ventilation and closed windows year round. However, the use of NLR criteria will not eliminate outdoor noise problems.

2 Measures to achieve NLR of 25 must be incorporated into the design and construction of portions of the buildings where the public is received, office areas, noise-sensitive areas or where the normal noise level is low.

3 Measures to achieve NLR of 30 must be incorporated into the design and construction of portions of the buildings where the public is received, office areas, noise-sensitive areas or where the normal noise level is low.

4 Measures to achieve NLR of 35 must be incorporated into the design and construction of portions of the buildings where the public is received, office areas, noise-sensitive areas or where the normal noise level is low.

5 Land use compatible provided special sound reinforcement systems are installed.

6 Residential buildings require a NLR of 25.

7 Residential buildings require a NLR of 30.

8 Residential buildings not permitted.

Source: FAR Part 150 (18 January 1985) with .local interpretation of level ranges.

4.4 DEMOGRAPHICS

Before evaluating the effects of future aircraft noise, the likelihood of future noise-sensitive development in the area must be understood. Development trends in the vicinity of the airport are critical to noise compatibility planning. Future residential growth can constrain the operation of the airport if it occurs beneath aircraft flight tracks and within areas subject to high noise levels.

Table 4-2 summarizes the population and housing counts for the city of Carlsbad. According to the U.S. Census Bureau, in 2002 the population of the City grew by approximately 3.5%, from 83,680 in 2001 to 86,639 in 2002 (U.S. Census Bureau, 2002). SANDAG has estimated the future population to be approximately 107,305 in the year 2010 and approximately 120,631 in the year 2020. Housing units are also expected to increase. In 2000, there were an estimated 33,798 housing units within the City. In 2010, approximately 45,321 total housing units are projected and in 2020 approximately 48,975 total housing units are projected (SANDAG, 2003).

Table 4-2
Population and Housing Counts for the City Of Carlsbad*

	Census Bureau		State Department of Finance
Year	1990	2000	2002
Population	62,846	78,247	88,013
Housing Units	27,119	33,717	37,486

*Notes: Census Bureau estimates are as of April 1 of the years stated. State Department of Finance estimates are as of January 1 of the year stated.

Source: http://www.ci.carlsbad.ca.us/about/demog.html

4.5 EXISTING AND PLANNED LAND USE

Existing and planned land use must be considered when assessing noise compatibility. An analysis of existing land use provides the data required to: 1) determine the type and extent of noise-sensitive land uses (such as residences, schools, and hospitals), and 2) the number of persons currently exposed to high levels of aircraft noise.

Land use plans can be studied for indications of what types of development the affected jurisdictions will encourage in the future. Land use data can also be used to estimate the potential increase or decrease in the number of persons and the noise-sensitive land uses that would be exposed to high levels of aircraft noise in the future.

4.5.1 Existing Land Use, Zoning and Compliance

The Part 150 definition of noise sensitive public buildings includes schools, hospitals, and health care facilities. Also identified are properties on or eligible to be included in the National Register of Historic Places (NRHP).

The area around the airport is served by four schools districts: 1) Carlsbad Unified School District, 2) Encinitas Union Elementary School District, 3) San Dieguito Union High School District, and 4) San Marcos Unified School District.

The purpose of identifying these sites is to assist in the assessment of which properties are impacted by incompatible noise levels and adopt policies with regard to the location of future noise sensitive land uses. In addition to residential areas, a number of land use types are considered to be noise sensitive according to Part 150 Land Use Compatibility Guidelines (see Table 4-1). As described previously, the Carlsbad General Plan has specific land use designations. The FAA also has certain land use designations as well. These designations are described in Table 4-3.

Table 4-3
Land Use Categories/Designations

General Plan Designation	General Plan Description	FAA description
R	Regional Commercial	Commercial
T-R	Travel/Recreation	Commercial
T-R/C	Travel/Recreation Commercial	Commercial
T-R/L	Travel/Recreation/Local Shopping Center	Commercial
T-R/O	Travel/Recreation/Office	Commercial
U	Public Utilities	Public Utilities
PI	Planned Industrial	Manufacturing and Production
PI/O	Planned Industrial/Office	Manufacturing and Production
AG	Agriculture	Manufacturing and Production
OS	Open Space	Open Space
CF	Community Facility	Public Use
S-E	School/Elementary	Public Use
G	Governmental Facilities	Public Use
TC	Transportation Corridor	Public Use
RH	Residential, High Density	Residential
RH/C/O	Residential, High Density-Commercial-Office	Residential
RH/L/CF	Residential, High Density/ Local Shopping Center/ Community Facility	Residential
RL	Residential, Low Density	Residential
RLM	Residential, Low-Medium Density	Residential
RM	Residential, Medium Density	Residential
RM/O		Residential
RMH	Residential, Medium-High Density	Residential
T-R/RH		Residential
V	Village	Residential
UA		Unplanned Area

Residential:

Low Density (RL): 0-1.5 dwelling units per acre
Low-Medium Density (RLM): 0-4 dwelling units per acre
Medium Density (RM): 4-8 dwelling units per acre
Medium-High Density (RMH): 8-15 dwelling units per acre
High Density (RH): 15-23 dwelling units per acre

Commercial:

Travel/Recreation (TR): Visitor attractions and commercial uses, which serve travel and recreational needs
Village (V): Retail Stores, offices, tourist-serving facilities, as well as intermixed residences

Industrial:

Planned Industrial (PI): Industrial development

Government:

Government Facilities (G): Government owned or operated facilities

Public Utilities:

Public Utilities (U): Public utility
Open Space and Community Parks
Open Space and Community Parks (OS): Open space, including existing parks and special resource areas.

Unplanned Areas:

Unplanned Areas (UA): An area where planning for future land uses has not been completed or development has not been formalized

Transportation Corridor:

Transportation Corridor (TC): Major transportation corridors

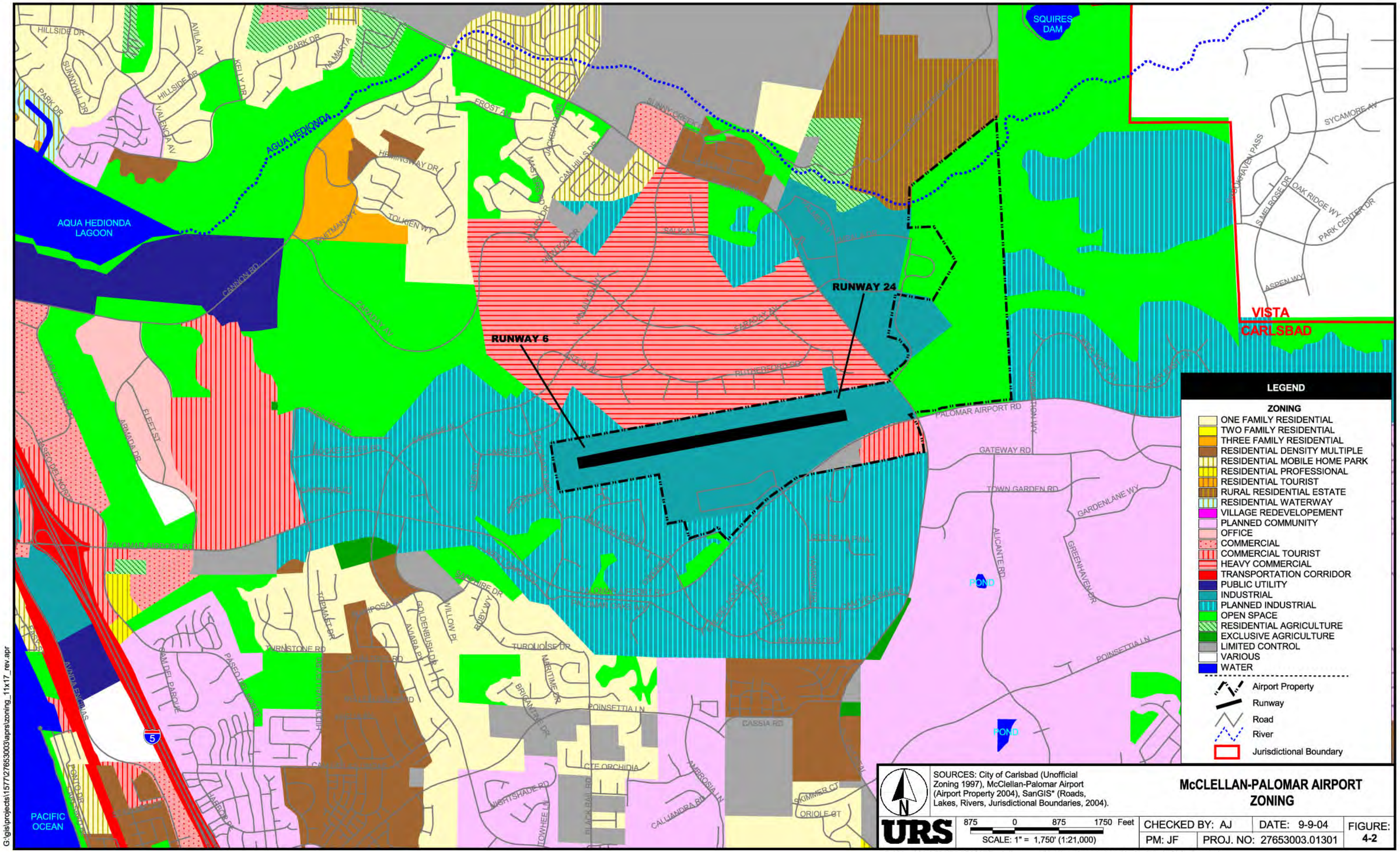
4.5.1.1 Existing Zoning

Existing zoning is depicted on Figure 4-2. Most of the area surrounding CRQ is zoned industrial. There are no zoned residential areas within the 65 CNEL contour.

4.5.1.2 Noise Complaints

While assessing the exposure of local land use and population to existing aircraft noise levels, it is valuable to review recent noise complaints. Complaints cannot be taken as a complete assessment of a noise problem at an airport. Many unpredictable variables can influence whether a person chooses to file a noise complaint. Many people who are annoyed may find it inconvenient or intimidating to call and complain. Others who decide to complain may be unusually sensitive to noise or be especially anxious about aircraft overflights. Some complaints may be motivated by unusual events rather than a chronic, long-term situation. Despite the limits of complaint information, it can aid in understanding the geographic pattern of concern about the airport.

Tables 4-4 and 4-5 summarize the CRQ received complaints for CY 2002 and CY 2003. The majority of complaints were reported from the area south and west of CRQ, were reported at night, and jets were typically the noise source.



SOURCES: City of Carlsbad (Unofficial Zoning 1997), McClellan-Palomar Airport (Airport Property 2004), SanGIS* (Roads, Lakes, Rivers, Jurisdictional Boundaries, 2004).

McCLELLAN-PALOMAR AIRPORT ZONING

URS

875 0 875 1750 Feet

SCALE: 1" = 1,750' (1:21,000)

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Table 4-4
Noise Complaint Data for 2002

		CY 2002 Month													
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	TOTAL	Mix
By Quadrant	SW			34	23			49	39	55	23	13	19	255	60%
	NW			4	8			11	17	7	5	5	1	58	14%
	SE			4	1			8	1	5	6	2	3	30	7%
	NE			2	10			10	15	16	11	9	6	79	19%
	Total	0	0	44	42	0	0	78	72	83	45	29	29	422	100%
By Aircraft	None			0	1			7	5	5	1	1	1	21	5%
	Prop			12	11			16	18	23	22	11	10	123	29%
	Jet			28	30			38	32	47	20	16	12	223	53%
	Helo			4	0			15	17	8	2	1	6	53	13%
	Comm'l			0	0			2	0	0	0	0	0	2	0%
	Total	0	0	44	42	0	0	78	72	83	45	29	29	422	100%
By Period	Day			16	7			28	30	36	19	14	17	167	40%
	Evening			6	15			10	25	7	5	0	1	69	16%
	Nighttime			22	20			40	17	40	21	15	11	186	44%
	Total	0	0	44	42	0	0	78	72	83	45	29	29	422	100%

The northern and southern Quadrants are defined by a line bisecting the runway endpoints and extending to infinity in each runway direction.

The eastern and western halves are defined by a line through the midpoint of the runway, perpendicular to the runway extending to infinity northward and southward

Day = 7:00 a.m. to 7:00 p.m.
Evening = 7:00 p.m. to 10:00 p.m.
Night = 10:00 p.m. to 7:00 a.m.

Table 4-5
Noise Complaint Data for 2003

		CY 2003 Month													
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	TOTAL	Mix
By Quadrant	SW			22	19	28	28	48	40	50	31	39	27	332	81%
	NW			0	0	1	3	0	1	1	0	0	1	7	2%
	SE		1	1	1	3	2	2	0	4	0	2	0	16	4%
	NE			2	1	4	5	9	6	11	8	6	4	56	14%
	Total	0	1	25	21	36	38	59	47	66	39	47	32	411	101%
By Aircraft	None			0	0	1	2	5	0	5	6	4	1	24	6%
	Prop		1	6	1	7	3	5	6	5	6	5	5	50	12%
	Jet			19	18	25	31	48	39	55	27	38	24	324	79%
	Helo			0	2	3	2	1	2	1	0	0	2	13	3%
	Comm'l			0	0	0	0	0	0	0	0	0	0	0	0%
	Total	0	1	25	21	36	38	59	47	66	39	47	32	411	100%
By Period	Day		1	6	1	7	8	15	7	11	9	8	8	81	20%
	Evening			1	0	2	3	2	0	6	1	1	0	16	4%
	Nighttime			18	20	27	27	42	40	49	29	38	24	314	76%
	Total	0	1	25	21	36	38	59	47	66	39	47	32	411	100%

The northern and southern Quadrants are defined by a line bisecting the runway endpoints and extending to infinity in each runway direction.

The eastern and western halves are defined by a line through the midpoint of the runway, perpendicular to the runway extending to infinity northward and southward

Day = 7:00 a.m. to 7:00 p.m.
Evening = 7:00 p.m. to 10:00 p.m.
Night = 10:00 p.m. to 7:00 a.m.

4.5.2 Planned Land Use and Zoning

Recently completed, on-going, and proposed projects occurring within the City of Carlsbad are discussed below (http://www.ci.carlsbad.ca.us/cserv/mstplan.html). The location of these projects is depicted on Figure 4-3.

1 - Bressi Ranch

Project Description: A Master Planned community of 585.1 acres which has been subdivided into 21 lots for future planning purposes including the following: six industrial, seven residential, one mixed use, one community facility, and six open space planning areas for the purpose of regulating the future development of up to 623 residential units (523 single-family and 100 for-sale affordable condos), 2.16 million square feet (sq ft) of industrial buildings, 130,000 sq ft of commercial buildings, and 138,000 sq ft of community-related services and/or facilities. The Master Plan has identified both single-family and multi-family residential product types. Five of the six open space lots totaling 187 acres are for native open space preservation. The remaining open space lot is a 3- acre park for active and passive recreation.

Project Duration: Clearing, grubbing and grading for the project began in February 2003, with expected completion of earthwork to occur in one year. Construction of El Fuerte from its southern terminus to Palomar Airport Road is scheduled for completion in winter 2004; Poinsettia Lane (onsite) will be completed in winter 2004; El Camino Real completed in spring 2004; and improvements to Palomar Airport Road will be complete in spring 2004.

3 - Villages of La Costa

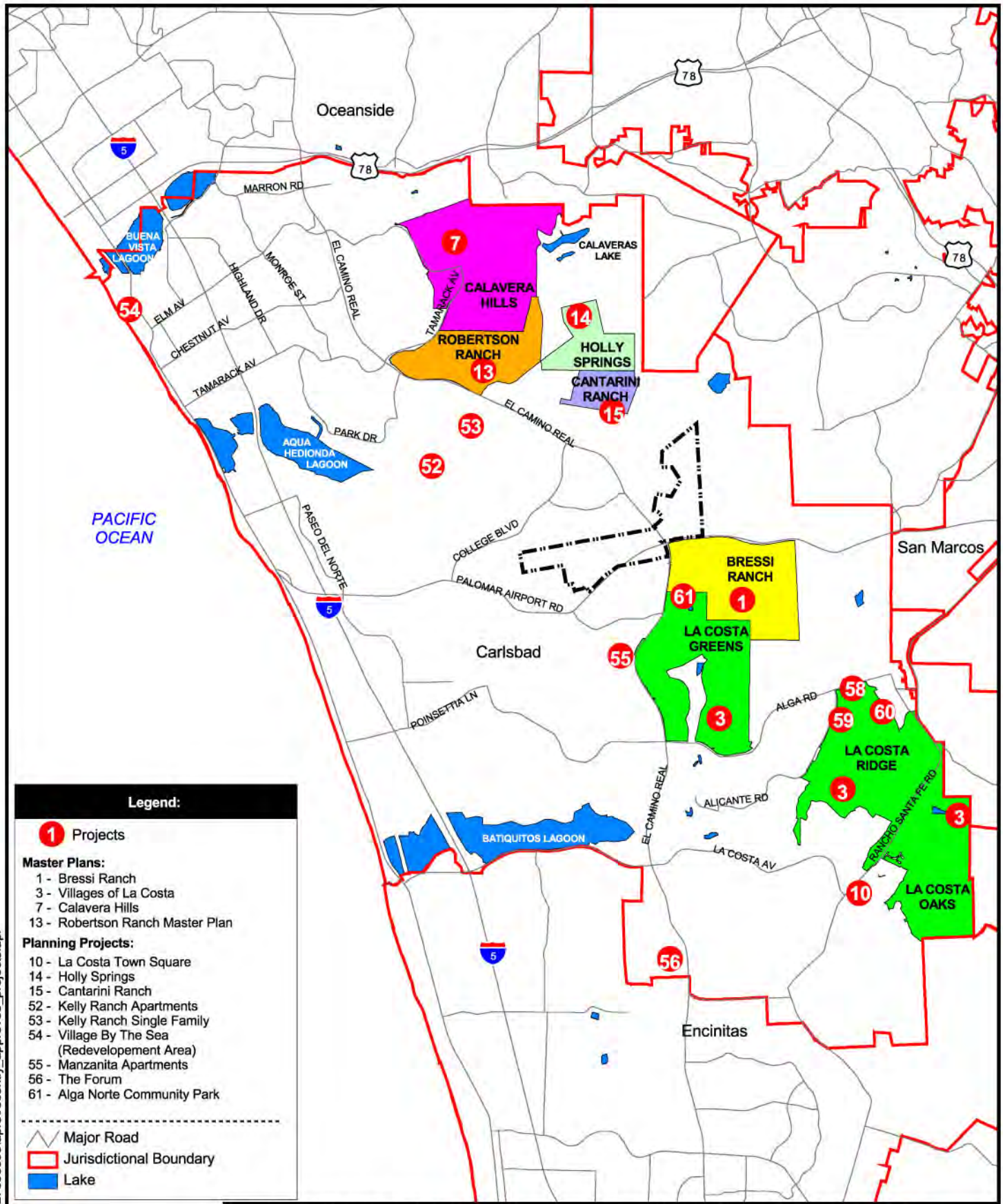
Project Description: The 1,866.4-acre project consists of three major planning areas: 1) The Greens which encompasses approximately 660.7 acres and is located approximately 2,500 feet south of Palomar Airport Road, east of El Camino Real, north of Alga Road and west of Unicornio Street; 2) The Ridge which includes approximately 493.1 acres and is located southeast of El Fuerte Street and Alga Road and northwest of San Marcos Creek; and 3) The Oaks which encompasses approximately 712.6 acres and is located on both sides of Rancho Santa Fe Road.

Project Duration: The build out of the Master Plan is anticipated to take approximately 10 to 15 years.

7 - Calavera Hills

Project Description: A Master Planned community of approximately 1,019 acres of urban villages and open space and a 110-acre environmental mitigation parcel (The Calavera Nature Preserve). The overall Master Plan features 19 residential villages, one community park, two school sites, two community facility sites, one recreational vehicle storage facility, an environmental mitigation open space parcel, as well as large areas of connecting open space corridors.

Project Duration: Complete build out of the Master Plan will likely occur in 2005.



SOURCES: City of Carlsbad (Projects), McClellan-Palomar Airport (Airport Property, 2004), SanGIS* (Lakes, Jurisdictional Boundaries, 2004), Sandag (Major Roads).

McCLELLAN-PALOMAR AIRPORT RECENTLY APPROVED/COMPLETED AND PROPOSED PROJECTS

URS

0.625 0 0.625 1.25 Miles

SCALE: 1" = 1.25 miles (1:79,200)

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13 - Robertson Ranch Master Plan

Project Description: A Master Planned community of approximately 403.7 acres, which integrates residential, commercial, educational, recreational, and open space land uses. The residential portion is proposed to provide a total of 1,122 dwelling units in a wide range of product types, densities and price ranges, including multi-family neighborhoods and affordable housing provided under the City's Inclusionary Housing Ordinance.

Project Duration: The Robertson Ranch Master Plan is intended to be developed in at least two phases over a period of approximately 10 years.

10 - La Costa Town Square

Project Description: A mixed-use project of 81.43 acres that includes 373,000 sq ft of retail uses, 75,000 sq ft of office use, medical offices, open space, and 64 single-family detached residential units.

Project Status: It is anticipated that the project will be heard by the Planning Commission in early 2004.

14 - Holly Springs

Project Description: Subdivision of a 119-acre site to allow 43 single-family custom homes on 1/2-acre minimum lots. Approximately 59 acres will be open space with an additional 20-acre open space remainder parcel.

Project Status: Pending Planning Commission hearing in spring 2004.

15 - Cantarini Ranch

Project Description: Subdivision of a 156.72-acre site to allow 105 single-family homes on 1/2-acre minimum lots and 80-unit multiple family units on 7.2 acres.

Project Status: Pending Planning Commission hearing in spring 2004.

52 - Kelly Ranch Apartments

Project Description: Archstone Pacific View is a 13 building, 451-unit apartment project located in the Kelly Ranch subdivision. The site will also contain open space, recreation facilities, and a possible child day-care center across the street.

Project Status: Approximately 70% of the apartment buildings are framed out, with the remaining 30% expected to begin framing in spring 2004.

53 - Kelly Ranch Single-Family

Project Description: Kelly Ranch is a 433-acre site located in the Northwest Quadrant of the City. 61.9-acres of the Ranch southeast of the Agua Hedionda Lagoon were subdivided into 178 lots for 147 single-family homes in Planning Areas "I" and "J." Lots will vary in size from 5,098 sq ft to 12,507 sq ft in

Planning Area "I" (also known as Heron Bay) and 7,500 sq ft to 20,655 sq ft in Planning Area "J" (also known as Spyglass Hills). A 7,200 sq ft recreational vehicle storage lot will be provided for the exclusive use of residents of Kelly Ranch developments: Canterbury, Heron Bay, Spyglass Hills, and two future developments. Planning Areas A and C northwest of the Agua Hedionda Lagoon will be considered for development at a later date.

Project Status: The actions listed below (under "project numbers") were approved by City Council on June 12, 2001. The project description, above, reflects the amended project based on Coastal Commission approval of LCPA 97-09. All infrastructure associated with this project is in, and the pads have been graded. Construction is under way on both the Heron Bay and Spyglass Hills projects.

54 - Village By The Sea (Redevelopment Area)

Project Description: A mixed-use development consisting of 65 condominium units (11 of which are affordable to lower-income families) and 8,662 sq ft of retail space.

Project Status: The Housing and Redevelopment Commission approved the project on August 6, 2002. The first phase of the residential development should be completed by April, 2004. The second phase to develop the last of the residential buildings and the retail shops should be finished by the end of 2004.

55 - Manzanita Apartments

Project Description: The project provides 157 two and three bedroom apartment homes in a series of 17 buildings, along with related recreational amenities.

Project Status: City Council approved the development at its meeting November 9, 1999. Grading of the site is under way and building construction is anticipated to begin in March 2004.

56 - The Forum

Project Description: Originally approved as The Pavilion, The Forum is a 265,000 sq ft specialty retail commercial center, with second floor office space.

Project Status: The project was approved in December 2001. Construction is under way with some of the stores opening as soon as mid-November 2003. The grand opening is scheduled for spring 2004.

61 - Alga Norte Community Park

Project Description: A 33-acre Master Planned active use community park.

Project Status: The CUP application was submitted to the Planning Department February 9, 2004.

4.5.2.1 Proposed Zoning Changes

There are approximately three proposed zoning changes within the City (Grimm, 2004). No proposed zone change would occur within the 65 CNEL contour.

SECTION 5 NOISE EXPOSURE MAP FOR YEAR 2004

Sections 5.1 through 5.5 discuss the operational information used to generate the Year 2004 Noise Exposure Map (2004 NEM), presented in Section 5.6. Section 5.7 concludes the chapter with a quantification of non-compatible land use relative to the 2004 NEM.

5.1 FLIGHT OPERATIONS AND FLEET MIX

Table 5-1 presents a summary of the modeled flight operations, in terms of arrivals, departures, and training operations. Approximately 204,000 annual flight operations were modeled for this NEM. Within rounding error, the total agrees with counts by the FAA ATCT of 204,289 for CY 2002. The temporal (day/evening/night) distribution for all aircraft categories was derived from 365 days (CY 2002) of data from the airport's Global Environment Management System (GEMS). GEMS is a flight track and noise monitoring system. Overall, 7%of the flight operations occur during the evening (7:00 p.m. to 10:00 p.m.) period and 3% occur during the nighttime (10:00 p.m. to 7:00 a.m.) period.

While researching the number of aircraft operations, the make and model of aircraft used in these operations were also identified for the development of a fleet mix. Fleet mix refers to the various types of aircraft operating at CRQ and included very specific information such as engine type, FAR Part 36 Noise Stage Certification and gross weight. See section 5.5 for more information on Noise Stage Certification.

The numbers of departures, arrivals, and training or touch-and-go (TNG) operations were estimated by CRQ. Nearly 58,000 operations are training or TNG operations, i.e., flights in the local traffic patterns. Each TNG is counted as two operations. The operation numbers and fleet mix for the 2004 NEM were developed from CRQ airport records (including tracking data described below in the Flight Tracks section), air taxi schedules (i.e., Official Airline Guide data), FAA ATCT records, and interviews with Fixed Base Operators (FBOs) at CRQ.

Using the ATCT counts, the operations were distributed into FAA-style categories – Air Carrier, Air Taxi, General Aviation (GA), and Military. The operations were also distributed by flight rule in effect – Instrument Flight Rules (IFR) or Visual Flight Rules (VFR). No Air Carrier (greater than 60 seats) operations were recorded. Annual Air Taxi operations totaled nearly 13,000, primarily by America West and United Express. With approximately 126,000 operations, itinerant GA operations outnumbered local GA operations by a ratio of approximately two to one. Annual Military operations, primarily from aircraft based at nearby MCAS Camp Pendleton and/or Miramar, numbered nearly 2,000. Each category is discussed in further detail in Sections 5.1.1, 5.1.2, and 5.1.3.

Application of the fleet mix to the average daily aircraft operations figures produced the number of average daily operations by aircraft type.

Table 5-1
Summary of Modeled Annual Flight Operations for 2004 NEM

Category	IFR or VFR	Departure				Arrival				Touch and Go[1]				Total			
		Day	Evening	Night	Total	Day	Evening	Night	Total	Day	Evening	Night	Total	Day	Evening	Night	Total
Air Carrier	both																
Air Taxi	both	5,443	836	291	6,570	5,353	759	458	6,570	0	0	0	0	10,796	1,595	749	13,140
GA Itinerant	IFR*	14,094	605	459	15,158	13,635	1,062	457	15,154	0	0	0	0	27,729	1,667	916	30,312
GA Local		7,020	300	226	7,546	6,798	528	226	7,552	0	0	0	0	13,818	828	452	15,098
GA Itinerant	VFR	31,236	1,343	1,009	33,588	30,228	2,352	1,008	33,588	26,197	2,016	576	28,789	87,661	5,711	2,593	95,965
GA Local		8,896	383	287	9,566	8,608	670	286	9,564	26,108	2,008	574	28,690	43,612	3,061	1,147	47,820
Military	both	536	228	0	764	536	228	0	764	305	131	0	436	1,377	587	0	1,964
Total		67,225	3,695	2,272	73,192	65,158	5,599	2,435	73,192	52,610	4,155	1,150	57,915	184,993	13,449	5,857	204,299

[1]Touch and Go counted as 2 operations each.

*Total may not match the detailed table due to rounding.

Day = 7:00 a.m. to 7:00 p.m.
Evening = 7:00 p.m. to 10:00 p.m.
Night = 10:00 p.m. to 7:00 a.m.

Source: URS Analysis

5.1.1 Air Taxi

Table 5-2 lists the detailed distribution of annual Air Taxi flight operations among representative INM aircraft types, operational mode, and CNEL time period. Numbers of Air Taxi operations were primarily based on data from the Official Airline Guide (OAG) and interviews with America West and United Express, which fly DeHavilland DHC-8 and Embraer EMB-120 twin turboprops, respectively. Per the OAG, annual operations by these two operators at CRQ in CY 2002 totaled nearly 5,700.

In addition to scheduled carriers of America West and United Express, the remaining 7,500 (approximate) annual Air Taxi operations also include "fractional ownership" operators such as NetJets and Bombardier FlexJet. The entire list of fractionals composing this portion of the Air Taxi fleet at CRQ is shown in Table 5-2. The fleet mix of the fractionals was based on a contiguous two-week sample of March 2003 ATCT Flight Progress Strips (Strips) provided by the FAA via a Freedom of Information Act (FOIA) request comprising 2,163 records for the period of March 9, 2003 through March 23, 2003. The aircraft types listed on these Strips were mapped to representative INM types using the table shown in Table D-2 of Appendix D.

It was assumed Air Taxi operators do not conduct any TNG operations at CRQ. Overall, 12% and 6% of the Air Taxi flight operations are conducted during the CNEL evening and nighttime periods, respectively.

5.1.2 General Aviation

GA operations were separated into IFR and VFR flights.

5.1.2.1 Instrument Flight Rule (IFR) Flights

From ATCT counts, 24% of the total GA operations were IFR in CY 2002. Table 5-3 shows the detailed distribution of annual GA IFR operations among representative INM aircraft types, operational mode, and CNEL time period. The GA IFR fleet mix, as derived from the two-week sample of Strips (introduced in Section 5.1.1) is composed of large and small corporate jets, single and twin turboprop and propeller-driven aircraft, and helicopters. The jets comprise 36% of GA IFR flight operations, 3% of which are noise Stage 2 (noisier) types (i.e., LEAR25, GIIB, FAL20). The single-engine propeller-driven aircraft and helicopters comprise 62% and 2% of the GA IFR operations, respectively.

The two-week Strips database was compared to a four-month sample of January 2003 through April 2003 FlightVue data obtained from CRQ's JetSource FBO. The FlightVue data sample yielded 57% jet operations with 4% being noisier Stage 2 types. It is believed the FlightVue data is geared more towards corporate aviation, which would tend to be more jet-oriented. Therefore, the two-week sample of Strips is a better representation of average CRQ operations than the FlightVue data fleet mix.

Table 5-2
Annual Air Taxi Flight Operations for 2004 NEM

Aircraft Category	Representative INM Aircraft Type[3]	Arrival				Departure (Stage Length 1 (0-500nm))				Grand Total			
		Day	Evening	Night	Total	Day	Evening	Night	Total	Day	Evening	Night	Total
Regional Jet	CL600	265	23	9	297	275	14	9	298	540	37	18	595
	CL601	33	3	1	37	34	2	1	37	67	5	2	74
Business Jet	CIT3	133	12	5	150	138	7	4	149	271	19	9	299
	CNA500	133	12	5	150	138	7	4	149	271	19	9	299
	CNA750	365	32	13	410	378	19	12	409	743	51	25	819
	GIIB	66	6	2	74	69	4	2	75	135	10	4	149
	GIV	133	12	5	150	138	7	4	149	271	19	9	299
	LEAR35	1,161	102	40	1,303	1,204	61	38	1,303	2,365	163	78	2,606
	MU3001	696	61	24	781	722	37	23	782	1,418	98	47	1,563
Twin Turboprop	DHC6	33	3	1	37	34	2	1	37	67	5	2	74
	DHC8[1]	475	310		785	423	361		784	898	671		1,569
	EMB120[2]	1,562	157	343	2,062	1,580	299	183	2,062	3,142	456	526	4,124
Twin Piston Prop	BEC58P	298	26	10	334	310	16	10	336	608	42	20	670
Single Prop													0
Helicopter													0
Total		5,353	759	458	6,570	5,443	836	291	6,570	10,796	1,595	749	13,140

Notes:
[1]America West only.
[2]United Express only.
[3]Types other than for America West and United Express only include: AmeriFlight (cargo), ExecJet (NetJets), Executive Jet Management, Global Airways, Bombardier Flexjet, Flight Options, Pacific Jet, Inc., Priester Aviation.
Day = 7:00 a.m. to 7:00 p.m.
Evening = 7:00 p.m. to 10:00 p.m.
Night = 10:00 p.m. to 7:00 a.m.
Source: DAG, 2002 confirmed/slightly modified by airlines; CRQ, 2003, Flight Progress Strips, 2003.

Table 5-3
Annual IFR (Local and Itinerant)
General Aviation Flight Operations for 2004 NEM

Aircraft Category	Representative INM Aircraft Type	Arrival				Departure (Stage Length 1 (0-500nm))				Grand Total			
		Day	Evening	Night	Total	Day	Evening	Night	Total	Day	Evening	Night	Total
Regional Jet	CL600	817	63	27	907	845	36	27	908	1,662	99	54	1,815
Business Jet	CNA500	1,431	111	48	1,590	1,478	63	48	1,589	2,909	174	96	3,179
	CNA750	409	32	14	455	422	18	14	454	831	50	28	909
	FAL20	204	16	7	227	211	9	7	227	415	25	14	454
	GIIB	204	16	7	227	211	9	7	227	415	25	14	454
	GIV	613	48	21	682	634	27	21	682	1,247	75	42	1,364
	GV	204	16	7	227	211	9	7	227	415	25	14	454
	IA1125	204	16	7	227	211	9	7	227	415	25	14	454
	LEAR25	204	16	7	227	211	9	7	227	415	25	14	454
	LEAR35	1,839	143	61	2,043	1,900	82	61	2,043	3,739	225	122	4,086
	MU3001	1,226	96	41	1,363	1,266	54	41	1,361	2,492	150	82	2,724
Twin Turboprop	CNA441	613	48	21	682	634	27	21	682	1,247	75	42	1,364
	DHC6	1,022	79	34	1,135	1,056	45	34	1,135	2,078	124	68	2,270
Twin Piston Prop	BEC58P	2,044	159	68	2,271	2,111	90	69	2,270	4,155	249	137	4,541
Single Prop	CNA172	3,269	255	109	3,633	3,378	145	109	3,632	6,647	400	218	7,265
	CNA206	1,635	127	54	1,816	1,689	73	55	1,817	3,324	200	109	3,633
	GASEPF	2,451	190	82	2,723	2,534	109	82	2,725	4,985	299	164	5,448
	GASEPV	1,635	127	54	1,816	1,690	73	54	1,817	3,325	200	108	3,633

Table 5-3 (continued)
Annual IFR (Local and Itinerant)
General Aviation Flight Operations for 2004 NEM

Aircraft Category	Representative INM Aircraft Type	Arrival				Departure (Stage Length 1 (0-500nm))				Grand Total			
		Day	Evening	Night	Total	Day	Evening	Night	Total	Day	Evening	Night	Total
Helicopter	H500D[1]	164	13	6	183	169	7	6	182	333	20	12	365
	H500D[2]	221	17	8	246	228	10	8	246	449	27	16	492
	H500D[3]	4			4	4			4	8			8
	B206L[4]	8	1		9	8			8	16	1		17
	SA365N[5]	4			4	4			4	8			8
	H500D[6]												0
	B222[7]	8	1		9	8			8	16	1		17
	SA350D[8]												0
Total		20,433	1,590	683	22,706	21,113	904	685	22,702	41,546	2,494	1,368	45,408

Notes:
[1]Represents Civic Helicopters' Robinson R22BII
[2]Represents Civic Helicopters' Schweitzer S300C
[3]Represents Civic Helicopters' MD500D
[4]Represents Civic Helicopters' Bell 206BIII
[5]Represents Civic Helicopters' Eurocopter EC120
[6]Represents Civic Helicopters' future MD900
[7]Represents Mercy Flite Bell 222
[8]Represents Mercy Flite future Aerospatiale AS350 A-star

*each closed pattern evolution counted as 2 operations

Day = 7:00 a.m. to 7:00 p.m.
Evening = 7:00 p.m. to 10:00 p.m.
Night = 10:00 p.m. to 7:00 a.m.

Sources: Derived from 2-week sample of flight progress strips; Civic Helicopters 2003; Mercy Flight, 2003; URS analysis, 2004.

The helicopter fleet mix was derived from interviews with two primary helicopter operators at CRQ – Civic Helicopters and Mercy Flite. Civic Helicopters generates 98% of the GA IFR helicopter operations.

It was assumed that none of the GA IFR flight operations generated TNG operations. In accordance with CRQ currently voluntary noise abatement policy and because of the potential for air traffic congestion, TNG operations by jets are discouraged and therefore were not modeled.

5.1.2.2 Visual Flight Rule (VFR) Flights

VFR flight operations comprise the remaining 76% of the total GA flight operations. Table 5-4 shows the detailed distribution of annual GA VFR operations among representative INM aircraft types, operational mode, and CNEL time period. CRQ provided the distribution of these operations among the aircraft categories and types, separately for arrivals/departures and TNG. GA VFR flight operations consist of single and twin propeller-driven (turboprop and piston) aircraft (80%) and helicopters (20%).

Identical to the GA IFR operations, the helicopter fleet mix was derived from interviews with two primary helicopter operators at CRQ – Civic Helicopters and Mercy Flite. Civic Helicopters generates 98% of the GA VFR helicopter operations.

It was assumed that 30% of GA Itinerant VFR operations were TNG, providing a ratio of less than one TNG per GA Itinerant VFR departure, on average. It was also assumed that 60% of GA Local VFR operations were TNG, providing a ratio of nearly 3 TNGs per GA Local VFR departure, on average.

5.1.3 Military

Military aircraft from nearby installations have the County's approval to operate at CRQ, albeit on a limited basis regarding practice approaches (CRQ, 2004). Table 5-5 shows the detailed distribution of annual Military flight operations among representative INM aircraft types, operational mode, and CNEL time period, as provided by CRQ. Jet C9, turboprop C12, and helicopters comprise 9%, 45% and 37% of the Military flight operations, respectively. The total operations of 1,964 were comprised of missed approaches for all military aircraft types except the C12. In addition to full-stop landings, the C12 conducts approximately two TNG per departure. Besides the C12, all other aircraft each conducted approximately two operations, every four days on average, except for the CH-53E (large helicopter), which conducted two operations every other day on average. All aircraft were assumed to have the following temporal distribution: 70% daytime, 30% evening, 0% nighttime.

Table 5-4
Annual VFR (Local and Itinerant)
General Aviation Flight Operations for 2004 NEM

Aircraft Category	Representative INM Aircraft Type	Arrival				Training (closed patterns*)				Departure Stage Length 1 (0-500nm)				Grand Total			
		Day	Evening	Night	Total	Day	Evening	Night	Total	Day	Evening	Night	Total	Day	Evening	Night	Total
Regional Jet	CL600				0				0				0	0	0	0	0
Business Jet	CNA500				0				0				0	0	0	0	0
	CNA750				0				0				0	0	0	0	0
	FAL20				0				0				0	0	0	0	0
	GIIB				0				0				0	0	0	0	0
	GIV				0				0				0	0	0	0	0
	GV				0				0				0	0	0	0	0
	IA1125				0				0				0	0	0	0	0
	LEAR25				0				0				0	0	0	0	0
	LEAR35				0				0				0	0	0	0	0
	MU3001				0				0				0	0	0	0	0
Twin Turboprop	CNA441				0				0				0	0	0	0	0
	DHC6	388	31	13	432	0	0	0	0	401	17	13	431	789	48	26	863
Twin Piston Prop	BEC58P	388	31	13	432	2,615	201	58	2,874	401	18	13	432	3,404	250	84	3,738
Single Prop	CNA172	19,690	1,531	656	21,877	23,538	1,811	517	25,866	20,347	875	656	21,878	63,575	4,217	1,829	69,621
	CNA206	10,602	825	353	11,780	10,461	805	230	11,496	10,957	470	355	11,782	32,020	2,100	938	35,058
	GASEPF				0				0				0	0	0	0	0
	GASEPV				0				0				0	0	0	0	0
Helicopter	H500D[1]	3,107	242	104	3,453	6,276	483	138	6,897	3,210	138	104	3,452	12,593	863	346	13,802
	H500D[2]	4,195	326	140	4,661	8,473	652	186	9,311	4,334	187	140	4,661	17,002	1,165	466	18,633
	H500D[3]	78	6	3	87	157	12	3	172	80	3	3	86	315	21	9	345
	B206L[4]	155	12	5	172	314	24	7	345	161	7	5	173	630	43	17	690
	SA365N[5]	78	6	3	87	157	12	3	172	80	3	3	86	315	21	9	345

Table 5-4 (continued)
Annual VFR (Local and Itinerant)
General Aviation Flight Operations for 2004 NEM

Aircraft Category	Representative INM Aircraft Type	Arrival				Training (closed patterns*)				Departure Stage Length 1 (0-500nm)				Grand Total			
		Day	Evening	Night	Total	Day	Evening	Night	Total	Day	Evening	Night	Total	Day	Evening	Night	Total
	H500D[6]																
	B222[7]	155	12	5	172	314	24	7	345	161	7	5	173	630	43	17	690
	SA350D[8]																
Total		38,836	3,022	1,295	43,153	52,305	4,024	1,149	57,478	40,132	1,725	1,297	43,154	131,273	8,771	3,741	143,785

Notes:
[1]Represents Civic Helicopters' Robinson R22BII
[2]Represents Civic Helicopters' Schweitzer S300C
[3]Represents Civic Helicopters' MD500D
[4]Represents Civic Helicopters' Bell 206BIII
[5]Represents Civic Helicopters' Eurocopter EC120
[6]Represents Civic Helicopters' future MD900
[7]Represents Mercy Flite Bell 222
[8]Represents Mercy Flite future Aerospatiale AS350 A-star

*Each closed pattern evolution counted as 2 operations

Day = 7:00 a.m. to 7:00 p.m.
Evening = 7:00 p.m. to 10:00 p.m.
Night = 10:00 p.m. to 7:00 a.m.

Source: CRQ estimates; ATCT records

Table 5-5
Annual Military Flight Operations for All NEMs

Aircraft Category	Representative INM Aircraft Type	Arrival [1]				Touch and Go				Departure [1]				Grand Total			
		Day	Evening	Night	Total	Day	Evening	Night	Total	Day	Evening	Night	Total	Day	Evening	Night	Total
Jet Airlift	C9A	64	27	-	91	-	-	-	-	64	27	-	91	128	54	-	182
Twin Turboprop	CVR580[2]	64	27	-	91	-	-	-	-	64	27	-	91	128	54	-	182
	C12	152	65	-	217	305	131	-	436	152	65	-	217	609	261	-	870
Twin Piston Prop					-				-				-	-	-	-	0
Single Prop					-				-				-	-	-	-	0
Helicopter	CH-53E	128	55	-	183	-	-	-	-	128	55	-	183	256	110	-	366
	SA341G[3]	64	27	-	91	-	-	-	-	64	27	-	91	128	54	-	182
	S70[4]	64	27	-	91	-	-	-	-	64	27	-	91	128	54	-	182
Total		536	228	0	764	305	131	0	436	536	228	0	764	1,377	587	0	1,964

Notes:
[1]Represents only Practice Approach (arrival and departure segments) for all except C12; Only C12 conducts full-stop landings;
[2]Represents C-2 Greyhound
[3]Represents OH-58 Kiowa
[4]Represents H-60 Blackhawk

*Each closed pattern evolution counted as 2 operations

Day = 7:00 a.m. to 7:00 p.m.
Evening = 7:00 p.m. to 10:00 p.m.
Night = 10:00 p.m. to 7:00 a.m.

Source: CRQ and ATCT estimates

5.2 RUNWAY AND HELIPAD UTILIZATION

Utilization of runways is described in terms of the percentage of occurrence of fixed-wing flight operations on each runway. Although the FAA controls runway use, it does not keep records of past usage. Runway utilization by CNEL time period was directly obtained from the full year (CY 2002) sample of CRQ's GEMS data. Appendix D discusses the GEMS data in further detail. Table 5-6 contains the average daily runway utilization for fixed-wing aircraft. Table 5-6 shows that 97% of all flight operations recorded by GEMS occurred on Runway 24. This trend applies to daytime and evening periods and is consistent with CRQ policy designating Runway 24 as the calm wind runway. During the nighttime, 88% of the flight operations utilized Runway 24. These percentages were applied to all categories of aircraft and modeled aircraft types.

Runway use is not applicable to most helicopter operations at CRQ. Helicopters, especially ones based at CRQ, primarily utilize 'pads' or spots on the airfield to depart and land. Although CRQ's Airport Layout Plan (ALP) identifies four helicopter pad (helipad) areas, including the area adjacent to Civic Helicopters (Civic pad) and one immediately south of Taxiway A towards the west end of the airfield (Mercy pad), all helicopter flight operations were conservatively modeled as only using the Mercy pad. This was a conservative simplification because: 1) noise exposure of helicopter arrivals can be greater than departures and 2) the modeled altitude for helicopter arrivals from the south (to the Mercy pad) is effectively lower than the arrival altitudes for actual helicopters landings to the Civic pad.

Table 5-6
Average Daily Runway Utilization

Runway	Percent Utilization			
	Day	Evening	Night	Overall
06	3%	3%	12%	3%
24	97%	97%	88%	97%

Day = 7:00 a.m. to 7:00 p.m.
Evening = 7:00 p.m. to 10:00 p.m.
Night = 10:00 p.m. to 7:00 a.m.
Source: GEMS

5.3 FLIGHT TRACKS AND TRACK UTILIZATION

Section 5.3.1 discusses flight tracks and Section 5.3.2 discusses utilization of said flight tracks.

5.3.1 Flight Tracks

Flight tracks are graphic depictions of the paths aircraft fly in relation to the ground or, as defined by the FAA in the Aeronautical Information Manual (AIM), the actual flight path of an aircraft over the surface of the earth. Unlike other modes of transportation, aircraft have the freedom to travel over virtually unlimited paths above the earth's surface. In comparison, cars and trains must follow narrowly defined paths. On approach, aircraft flight paths must line up with the runway for landing and track straight out from the runway on

departure until airspeed, altitude, or local procedures permit the aircraft to change course or direction. These operating procedures are designed for the safe and efficient operation of aircraft.

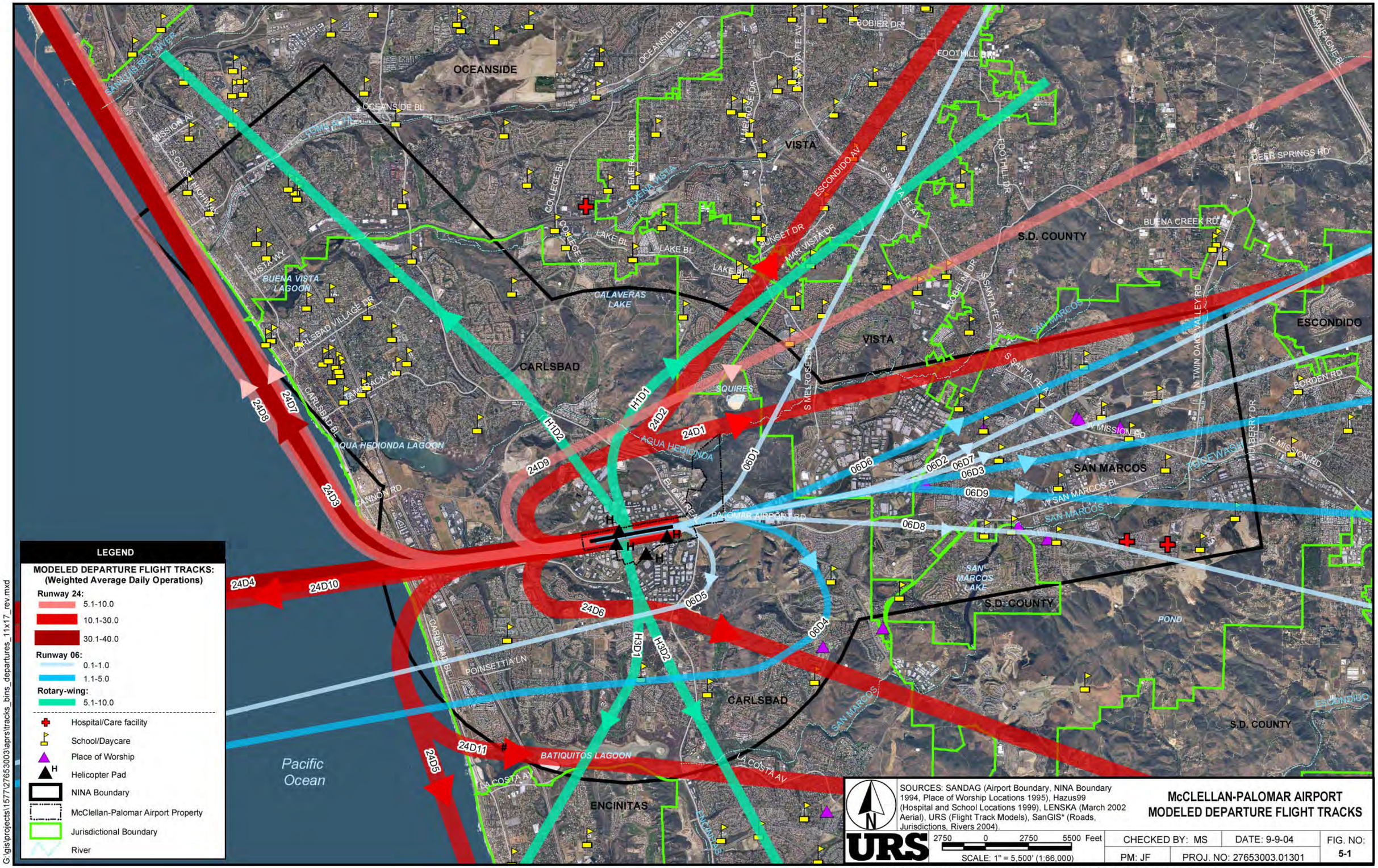
Like many airports in the U.S. that have a well-established general aviation community, flight training is conducted at CRQ. As part of flight training, a maneuver commonly known as a TNG is performed and practiced. A TNG is comprised of the following steps: a) an approach to the runway; b) a landing where the aircraft's wheels may "touch" the runway; c) a climbing departure from the runway (the "go" portion") and d) entry into the airport's local traffic pattern. The majority of the time this maneuver is practiced repeatedly with the aircraft in relatively close proximity to the airport while airborne. During periods when the airport's ATCT is operating, aircraft practicing this maneuver will be under the control of the ATCT. The TNG flight tracks developed reflect the performance of those aircraft known to conduct this type of operation and based on the GEM's data. These flight paths resemble racetrack ovals when viewed from above.

Figure 5-1 shows the modeled departure flight tracks. Figure 5-2 shows the modeled arrival and practice missed approach flight tracks. Figure 5-3 shows the modeled TNG flight tracks for existing conditions at CRQ. Helicopter tracks (depicted as green) are differentiated from fixed-wing tracks. The fixed-wing tracks are differentiated by runway. Runway 24 tracks are in depicted in shades of red and Runway 06 tracks are depicted in shades of blue. The tracks shown in the figures are based on a detailed analysis of the full year of CY 2002 CRQ GEMS flight operations density maps described in Appendix D. From the trends shown in the flight operations density maps, nominal flight tracks were determined and input into INM. Evidenced by the maps of Appendix D, aircraft do not always fly the nominal flight tracks. Nominal tracks are intended to represent the generalized flight paths within specific corridors.

Deviations from nominal flight tracks occur due to weather, pilot technique, ATC procedures, and aircraft weight. To compensate for these deviations, INM allows for flight track dispersal. Up to a maximum of nine dispersed tracks (one backbone track plus eight sub-tracks) may be generated to represent a flight corridor. In this study effort, the military flights had a high degree of dispersion and were therefore modeled with dispersion. Although the civilian operations also deviated from the nominal flight tracks, they did so to a lesser degree than the military tracks. Thus, modeling civilian dispersion did not seem reasonable. Four dispersed tracks (in addition to the backbone center flight track) were used to represent each of the departure portions of the military's practice approach flights, as appropriate. They consisted of one backbone carrying 39% of the total track operations and four sub-tracks, the outboard ones each carrying 6.5% of track's total operations, and the inboard ones each carrying 24% of the track's total operations. In Figure 5-2, the modeled practice approach tracks are shown in beige/orange.

The numbers of weighted average daily modeled flight operations on each individual modeled flight track is also depicted in the figures via the tracks' line thickness[2]. The weighting applied to the average daily flight operations simulates the penalties imposed by the CNEL metric. Evening operations were multiplied by three and nighttime operations were multiplied by 10 to approximate CNEL's 5 dBA and 10 dBA evening and nighttime penalties, respectively.

[2] The weighted daily operation ranges (and therefore the line thicknesses) are not cumulative for tracks or track segments which overlay each other.



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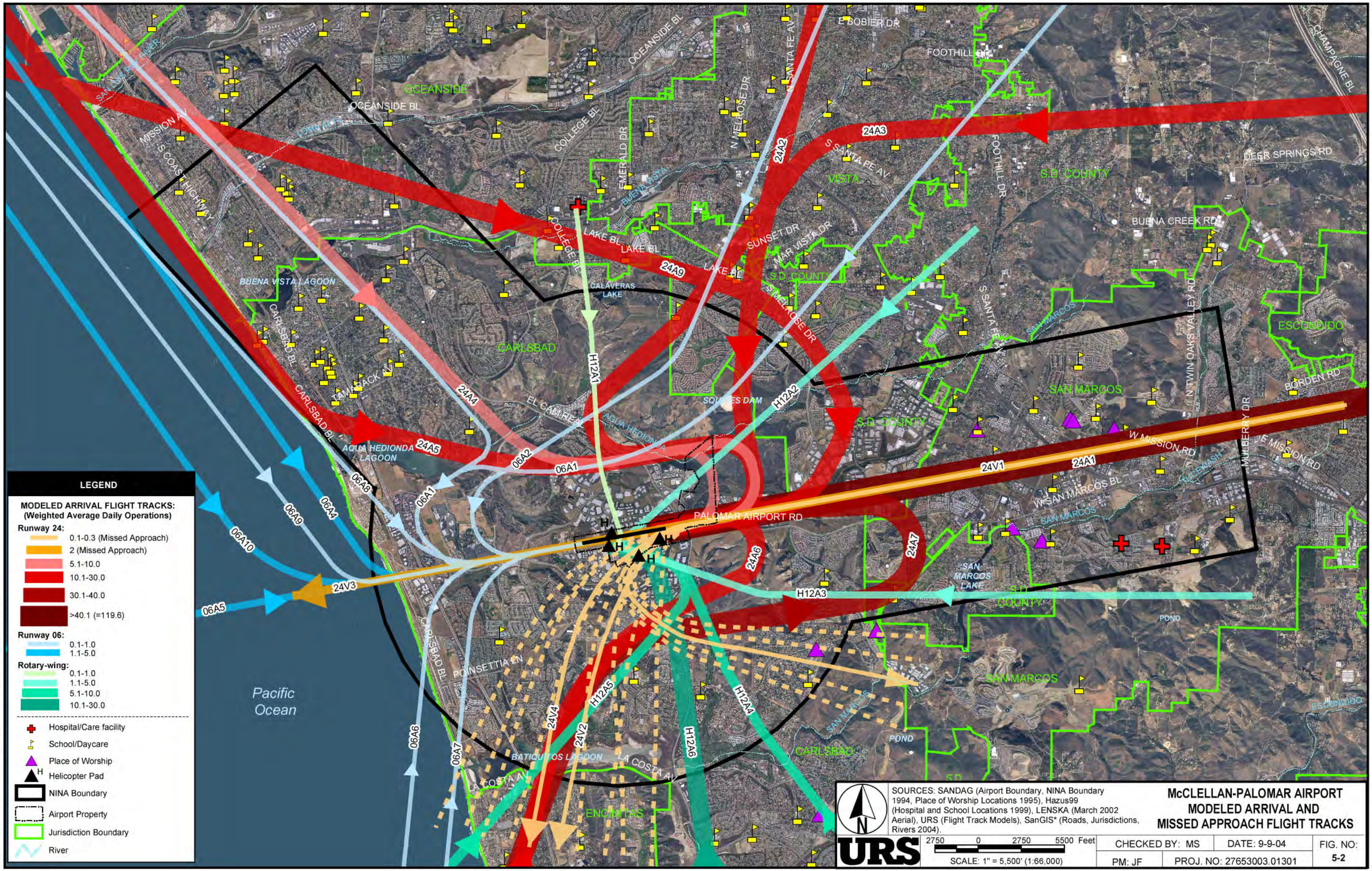

SOURCES: SANDAG (Airport Boundary, NINA Boundary 1994, Place of Worship Locations 1995), Hazus99 (Hospital and School Locations 1999), LENSKA (March 2002 Aerial), URS (Flight Track Models), SanGIS* (Roads, Jurisdictions, Rivers 2004).

URS

2750 0 2750 5500 Feet

SCALE: 1" = 5,500' (1:66,000)

McCLELLAN-PALOMAR AIRPORT MODELED ARRIVAL AND MISSED APPROACH FLIGHT TRACKS

CHECKED BY: MS	DATE: 9-9-04	FIG. NO:
PM: JF	PROJ. NO: 27653003.01301	5-2

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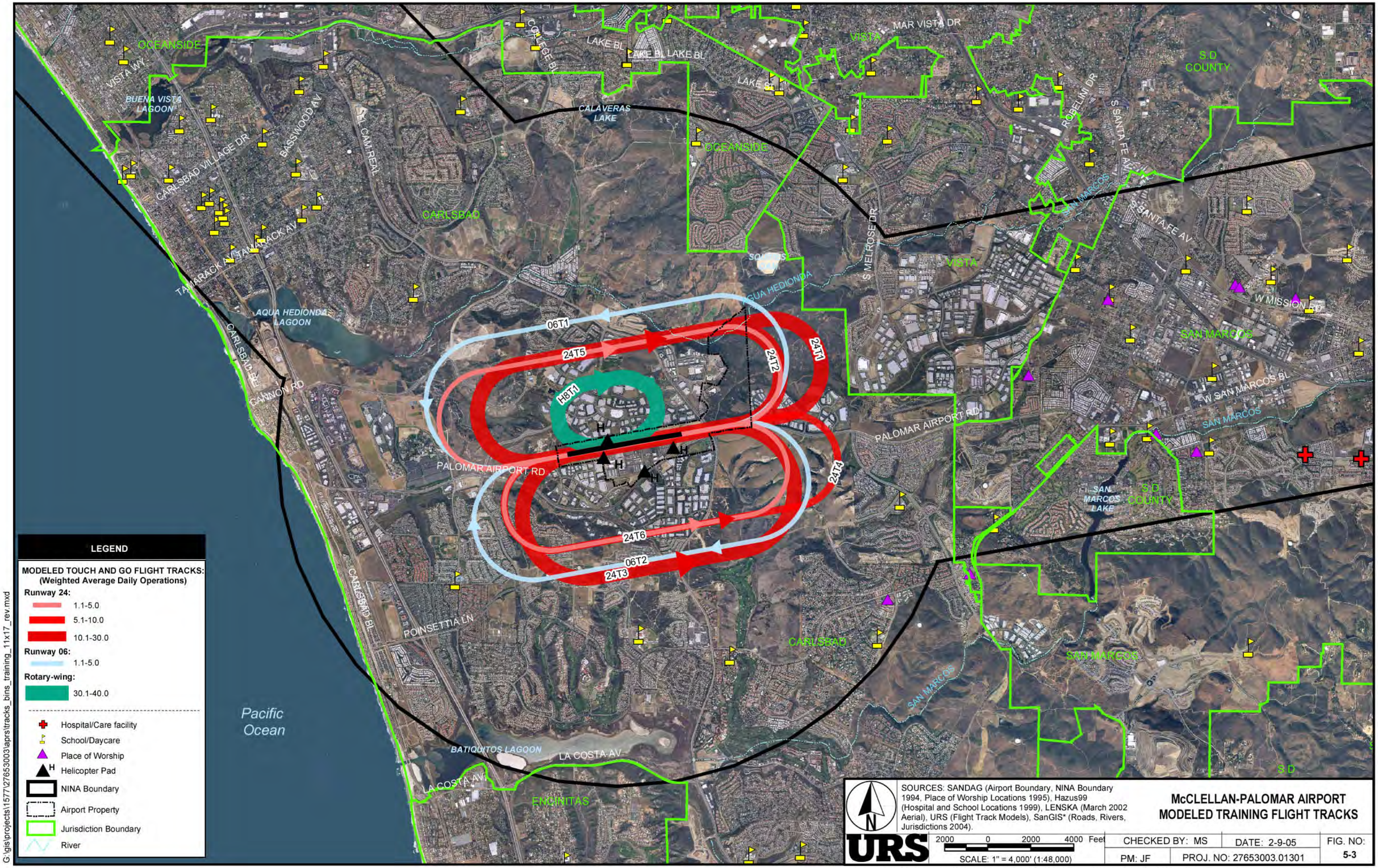

SOURCES: SANDAG (Airport Boundary, NINA Boundary 1994, Place of Worship Locations 1995), Hazus99 (Hospital and School Locations 1999), LENSKA (March 2002 Aerial), URS (Flight Track Models), SanGIS* (Roads, Rivers, Jurisdictions 2004).

URS

McCLELLAN-PALOMAR AIRPORT
MODELED TRAINING FLIGHT TRACKS

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PM: JF	PROJ. NO: 27653003.01301	5-3

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CRQ currently has voluntary noise abatement procedures relative to flight tracks (County of San Diego, 2002). Jets are requested to fly the ILS approach, which is essentially a straight-in flight track to Runway 24. This track is evident in Figure 5-2, as are the published VOR and GPS approaches. A current noise abatement departure procedure for Runway 24 is for aircraft to fly a 250 degree heading (relative to magnetic north) departing Runway 24 until 1.5 miles past the shoreline. Furthermore, the procedures request jets to maintain this heading until two miles from brake release. Likewise, aircraft departing Runway 06 are requested to maintain a 50 degree magnetic heading.

5.3.2 Flight Track Utilization

Similar to runway utilization, flight track utilization is defined in terms of usage percentages of operations by each aircraft type for each modeled flight track. The flight operations density map data output by GEMS provided the basis for flight track usage estimates. Percentages were determined separately for each CNEL time period (day, evening, and nighttime).

Tables 5-7 through 5-9 list the flight track utilization percentages for civilian fixed-wing aircraft. Daytime and evening departures from Runway 24 primarily use tracks 24D1 through 24D8 whereas Runway 24 nighttime departures use tracks 24D9 through 24D11. Most Runway 24 arrivals use track 24A1 (straight-in). Most daytime Runway 24 training pattern flights use track 24T1 whereas evening and nighttime training pattern flights use tracks 24T4 and 24T6, respectively.

Table 5-8 contains the flight track utilization percentages for civilian rotary-wing (helicopter) aircraft. For departures, track utilization was the same among all modeled flight tracks. Arrivals were split into regular and Mercy arrivals. Mercy arrivals were assigned to only one track (H12A1). For regular arrivals, the daytime flight track utilization was the same among all modeled flight tracks but the evening and nighttime utilization percentages were different. As all helicopter training activity was primarily confined to one flight area, the flight operations were assigned to one flight track (H8T1) originating from the practice helipads north of Runway 06/24.

Table 5-9 details the flight track utilization percentages for military practice approach flight operations. The Military aircraft conducting practice approaches primarily use track 24V3 during the daytime and evening periods but primarily use 24V2 during the nighttime.

5.4 RUN-UP OPERATIONS

Prior to flight or during maintenance, aircraft engines at CRQ are sometimes run to check their operation. Engine runs, simply called run-ups, are typically cyclic, i.e., power/throttle is increased and decreased, and can last on the order of minutes. Run-ups at CRQ are performed with the engine installed on the aircraft ("in-frame" run-up) as opposed to some airports that also perform run-ups with the engine not installed on the aircraft ("out-of-frame" run-up). At large busy airports maintenance is often performed at nighttime, however, at CRQ, maintenance run-ups only occur during the daytime.

Table 5-10 lists the modeled average daily run-up operations for the existing condition as derived from interview of CRQ staff. Table 5-10 only contains pre-flight run-ups. Pre-flight run-ups are performed at the hold-short areas of Runways 06 and 24 during daytime, evening, and nighttime period periods per the runway utilization percentages. All run-ups at CRQ are typically conducted by light twin

(piston/turboprop) and single piston/turboprop aircraft at a rate of one run-up per flight operation. Although the run-ups are conducted at high power, they last no more than 15 seconds each and are primarily during the daytime period. Approximately four brief pre-flight run-ups, on average, are conducted every night

Table 5-7
Civilian Fixed-Wing Aircraft Flight Track Utilization for All NEMs *

Operation Type	Runway	Track ID	Percent Utilization		
			Day	Evening	Night
Departure	24	24D1	15%	10%	-
		24D2	15%	10%	-
		24D3	20%	-	-
		24D4	20%	20%	-
		24D5	15%	20%	-
		24D6	15%	-	-
		24D7	-	20%	-
		24D8	-	20%	-
		24D9	-	-	20%
		24D10	-	-	45%
		24D11	-	-	35%
		Total	100%	100%	100%
	06	06D1	15%	-	-
		06D2	15%	-	-
		06D3	30%	-	35%
		06D4	25%	-	-
		06D5	15%	-	-
		06D6	-	20%	30%
		06D7	-	40%	-
		06D8	-	40%	-
		06D9	-	-	35%
		Total	100%	100%	100%
Arrival	24	24A1	40%	60%	70%
		24A2	5%	10%	-
		24A3	10%	-	-
		24A4	5%	-	-
		24A5	10%	10%	-
		24A6	10%	10%	-
		24A7	20%	-	-
		24A8	-	10%	10%
		24A9	-	-	20%
		Total	100%	100%	100%
	06	06A1	15%	-	-
		06A2	10%	-	-
		06A3	15%	-	-
		06A4	20%	-	30%
		06A5	20%	40%	35%
		06A6	10%	-	-

Table 5-7 (continued)
Civilian Fixed-Wing Aircraft Flight Track Utilization for All NEMs *

Operation Type	Runway	Track ID	Percent Utilization		
			Day	Evening	Night
		06A7	10%	-	-
		06A8	-	20%	-
		06A9	-	40%	-
		06A10	-	-	35%
		Total	100%	100%	100%
Touch and Go	24	24T1	40%	-	-
		24T2	30%	45%	25%
		24T3	30%	-	-
		24T4	-	55%	-
		24T5	-	-	25%
		24T6	-	-	50%
		Total	100%	100%	100%
	06	06T1	50%	50%	50%
		06T2	50%	50%	50%
		Total	100%	100%	100%

* Except Military aircraft performing missed approaches; also applies to Military C12
Day = 7:00 a.m. to 7:00 p.m.
Evening = 7:00 p.m. to 10:00 p.m.
Night = 10:00 p.m. to 7:00 a.m.
Source: GEMS

Table 5-8
Civilian Rotary-Wing Aircraft Flight Track Utilization for All NEMs

Operation Type	Helo pad	Track ID	Percent Utilization		
			Day	Evening	Night
Departure	H1	H1D1	25%	25%	25%
		H1D2	25%	25%	25%
	H3	H3D1	25%	25%	25%
		H3D2	25%	25%	25%
	Total		100%	100%	100%
Arrival*	H12	H12A2	20%	-	-
		H12A3	20%	10%	-
		H12A4	20%	40%	-
		H12A5	20%	40%	20%
		H12A6	20%	10%	80%
	Total		100%	100%	100%
Mercy (Hospital) Arrivals	H12	H12A1	100%	100%	100%
	Total		100%	100%	100%
Touch and Go	H8	H8T1	100%	100%	100%
	Total		100%	100%	100%

Day = 7:00 a.m. to 7:00 p.m.
Evening = 7:00 p.m. to 10:00 p.m.
Night = 10:00 p.m. to 7:00 a.m.
Source: GEMS
*Arrivals conservatively modeled to single helicopter pad.

Table 5-9
Military Aircraft Practice Approach Flight Track Utilization for All NEMs

Aircraft Group	Runway	Track ID	Percent Utilization		
			Day	Evening	Night
Helicopter	24	24V1	10%	-	-
		24V2	5%	-	85%
		24V3	85%	80%	15%
		24V4	-	20%	-
		Total	100%	100%	100%
C9 and C2	24	24V1	-	-	-
		24V2	10%	-	85%
		24V3	90%	80%	15%
		24V4	-	20%	-
		Total	100%	100%	100%

Day = 7:00 a.m. to 7:00 p.m.
Evening = 7:00 p.m. to 10:00 p.m.
Night = 10:00 p.m. to 7:00 a.m.
Source: GEMS

Table 5-10
Run-Up Operations for 2004 NEM

Aircraft Group	Representative INM Aircraft Type	Location	Heading (degrees, re true North)	Power Setting (% RPM)	Annual Single-engine Run-up Operations				
					Duration (Seconds)	Day	Evening	Night	Total
Multi-Engine Prop	BEC58P	Runway 06 hold-short	60	100	15.0	85	4	11	100
Single Engine Prop	CNA172		60	100	15.0	1,218	52	157	1,427
Multi-Engine Prop	BEC58P	Runway 24 hold-short	210	100	15.0	2,737	120	80	2,937
Single Engine Prop	CNA172		240	100	15.0	39,374	1,692	1,151	42,217
					Total	43,414	1,868	1,399	46,681

Source: URS Analysis

5.5 AIRCRAFT NOISE AND PERFORMANCE

Specific noise and performance data must be entered into INM for each representative aircraft type modeled at CRQ. Noise data is in terms of Sound Exposure Level (SEL) for a range of distances (from 200 feet to 25,000 feet) from each aircraft with engines at a specific thrust/power level. Performance data includes thrust/power setting, speed, and altitude profiles (i.e., as a function of traveled distance) for departure and arrival operations. Aircraft manufacturers provide the data to the FAA. The INM database contains standard noise and performance data for over 200 fixed-wing aircraft types, most of which are civilian aircraft. INM also has the capability for over 260 FAA pre-approved substitutions for aircraft that are not specifically defined in the standard database. INM automatically accesses the applicable noise and performance data for departure and approach operations by those aircraft. For aircraft not included in the database, such as some helicopters or for non-standard operations (e.g., practice approaches), the data must be manually entered into INM.

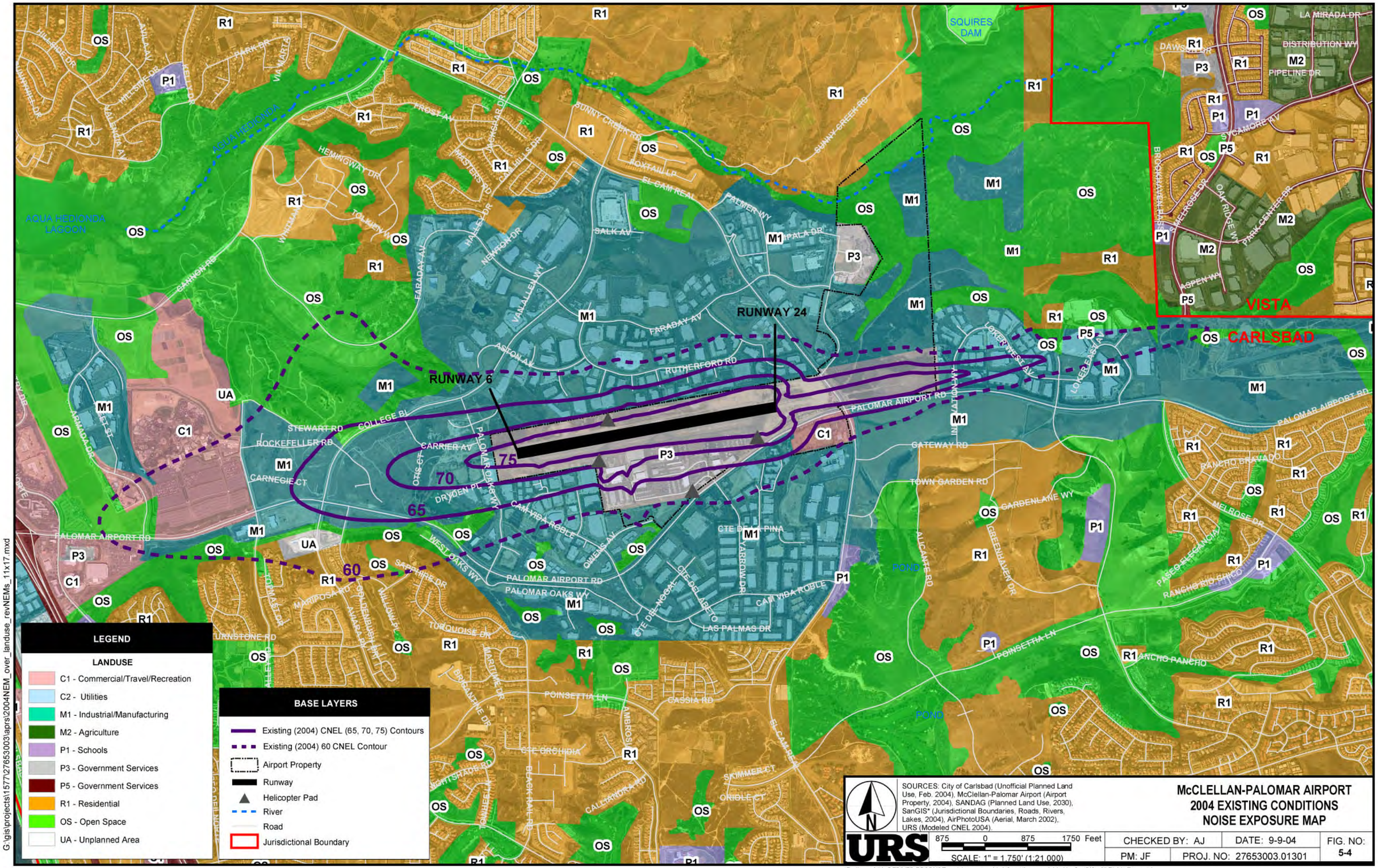
In the U.S., aircraft are subject to Federal requirements limiting noise emissions under 14 CFR Part 36 – Noise Standards: Aircraft Type and Airworthiness Certification. The standards described in these regulations identify three noise standards, called stages. These stages are progressively more restrictive beginning with Stage 1 the loudest and ending with Stage 3 the quietest. Operating limits and compliance for civilian subsonic aircraft with maximum weights of more than 75,000 pounds for each noise stage are identified in 14 CFR Part 91-Subpart I: Operating Noise Limits. Part 91 states, "… on and after January 1, 1985, no person may operate to or from an airport in the United States any subsonic airplane covered by this subpart unless that airplane has been shown to comply with Stage 2 or Stage 3 noise levels." Since the adoption of this legislation, commercial aircraft operators have replaced older noise stage aircraft with newer aircraft that comply with the regulation or have retrofitted the aircraft with modified engines and airframe components. 14 CFR Part 91-§ 91.853 reads in part as follows: "Except as provided in § 91.873, after December 31, 1999, no person shall operate to or from the contiguous United States any airplane subject to § 91.801(c) of this subpart, unless that airplane has been shown to comply with Stage 3 noise levels."

Currently, the commercial operators utilize aircraft that are Stage 3 compliant. However, it should be noted that the military operations are exempt from the aforementioned regulations and corporate jet aircraft weighing less than 75,000 pounds, some of which are noise Stage 2, are also exempt.

See Section 2 and Appendix E for discussion of flight profiles relevant to this NEM. INM standard default profiles were primarily utilized except for operator-provided INM user-defined flight profiles for helicopters and military aircraft, which were approved by the FAA's Office of Environment and Energy in a letter dated February 12, 2004. A copy of the letter is included in Appendix E. It was not assumed that the modeled aircraft were flying the voluntary noise abatement procedures (County of San Diego, 2002).

5.6 AIRCRAFT NOISE CONTOURS

Figure 5-4 is the 2004 NEM. It presents the CNEL contours superimposed over the existing land use base map. The 60 CNEL contour is shown as a dashed line and extends approximately 8,000 feet west of Runway 06 and approximately 8,400 feet east of Runway 24. Except for the bulge in the 60 CNEL primarily attributed to westerly departures from Runway 24, the maximum north/south extent of the 60



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SOURCES: City of Carlsbad (Unofficial Planned Land Use, Feb. 2004), McClellan-Palomar Airport (Airport Property, 2004), SANDAG (Planned Land Use, 2030), SanGIS* (Jurisdictional Boundaries, Roads, Rivers, Lakes, 2004), AirPhotoUSA (Aerial, March 2002), URS (Modeled CNEL 2004).

875 0 875 1750 Feet

SCALE: 1" = 1,750' (1:21,000)

McCLELLAN-PALOMAR AIRPORT 2004 EXISTING CONDITIONS NOISE EXPOSURE MAP

CHECKED BY: AJ	DATE: 9-9-04	FIG. NO:
PM: JF	PROJ. NO: 27653003.01301	5-4

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CNEL is approximately 1,500 feet relative to Runway 06-24. The 65 CNEL extends approximately 4,600 feet to the west of Runway 06 and approximately one (statute) mile east of Runway 24. The maximum north/south extent of the 65 CNEL contour is approximately 900 feet relative to Runway 06-24. The 60 CNEL (and 65 CNEL) contours are wholly contained within the City.

The aircraft noise exposure east of CRQ is primarily due to Runway 24 arrival/practice approach traffic. Conversely, the aircraft noise exposure west of CRQ is primarily due to Runway 24 departure traffic. The effect of helicopter operations on the CNEL contours are evidenced by the south-pointing ripples in the contours located near the middle of the airfield.

5.7 LAND USE COMPATIBILITY

As indicated in Tables 5-11 and 5-12, there are currently no noise sensitive land uses (residences, healthcare facilities, etc.) that exist within the 65 or greater CNEL contour. Although there are approximately 78 residential homes within the 60 to 64 CNEL contour and approximately three hotels (the Olympic Resort Hotel and Spa at El Camino Real and Palomar Airport Road; the Grand Pacific Resort and Hotel at Armada Drive and Palomar Airport Road; and the Courtyard by Marriot between Owens Road and Palomar Airport Road) within or immediately adjacent to the 60 to 64 CNEL contour, these land uses are not considered non-compatible.

Table 5-11
Land Use Acreages for 2004 NEM Noise Contours

	CNEL (dBA)				
Land Use	60-64	65-69	70-74	Greater than or Equal to 75	Total Within 65 dBA CNEL
Commercial	93.2	6.7			6.7
Industrial	375.1	228.0	60.4	3.6	292.0
Open Space	176.4	6.0			6.0
Government Services	37.5	51.8	82.8	94.5	229.1
Residential	41.9				0
Unplanned Area	11.5				0
TOTAL	735.6	292.5	143.2	98.1	533.8

Source: SANDAG and URS inventory and analysis, 2004

Table 5-12
Projected Sensitive Receivers
Within Identified 2004 NEM Noise Contours

Receivers	CNEL (dBA)			
	60-64	65-69	70-74	75 or greater
Population**	267	0	0	0
Residences**	96	0	0	0
Churches	0	0	0	0
Schools and Daycare Facilities	0	0	0	0
Hospitals and other Healthcare Facilities (including Nursing Homes)	0	0	0	0
Parks	0	0	0	0

**Using population year 2005 estimates.
Source: SANDAG and URS Inventory and analysis, 2004.

SECTION 6 NOISE EXPOSURE MAP FOR YEAR 2009 (UNMITIGATED)

Sections 6.1 through 6.4 discuss the operational information used to generate the Year 2009 Future Condition Noise Exposure Map (2009 NEM), presented in Section 6.5. Section 6.6 concludes the chapter with a quantification of non-compatible land use relative to the 2009 NEM.

6.1 FLIGHT OPERATIONS AND FLEET MIX

Table 6-1 presents a summary of the modeled flight operations, in terms of arrivals, departures and training operations. Table 1.7 of the Forecast contained in Appendix F predicts approximately 233,000 annual flight operations for the CY 2008 and nearly 260,000 annual flight operations for the CY 2013. Interpolating between CY 2008 and CY 2013, approximately 238,000 annual flight operations were modeled for the 2009 NEM and are shown in Table 6-1. Consistent with the forecast, Table 6-1 shows an increase in Air Taxi, GA Itinerant, GA Local flight operations by 23%, 15% and 19% relative to 2004, respectively. The forecast held Military flight operations at a constant tempo (1,964 flight operations annually). The temporal (day/evening/night) and operational distributions for all aircraft categories are identical to the 2004 case. Therefore, 7% of the flight operations would occur during the evening (7:00 p.m. to 10:00 p.m.) period and 3% would occur during the nighttime (10:00 p.m. to 7:00 a.m.) period.

The fleet mix forecast for CY 2008, as documented in Table 1.9 of the Forecast of Appendix F, was assumed to apply to 2009. Tables 6-1 through 6-4 detail the 2009 flight operations. Relative to 2004, the fleet mix would be identical except for helicopters, which would have phased out the Bell 222 aircraft and substituted it with the MD 902 and introduced the AS 350.

6.2 RUNWAY AND HELIPAD UTILIZATION, FLIGHT TRACKS, AND TRACK UTILIZATION

Relative to existing conditions, no changes are estimated for runway and helipad utilization, flight tracks and track utilization described in Sections 5.2 and 5.3. The modeling parameters applied to existing helicopter operations would apply to the 2009 helicopter fleet mix.

6.3 RUN-UP OPERATIONS

Corresponding to an increase in flight operations, the run-up operations for CY 2009 would also increase relative to 2004 conditions. Table 6-5 lists the modeled pre-flight run-up operations, which would be identical to 2004 conditions, except for a 16% increase in frequency.

6.4 AIRCRAFT NOISE AND PERFORMANCE

It was conservatively assumed that aircraft noise and performance in 2009 would be identical to existing conditions, although some decrease in noise levels are anticipated by the replacement of aging aircraft with newer stage 3 compliant GA and commercial aircraft. See Sections 2, 5.5 and Appendix E for discussion of flight profiles relevant to this NEM.

Table 6-1
Summary of Modeled Annual Flight Operations for 2009 NEM

Category	IFR or VFR	Departure				Arrival				Touch and Go[1]				TOTAL			
		Day	Evening	Night	Total	Day	Evening	Night	Total	Day	Evening	Night	Total	Day	Evening	Night	Total
Air Carrier	both																
Air Taxi	both	6,699	1,028	355	8,082	6,585	936	559	8,080				0	13,284	1,963	914	16,161
GA Itinerant	IFR	16,190	699	522	17,411	15,667	1,217	522	17,406				0	31,857	1,916	1,044	34,817
GA Local	IFR	8,328	360	268	8,956	8,062	626	268	8,956				0	16,390	986	536	17,912
GA Itinerant	VFR*	35,884	1,542	1,159	38,585	34,725	2,700	1,159	38,584	30,096	2,316	661	33,073	100,705	6,558	2,979	110,242
GA Local	VFR*	10,548	455	340	11,343	10,208	795	340	11,343	30,964	2,382	680	34,026	51,720	3,632	1,360	56,712
Military	both	536	228	0	764	536	228	0	764	305	131	0	436	1,377	587	0	1,964
TOTAL		78,185	4,312	2,644	85,141	75,783	6,502	2,848	85,133	61,365	4,829	1,341	67,535	215,333	15,642	6,833	237,808

[1]Touch and Go counted as 2 operations each

Total may not match the detailed table due to rounding

Day = 7:00 a.m. to 7:00 p.m.
Evening = 7:00 p.m. to 10:00 p.m.
Night = 10:00 p.m. to 7:00 a.m.

Source: Aviation Activity Forecast (URS, 2003); URS Analysis

Table 6-2
Annual Air Taxi Flight Operations for 2009 NEM

Aircraft Category	Representative INM Aircraft Type[3]	Arrival				Departure (Stage Length 1 (0-500nm))				Grand Total			
		Day	Evening	Night	Total	Day	Evening	Night	Total	Day	Evening	Night	Total
Regional Jet	CL600	328	29	11	368	340	17	11	368	668	46	22	736
	CL601	41	4	1	46	43	2	1	46	84	6	2	92
Business Jet	CIT3	164	14	6	184	170	9	5	184	334	23	11	368
	CNA500	164	14	6	184	170	9	5	184	334	23	11	368
	CNA750	451	40	16	507	468	24	15	507	919	64	31	1,014
	GIIB	82	7	3	92	85	4	3	92	167	11	6	184
	GIV	164	14	6	184	170	9	5	184	334	23	11	368
	LEAR35	1,436	127	49	1,612	1,490	76	47	1,613	2,926	203	96	3,225
	MU3001	861	76	30	967	894	46	28	968	1,755	122	58	1,935
Twin Turboprop	DHC6	41	4	1	46	43	2	1	46	84	6	2	92
	DHC8[1]	587	383		970	523	446		970	1,110	829		1,939
	EMB120[2]	1,898	191	417	2,505	1,919	363	222	2,505	3,817	554	639	5,010
Twin Piston Prop	BEC58P	369	33	13	415	383	20	12	415	752	53	25	830
TOTAL		6,585	936	559	8,080	6,699	1,028	355	8,082	13,284	1,963	914	16,161

Notes:
[1]America West only
[2]United Express only
[3]Types other than for America West and United Express only include: AmeriFlight (cargo), ExecJet (NetJets), Executive Jet Management, Global Airways, Bombardier Flexjet, Flight Options, Pacific Jet, Inc., Priester Aviation

Day = 7:00 a.m. to 7:00 p.m.
Evening = 7:00 p.m. to 10:00 p.m.
Night = 10:00 p.m. to 7:00 a.m.

Source: Aviation Activity Forecast (URS, 2003); URS Analysis

Table 6-3
Annual IFR (Local and Itinerant)
General Aviation Flight Operations for 2009 NEM

Aircraft Category	Representative INM Aircraft Type	Arrival				Departure (Stage Length 1 (0-500nm))				Grand Total			
		Day	Evening	Night	Total	Day	Evening	Night	Total	Day	Evening	Night	Total
Regional Jet	CL600	949	74	32	1,055	981	42	32	1,055	1,930	116	64	2,110
Business Jet	CNA500	1,661	129	56	1,846	1,716	74	56	1,846	3,377	203	112	3,692
	CNA750	474	37	15	526	491	21	15	527	965	58	30	1,053
	FAL20	238	18	8	264	245	11	8	264	483	29	16	528
	GIIB	238	18	8	264	245	11	8	264	483	29	16	528
	GIV	712	56	24	792	736	32	24	792	1,448	88	48	1,584
	GV	238	18	8	264	245	11	8	264	483	29	16	528
	IA1125	238	18	8	264	245	11	8	264	483	29	16	528
	LEAR25	238	18	8	264	245	11	8	264	483	29	16	528
	LEAR35	2,135	166	71	2,372	2,207	95	71	2,373	4,342	261	142	4,745
	MU3001	1,424	111	47	1,582	1,471	63	47	1,581	2,895	174	94	3,163
Twin Turboprop	CNA441	712	56	24	792	736	32	24	792	1,448	88	48	1,584
	DHC6	1,186	92	39	1,317	1,225	53	39	1,317	2,411	145	78	2,634
Twin Piston Prop	BEC58P	2,373	185	79	2,637	2,452	106	79	2,637	4,825	291	158	5,274
Single Prop	CNA172	3,796	295	127	4,218	3,923	168	127	4,218	7,719	463	254	8,436
	CNA206	1,898	147	63	2,108	1,961	85	63	2,109	3,859	232	126	4,217
	GASEPF	2,847	221	95	3,163	2,942	127	95	3,164	5,789	348	190	6,327
	GASEPV	1,898	147	63	2,108	1,961	85	63	2,109	3,859	232	126	4,217

Table 6-3 (continued)
Annual IFR (Local and Itinerant)
General Aviation Flight Operations for 2009 NEM

Aircraft Category	Representative INM Aircraft Type	Arrival				Departure (Stage Length 1 (0-500nm))				Grand Total			
		Day	Evening	Night	Total	Day	Evening	Night	Total	Day	Evening	Night	Total
Helicopter	H500D[1]	180	14	6	200	187	8	6	200	367	22	11	400
	H500D[2]	261	20	8	289	270	12	8	290	531	32	17	579
	H500D[3]	5	0	0	5	5	0	0	5	10	1	0	11
	B206L[4]	9	1	0	11	10	0	0	11	19	1	1	21
	SA365N[5]	5	0	0	5	5	0	0	5	10	1	0	11
	H500D[6]	9	1	0	11	10	0	0	11	19	1	1	21
	B222[7]												0
	SA350D[8]	5	0	0	5	5	0	0	5	10	1	0	11
Total		23,729	1,843	790	26,362	24,518	1,059	790	26,367	48,247	2,902	1,580	52,729

Notes:
[1]Represents Civic Helicopters' Robinson R22BII
[2]Represents Civic Helicopters' Schweitzer S300C
[3]Represents Civic Helicopters' MD500D
[4]Represents Civic Helicopters' Bell 206BIII
[5]Represents Civic Helicopters' Eurocopter EC120
[6]Represents Civic Helicopters' future MD900
[7]Represents Mercy Flite Bell 222
[8]Represents Mercy Flite future Aerospatiale AS350 A-star

*Each closed pattern evolution counted as 2 operations

Day = 7:00 a.m. to 7:00 p.m.
Evening = 7:00 p.m. to 10:00 p.m.
Night = 10:00 p.m. to 7:00 a.m.

Source: Aviation Activity Forecast (URS, 2003); URS Analysis

Table 6-4
Annual VFR (Local and Itinerant)
General Aviation Flight Operations for 2009 NEM

Aircraft Category	Representative INM Aircraft Type	Arrival				Touch and Go (closed patterns*)				Departure (Stage Length 1 (0-500nm))				Grand Total			
		Day	Evening	Night	Total	Day	Evening	Night	Total	Day	Evening	Night	Total	Day	Evening	Night	Total
Regional Jet	CL600																0
Business Jet	CNA500																0
	CNA750																0
	FAL20																0
	GIIB																0
	GIV																0
	GV																0
	IA1125																0
	LEAR25																0
	LEAR35																0
	MU3001																0
Twin Turboprop	CNA441																0
	DHC6	449	35	15	499					464	20	15	499	913	55	30	998
Twin Piston Prop	BEC58P	449	35	15	499	3,053	235	67	3,355	464	20	15	499	3,966	290	97	4,353
Single Prop	CNA172	22,781	1,772	760	25,313	27,477	2,114	604	30,195	23,541	1,012	760	25,313	73,799	4,898	2,124	80,821
	CNA206	12,267	954	409	13,630	12,212	939	268	13,419	12,676	545	409	13,630	37,155	2,438	1,086	40,679
	GASEPF																0
	GASEPV																0
Helicopter	H500D[1]	3,415	266	114	3,794	7,251	558	159	7,968	3,529	152	114	3,795	14,195	976	387	15,557
	H500D[2]	4,943	384	165	5,492	10,495	808	230	11,533	5,108	220	165	5,493	20,545	1,412	560	22,517
	H500D[3]	90	7	3	100	191	15	4	210	93	4	3	100	374	26	10	409
	B206L[4]	180	14	6	200	382	29	8	419	186	8	6	200	747	51	20	819
	SA365N[5]	90	7	3	100					93	4	3	100	183	11	6	200

Table 6-4 (continued)
Annual VFR (Local and Itinerant)
General Aviation Flight Operations for 2009 NEM

Aircraft Category	Representative INM Aircraft Type	Arrival				Touch and Go (closed patterns*)				Departure (Stage Length 1 (0-500nm))				Grand Total			
		Day	Evening	Night	Total	Day	Evening	Night	Total	Day	Evening	Night	Total	Day	Evening	Night	Total
	H500D[6]	180	14	6	200					186	8	6	200	365	22	12	399
	B222[7]																0
	SA350D[8]	90	7	3	100					93	4	3	100	183	11	6	200
Total		44,932	3,495	1,499	49,926	61,060	4,698	1,341	67,099	46,431	1,997	1,499	49,927	152,424	10,190	4,339	166,953

Notes:
[1]Represents Civic Helicopters' Robinson R22BII
[2]Represents Civic Helicopters' Schweitzer S300C
[3]Represents Civic Helicopters' MD500D
[4]Represents Civic Helicopters' Bell 206BIII
[5]Represents Civic Helicopters' Eurocopter EC120
[6]Represents Civic Helicopters' future MD900
[7]Represents Mercy Flite Bell 222
[8]Represents Mercy Flite future Aerospatiale AS350 A-star

*Each closed pattern evolution counted as 2 operations

Day = 7:00 a.m. to 7:00 p.m.
Evening = 7:00 p.m. to 10:00 p.m.
Night = 10:00 p.m. to 7:00 a.m.

Source: Aviation Activity Forecast (URS, 2003); URS Analysis

Table 6-5
Run-Up Operations for 2009 NEM

Aircraft Group	Representative INM Aircraft Type	Location	Heading (degrees, re true North)	Power Setting (% RPM)	Duration (Seconds)	Annual Single-engine Run-up Operations			
						Day	Evening	Night	Total
Multi-Engine Prop	BEC58P	Runway 06 hold-short	60	100	15.0	99	4	13	116
Single Engine Prop	CNA172		60	100	15.0	3,200	142	93	3,435
Multi-Engine Prop	BEC58P	Runway 24 hold-short	210	100	15.0	1,410	61	182	1,653
Single Engine Prop	CNA172		240	100	15.0	45,593	1,961	1,335	48,889
					Total	50,302	2,168	1,623	54,093

6.5 AIRCRAFT NOISE CONTOURS

Figure 6-1 is the 2009 Future Condition NEM. It presents the CNEL contours superimposed over the land use base map. The CNEL contours are only slightly larger than the 2004 NEM representing a 16% overall forecasted increase in operations. The 60 CNEL (and 65 CNEL) contours of the 2009 NEM are wholly contained within the city of Carlsbad.

Similar to the 2004 NEM, the 2009 aircraft noise exposure east of CRQ would be primarily due to Runway 24 arrival/practice approach traffic. Conversely, the aircraft noise exposure west of CRQ would be primarily due to Runway 24 departure traffic. The effect of helicopter operations on the CNEL contours are evidenced by the south-pointing ripples in the contours located near the middle of the airfield.

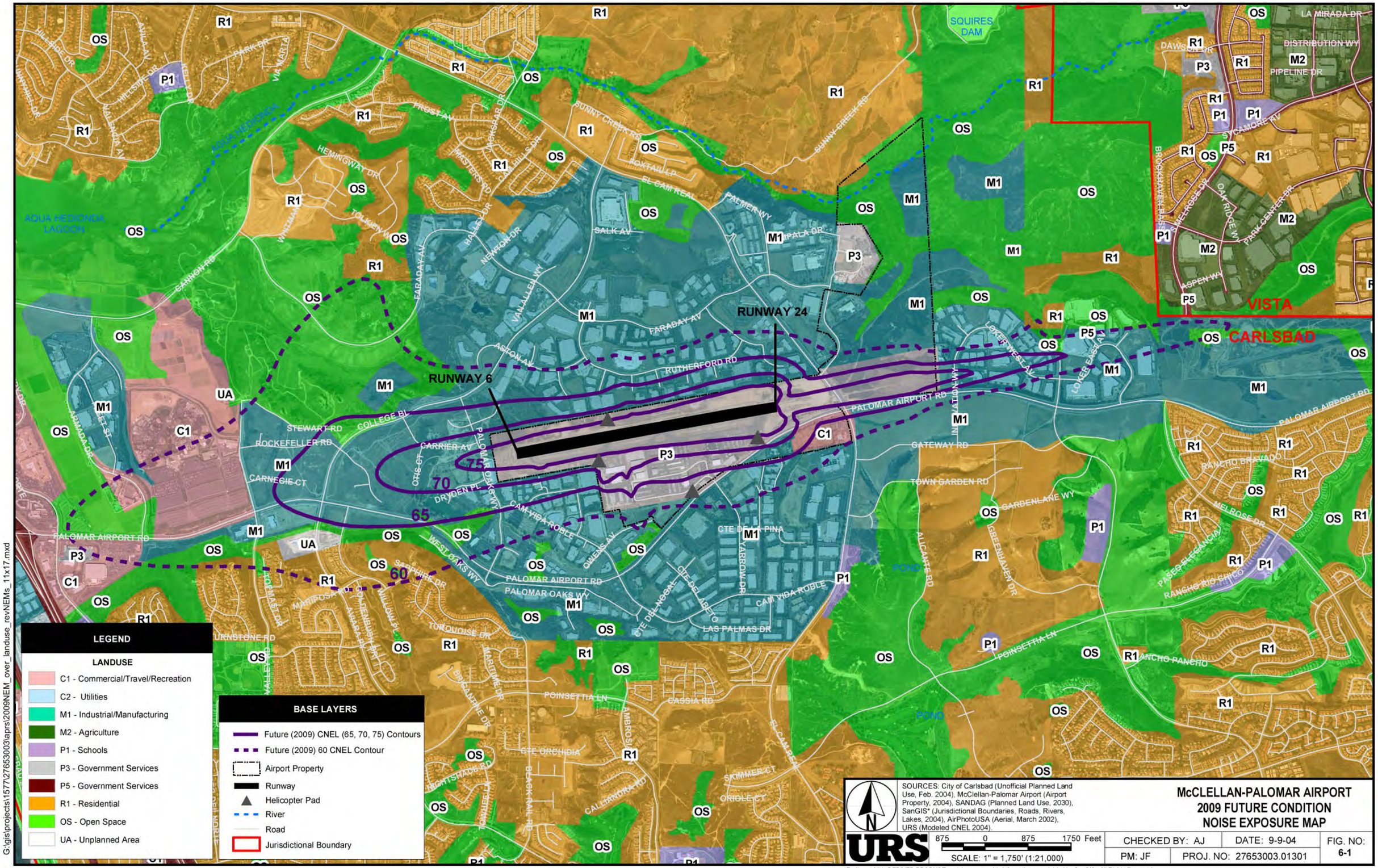
6.6 LAND USE COMPATIBILITY

Land uses within the 2009 CNEL noise contours are listed in Tables 6-6 and 6-7. Table 6-6 indicates that no residential land uses occur within the 65 or greater CNEL contour. As indicated in Table 6-7, using 2010 population projections, there are no non-compatible land uses within the CY 2009 65 or greater CNEL contours.

Table 6-6
Land Use Acreages for 2009 NEM Noise Contours

	CNEL (dBA)				
Land Use	60-64	65-69	70-74	Greater than or Equal to 75	Total Within 65 dBA CNEL
Commercial	113.9	7.7	0.1		7.8
Industrial	384.5	250.0	76.4	6.2	332.6
Open Space	233.2	13.0			13.0
Government Services	33.7	51.1	80.3	102.3	233.7
Residential	61.4				0
Unplanned Area	11.5				0
TOTAL	838.2	321.8	156.8	108.5	587.1

Source: SANDAG and URS inventory and analysis, 2004



SOURCES: City of Carlsbad (Unofficial Planned Land Use, Feb. 2004), McClellan-Palomar Airport (Airport Property, 2004), SANDAG (Planned Land Use, 2030), SanGIS* (Jurisdictional Boundaries, Roads, Rivers, Lakes, 2004), AirPhotoUSA (Aerial, March 2002), URS (Modeled CNEL 2004).

URS

875 0 875 1750 Feet

SCALE: 1" = 1,750' (1:21,000)

McCLELLAN-PALOMAR AIRPORT 2009 FUTURE CONDITION NOISE EXPOSURE MAP

CHECKED BY: AJ	DATE: 9-9-04	FIG. NO: 6-1
PM: JF	PROJ. NO: 27653003.01301	

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Table 6-7
Projected Sensitive Receivers
Within Identified 2009 NEM Noise Contours*

Receivers	CNEL (dBA)			
	60-64	65-69	70-74	75 or greater
Population*	413	0	0	0
Residences*	155	0	0	0
Churches	0	0	0	0
Schools and Daycare Facilities	0	0	0	0
Hospitals and other Healthcare Facilities (including Nursing Homes)	0	0	0	0
Parks	0	0	0	0

*Using population year 2010 estimates.
Source: SANDAG and URS Inventory and analysis, 2004.

SECTION 7 NOISE EXPOSURE CONTOURS FOR YEAR 2014 (UNMITIGATED)

Sections 7.1 through 7.4 discuss the operational information used to generate the Year 2014 Future Condition NEM, presented in Section 7.5. Section 7.6 concludes the chapter with a quantification of non-compatible land use relative to the 2014 NEM.

7.1 FLIGHT OPERATIONS AND FLEET MIX

Table 7-1 presents a summary of the modeled flight operations, in terms of arrivals, departures and training operations. Table 1.7 of the Forecast contained in Appendix F predicts nearly 260,000 annual flight operations for CY 2013. Extrapolating from CY 2013, approximately 265,000 annual flight operations were modeled for this NEM and are shown in Table 7-1. Consistent with the forecast, Table 7-1 shows an increase in Air Taxi, GA Itinerant, GA Local flight operations by 43%, 27% and 34% relative to 2004, respectively. Relative to 2009, the increase in Air Taxi, GA Itinerant, and GA Local would be 16%, 10% and 13%, respectively. The forecast held Military flight operations at a constant tempo (1,964 flight operations annually). The temporal (day/evening/night) and operational distributions for all aircraft categories are identical to 2004. Therefore, 7% of the flight operations would occur during the evening (7:00 p.m. to 10:00 p.m.) period and 3% would occur during the nighttime (10:00 p.m. to 7:00 a.m.) period.

The fleet mix forecast for 2013, as documented in Table 1.9 of the Forecast of Appendix F, was assumed to apply to 2014. Tables 7-2 through 7-4 detail the 2014 flight operations. Relative to 2004, the fleet mix would be identical except for helicopters, which would have phased out the Bell 222 aircraft and substituted it with the MD 900 and introduced the AS 350. Relative to 2009, the fleet mix for 2014 would be identical.

7.2 RUNWAY AND HELIPAD UTILIZATION, FLIGHT TRACKS AND TRACK UTILIZATION

Relative to existing conditions, no changes are estimated for runway and helipad utilization, flight tracks, and track utilization described in Sections 5.2 and 5.3. The modeling parameters applied to existing helicopter operations would apply to the 2014 helicopter fleet mix.

7.3 RUN-UP OPERATIONS

Corresponding to an increase in flight operations, the run-up operations for 2014 would also increase relative to 2004 conditions. Table 7-5 lists the modeled pre-flight run-up operations that would be identical to 2004 conditions, except for a 29% increase in frequency. Relative to 2009, the increase in frequency would be 11%.

7.4 AIRCRAFT NOISE AND PERFORMANCE

It was conservatively assumed that aircraft noise and performance in 2014 would be identical to existing conditions, although some decrease in noise levels are anticipated by the replacement of aging aircraft with newer stage 3 compliant GA and commercial aircraft. See Sections 2, 5.5 and Appendix E for discussion of flight profiles relevant to this NEM.

Table 7-1
Summary of Modeled Annual Flight Operations for 2014 NEM

Category	IFR or VFR	Departure				Arrival				Touch and Go[1]				TOTAL			
		Day	Evening	Night	Total	Day	Evening	Night	Total	Day	Evening	Night	Total	Day	Evening	Night	Total
Air Carrier	both																
Air Taxi	both	7,765	1,192	412	9,368	7,636	1,085	648	9,369				0	15,400	2,277	1,060	18,737
GA Itinerant	IFR*	17,874	768	578	19,220	17,299	1,343	578	19,220				0	35,173	2,111	1,156	38,440
GA Local		9,421	403	301	10,125	9,117	708	301	10,126				0	18,538	1,111	602	20,251
GA Itinerant	VFR	39,618	1,704	1,279	42,601	38,339	2,982	1,279	42,600	33,227	2,556	731	36,514	111,184	7,242	3,289	121,715
GA Local		11,934	513	385	12,832	11,548	898	385	12,831	35,034	2,695	769	38,498	58,516	4,106	1,539	64,161
Military	both	536	228	0	764	536	228	0	764	305	131	0	436	1,377	587	0	1,964
TOTAL		87,148	4,808	2,955	94,910	84,475	7,244	3,191	94,910	68,566	5,382	1,500	75,448	240,188	17,434	7,646	265,268

[1]Touch and Go counted as 2 operations each

Total may not match the detailed table due to rounding

Day = 7:00 a.m. to 7:00 p.m.
Evening = 7:00 p.m. to 10:00 p.m.
Night = 10:00 p.m. to 7:00 a.m.

Source: Aviation Activity Forecast (URS, 2003); URS Analysis

Table 7-2
Annual Air Taxi Flight Operations for 2014 NEM

Aircraft Category	Representative INM Category[3]	Arrival				Departure (Stage Length 1 (0-500nm))				Grand Total			
		Day	Evening	Night	Total	Day	Evening	Night	Total	Day	Evening	Night	Total
Regional Jet	CL600	380	34	13	427	395	20	12	427	775	54	25	854
	CL601	48	4	2	54	49	3	2	54	97	7	4	108
Business Jet	CIT3	190	17	7	214	197	10	6	213	387	27	13	427
	CNA500	190	17	7	214	197	10	6	213	387	27	13	427
	CNA750	523	46	18	587	543	28	17	588	1,066	74	35	1,175
	GIIB	95	8	3	106	99	5	3	107	194	13	6	213
	GIV	190	17	7	214	197	10	6	213	387	27	13	427
	LEAR35	1,665	147	57	1,869	1,727	88	54	1,869	3,392	235	111	3,738
	MU3001	999	88	34	1,121	1,036	53	32	1,121	2,035	141	66	2,242
Twin Turboprop	DHC6	48	4	2	54	49	3	2	54	97	7	4	108
	DHC8[1]	680	444		1,124	606	518		1,124	1,287	961		2,248
	EMB120[2]	2,200	221	483	2,904	2,225	421	258	2,904	4,425	642	741	5,808
Twin Piston Prop	BEC58P	428	38	15	481	444	23	14	481	872	61	29	962
TOTAL		7,636	1,085	648	9,369	7,765	1,192	412	9,368	15,400	2,277	1,060	18,737

Notes:
[1]America West only
[2]United Express only
[3]Types other than for America West and United Express only include: AmeriFlight (cargo), ExecJet (NetJets), Executive Jet Management, Global Airways, Bombardier Flexjet, Flight Options, Pacific Jet, Inc., Priester Aviation

Day = 7:00 a.m. to 7:00 p.m.
Evening = 7:00 p.m. to 10:00 p.m.
Night = 10:00 p.m. to 7:00 a.m.

Source: Aviation Activity Forecast (URS, 2003); URS Analysis

Table 7-3
Annual IFR (Local and Itinerant)
General Aviation Flight Operations for 2014 NEM

Aircraft Category	Representative INM Aircraft Type	Arrival				Departure (Stage Length 1 (0-500nm))				Grand Total			
		Day	Evening	Night	Total	Day	Evening	Night	Total	Day	Evening	Night	Total
Regional Jet	CL600	1,057	82	35	1,174	1,092	47	35	1,174	2,149	129	70	2,348
Business Jet	CNA500	1,849	144	61	2,054	1,911	82	61	2,054	3,760	226	122	4,108
	CNA750	528	41	18	587	545	23	18	586	1,073	64	36	1,173
	FAL20	264	20	9	293	273	12	9	294	537	32	18	587
	GIIB	264	20	9	293	273	12	9	294	537	32	18	587
	GIV	793	61	26	880	819	35	26	880	1,612	96	52	1,760
	GV	264	20	9	293	273	12	9	294	537	32	18	587
	IA1125	264	20	9	293	273	12	9	294	537	32	18	587
	LEAR25	264	20	9	293	273	12	9	294	537	32	18	587
	LEAR35	2,378	185	79	2,642	2,457	105	79	2,641	4,835	290	158	5,283
	MU3001	1,585	124	53	1,762	1,637	70	53	1,760	3,222	194	106	3,522
Twin Turboprop	CNA441	793	61	26	880	819	35	26	880	1,612	96	52	1,760
	DHC6	1,321	102	44	1,467	1,365	58	44	1,467	2,686	160	88	2,934
Twin Piston Prop	BEC58P	2,642	206	88	2,936	2,729	118	88	2,935	5,371	324	176	5,871
Single Prop	CNA172	4,226	328	141	4,695	4,367	188	141	4,696	8,593	516	282	9,391
	CNA206	2,113	165	70	2,348	2,184	93	70	2,347	4,297	258	140	4,695
	GASEPF	3,170	246	105	3,521	3,276	141	105	3,522	6,446	387	210	7,043
	GASEPV	2,113	165	70	2,348	2,184	93	70	2,347	4,297	258	140	4,695

Table 7-3 (continued)
Annual IFR (Local and Itinerant)
General Aviation Flight Operations for 2014 NEM

Aircraft Category	Representative INM Aircraft Type	Arrival				Departure (Stage Length 1 (0-500nm))				Grand Total			
		Day	Evening	Night	Total	Day	Evening	Night	Total	Day	Evening	Night	Total
Helicopter	H500D[1]	185	14	6	206	191	8	6	205	376	22	13	411
	H500D[2]	307	24	10	341	316	13	10	340	623	37	21	681
	H500D[3]	5	0	0	6	5	0	0	6	11	1	0	12
	B206L[4]	11	1	0	12	11	0	0	12	21	1	1	23
	SA365N[5]	5	0	0	6	5	0	0	6	11	1	0	12
	H500D[6]	11	1	0	12	11	0	0	12	21	1	1	23
	B222[7]												0
	SA350D[8]	5	0	0	6	5	0	0	6	11	1	0	12
Total		26,417	2,051	879	29,347	27,296	1,171	879	29,346	53,712	3,222	1,758	58,692

Notes:
[1]Represents Civic Helicopters' Robinson R22BII
[2]Represents Civic Helicopters' Schweitzer S300C
[3]Represents Civic Helicopters' MD500D
[4]Represents Civic Helicopters' Bell 206BIII
[5]Represents Civic Helicopters' Eurocopter EC120
[6]Represents Civic Helicopters' future MD900
[7]Represents Mercy Flite Bell 222
[8]Represents Mercy Flite future Aerospatiale AS350 A-star
*Each closed pattern evolution counted as 2 operations
Day = 7:00 a.m. to 7:00 p.m.
Evening = 7:00 p.m. to 10:00 p.m.
Night = 10:00 p.m. to 7:00 a.m.
Sources: Aviation Activity Forecast (URS, 2003); URS Analysis

Table 7-4
Annual VFR (Local and Itinerant)
General Aviation Flight Operations for 2014 NEM

Aircraft Category	Representative INM Aircraft Type	Arrival				Touch and Go (closed patterns*)				Departure (Stage Length 1 (0-500nm))				Grand Total			
		Day	Evening	Night	Total	Day	Evening	Night	Total	Day	Evening	Night	Total	Day	Evening	Night	Total
Regional Jet	CL600																0
Business Jet	CNA500																0
	CNA750																0
	FAL20																0
	GIIB																0
	GIV																0
	GV																0
	IA1125																0
	LEAR25																0
	LEAR35																0
	MU3001																0
Twin Turboprop	CNA441																0
	DHC6	498	39	17	554					515	22	17	554	1,013	61	34	1,108
Twin Piston Prop	BEC58P	498	39	17	554	3,413	263	75	3,751	515	22	17	554	4,426	324	109	4,859
Single Prop	CNA172	25,293	1,967	843	28,103	30,717	2,363	675	33,755	26,137	1,124	843	28,104	82,147	5,454	2,361	89,962
	CNA206	13,620	1,059	454	15,133	13,653	1,050	300	15,003	14,074	605	454	15,133	41,347	2,714	1,208	45,269
	GASEPF																0
	GASEPV																0

Table 7-4 (continued)
Annual VFR (Local and Itinerant)
General Aviation Flight Operations for 2014 NEM

Aircraft Category	Representative INM Aircraft Type	Arrival				Touch and Go (closed patterns*)				Departure (Stage Length 1 (0-500nm))				Grand Total			
		Day	Evening	Night	Total	Day	Evening	Night	Total	Day	Evening	Night	Total	Day	Evening	Night	Total
Helicopter	H500D[1]	3,492	272	117	3,880	7,466	574	164	8,204	3,609	155	117	3,881	14,567	1,001	397	15,965
	H500D[2]	5,787	450	193	6,430	12,372	952	272	13,596	5,980	258	193	6,431	24,139	1,659	658	26,457
	H500D[3]	100	8	3	111	213	16	5	234	103	4	3	111	416	29	11	456
	B206L[4]	200	16	7	222	427	33	9	469	206	9	7	222	832	57	23	912
	SA365N[5]	100	8	3	111					103	4	3	111	203	12	7	222
	H500D[6]	200	16	7	222					206	9	7	222	406	24	13	443
	B222[7]																0
	SA350D[8]	100	8	3	111					103	4	3	111	203	12	7	222
Total		49,887	3,880	1,664	55,430	68,261	5,251	1,500	75,012	51,552	2,217	1,664	55,432	169,699	11,348	4,828	185,875

Notes:
[1]Represents Civic Helicopters' Robinson R22BII
[2]Represents Civic Helicopters' Schweitzer S300C
[3]Represents Civic Helicopters' MD500D
[4]Represents Civic Helicopters' Bell 206BIII
[5]Represents Civic Helicopters' Eurocopter EC120
[6]Represents Civic Helicopters' future MD900
[7]Represents Mercy Flite Bell 222
[8]Represents Mercy Flite future Aerospatiale AS350 A-star
*Each closed pattern evolution counted as 2 operations
Day = 7:00 a.m. to 7:00 p.m.
Evening = 7:00 p.m. to 10:00 p.m.
Night = 10:00 p.m. to 7:00 a.m.
Sources: Aviation Activity Forecast (URS, 2003); URS Analysis

Table 7-5
Run-Up Operations for 2014 NEM

Aircraft Group	Representative INM Aircraft Type	Location	Heading (degrees, re true North)	Power Setting (% RPM)	Duration (Seconds)	Annual Single-engine Run-up Operations			
						Day	Evening	Night	Total
Multi-Engine Prop	BEC58P	Runway 06 hold-short	60	100	15.0	111	5	14	130
Single Engine Prop	CNA172		60	100	15.0	3,578	158	105	3,841
Multi-Engine Prop	BEC58P	Runway 24 hold-short	210	100	15.0	1,567	67	202	1,836
Single Engine Prop	CNA172		240	100	15.0	50,656	2,177	1,481	54,314
					Total	55,912	2,407	1,802	60,121

Source: URS Analysis

7.5 AIRCRAFT NOISE CONTOURS

Figure 7-1 is the 2014 NEM. It presents the CNEL contours superimposed over the land use base map. The CNEL contours are only slightly larger than the 2004 NEM representing a 30% overall forecasted increase in operations. All other modeling parameters being equal, a 30% increase in operations would correspond to an increase in noise exposure of 1.1 dBA. The 60 CNEL (and 65 CNEL) contours of the 2014 NEM are wholly contained within the city of Carlsbad.

Similar to the 2004 NEM, the aircraft noise exposure east of CRQ would be primarily due to Runway 24 arrival/practice approach traffic. Conversely, the aircraft noise exposure west of CRQ would be primarily due to Runway 24 departure traffic. The effect of helicopter operations on the CNEL contours are evidenced by the south-pointing ripples in the contours located near the middle of the airfield.

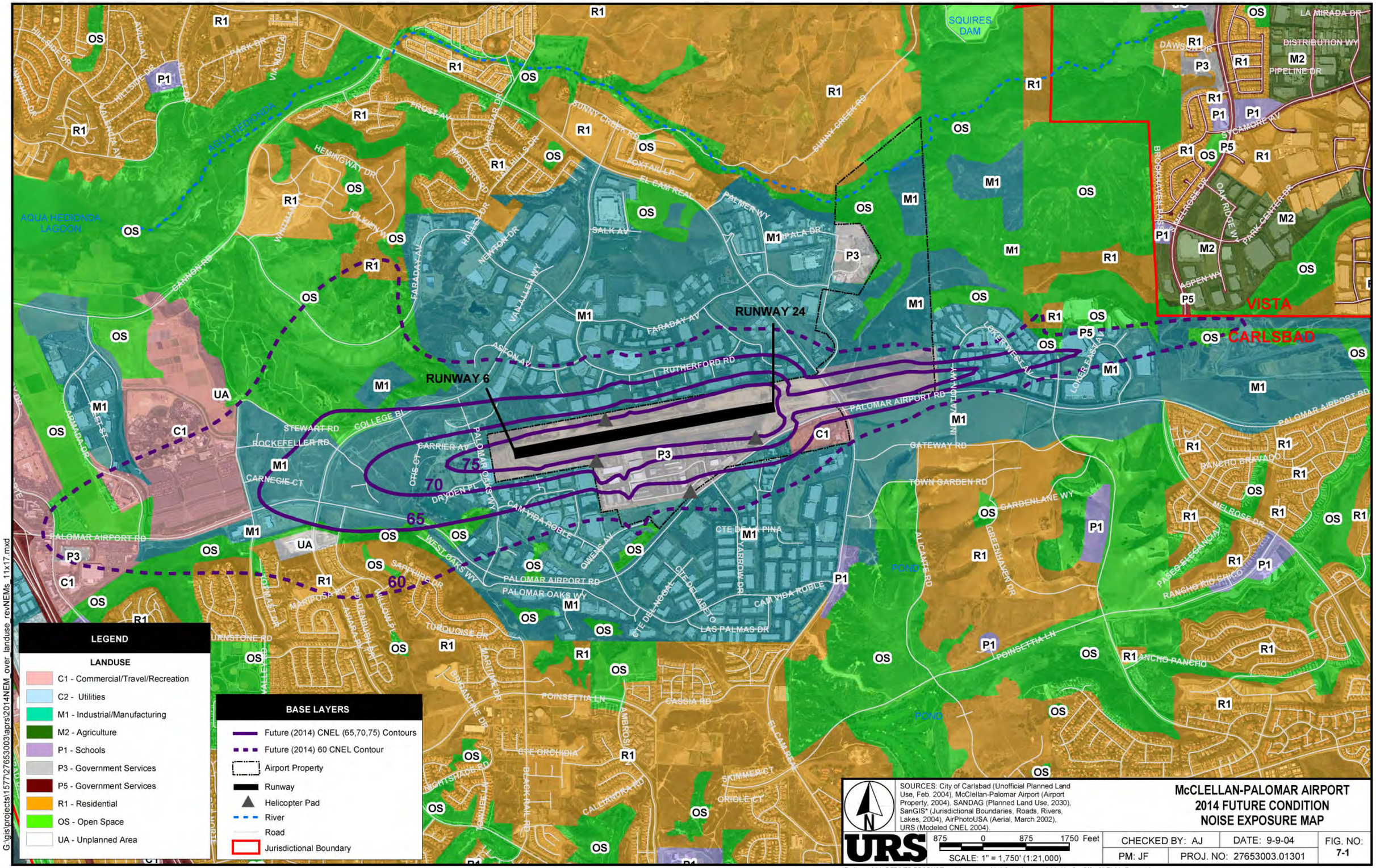
7.6 LAND USE COMPATIBILITY

Land uses within the 2014 CNEL noise contours are listed in Tables 7-6 and 7-7. Table 7-6 indicates that no residential land uses occur within the 65 or greater CNEL contour. As indicated in Table 7-7, using 2020 population projections, there are no non-compatible residential land uses within the year 2014 65 or greater CNEL contours

Table 7-6
Land Use Acreages for 2014 NEM Noise Contours

	CNEL (dBA)				
Land Use	60-64	65-69	70-74	Greater than or Equal to 75	Total Within 65 dBA CNEL
Commercial	130.4	8.4	0.2		8.6
Industrial	394.9	264.0	89.0	8.7	361.7
Open Space	266.4	22.2			22.2
Government Services	33.7	50.8	78.4	108.0	237.2
Residential	85.5				0
Unplanned Area	11.5				0
TOTAL	922.4	345.4	167.6	116.7	629.7

Source: SANDAG and URS inventory and analysis, 2004



SOURCES: City of Carlsbad (Unofficial Planned Land Use, Feb. 2004), McClellan-Palomar Airport (Airport Property, 2004), SANDAG (Planned Land Use, 2030), SanGIS* (Jurisdictional Boundaries, Roads, Rivers, Lakes, 2004), AirPhotoUSA (Aerial, March 2002), URS (Modeled CNEL 2004).

URS

875 0 875 1750 Feet

SCALE: 1" = 1,750' (1:21,000)

McCLELLAN-PALOMAR AIRPORT 2014 FUTURE CONDITION NOISE EXPOSURE MAP

CHECKED BY: AJ	DATE: 9-9-04	FIG. NO:
PM: JF	PROJ. NO: 27653003.01301	7-1

G:\gis\projects\1577\27653003\aprs\2014NEM_over_landuse_revNEMs_11x17.mxd

*Portions of this DERIVED PRODUCT contains geographic information copyrighted by SanGIS. All Rights Reserved.

Table 7-7
Projected Sensitive Receivers
Within Identified 2014 NEM Noise Contours*

Receivers	CNEL (dBA)			
	60-64	65-69	70-74	75 or greater
Population*	809	0	0	0
Residences*	295	0	0	0
Churches	0	0	0	0
Schools and Daycare Facilities	0	0	0	0
Hospitals and other Healthcare Facilities (including Nursing Homes)	0	0	0	0
Parks	0	0	0	0

*Using 2020 population estimates
Source: SANDAG and URS Inventory and analysis, 2004.

SECTION 8 CONSULTATION WITH PUBLIC, USERS AND OUTSIDE AGENCIES

FAR Part 150, Airport Noise Compatibility Planning, requires that each NEM and NCP must be developed and prepared in consultation with FAA regional officials, the officials of the state, and of any public agencies and planning agencies whose area, or any portion of whose area, of jurisdiction is within the 65 DNL (or CNEL) contour depicted on the NEM, and other Federal officials having local responsibility for land uses depicted on the map. This consultation must include regular aeronautical users of the airport, including air carriers and other aircraft operators.

Prior to and during the development of a program, and prior to submission of the resulting draft program to the FAA, the airport operator shall afford adequate opportunity for the active and direct participation of the states, public agencies and planning agencies in the areas surrounding the airport, aeronautical users of the airport, and the general public to submit their views, data, and comments on the formulation and adequacy of that program.

The County, as owner and operator of CRQ, certifies in the Sponsor's Certification that it has afforded interested persons adequate opportunity to submit their views, data, and comments concerning the correctness and adequacy of the draft NEMs and descriptions of forecast aircraft operations. Documentation describing the consultation accomplished during the development of the NEMs and the opportunities afforded the public to review and comment are included in this section and associated appendices.

As specified in FAR Part 150, the preparation of a Part 150 Study requires that certain parties must be identified and consulted during development of the associated NEMs and the overall NCP. Based on this requirement, written and verbal correspondence was initiated and continued throughout the study with the following parties to provide input and assistance:

At the start of the Part 150 Study a letter was sent to parties identified below to notify them of the Part 150 Study Update, and to request their participation / input. A copy of the letter is provided in Appendix H.

- Airlines serving CRQ
- Airline Pilots Association (ALPA)
- Aircraft Owners and Pilots Association (AOPA)
- FAA ATC
- FAA ATCT
- Local General Aviation / Private Pilots
- Cities of Carlsbad, Oceanside, San Marcos, Encinitas and Vista
- San Diego County Property Appraiser
- PAAC
- National Business Aircraft Association (NBAA)
- Air Transport Association (ATA)
- California Department of Aeronautics
- All individuals that participated in the Palomar Airport Round Table 2000

8.1 PALOMAR AIRPORT ADVISORY COMMITTEE (PAAC)

The County designated PAAC as the citizens review committee for this study. Committee members are nominated by the Supervisor from the Fifth Supervisory District and appointed by the County Board of Supervisors. Committee members serve a term, which run concurrently with the term of the Supervisor who nominated them to the Committee. A list of the Airport Advisory Committee Members is presented in Appendix G.

The PAAC provided input to the study process and served as a conduit for input from community residents, FBOs, and other interested parties. The PAAC meets the third Thursday of every month at the Carlsbad City Council Chambers, 1200 Carlsbad Village Drive, Carlsbad, California to discuss issues related to CRQ. The meetings are noticed on the Airport website and the Carlsbad information television channel. The public is encouraged to attend and ask questions and comment on the proceedings. The URS Project Manager provided written and oral reports describing the progress of the Part 150 Study and answered questions from Committee members and the public at each PAAC meeting since December 19, 2002. Many topics were discussed including the Part 150 process, existing and future aircraft operations, flight tracks for fixed wing and helicopter aircraft, and NEMs. A Part 150 fact sheet was provided to all interested attendees. Specific PowerPoint presentations were made to the PAAC on December 19, 2002, September 18, 2003, January 15, 2004, and March 18, 2004 as described in Table 8.1. Appendix G contains copies of the agenda for the meeting, as well as a copy of the presentation materials.

8.2 PUBLIC MEETINGS

Two public meetings were conducted during the course of preparing the NEM document that focused on the development and refinement of the NEMs.

The first meeting was to acquaint the public with the Part 150 Study process, present terms and methodologies, and solicit questions and comments on the process. The meeting was held on March 27, 2003, from 7:00 p.m. to 9:00 p.m. at the city of Carlsbad's Faraday Center. The meeting consisted of an oral/visual presentation followed by a question, comment and answer period. A fact sheet was prepared and made available for meeting attendees. Attendance records indicate that 38 members of the public, airport users, and media reporters attended. Forty-nine written comment letters were submitted, which resulted in 86 individual comments. One hundred individual verbal question/comments were received. The comments are summarized in Appendix H. Copies of the meeting's presentation, meeting invitation, news release, sign-in sheets, verbal questions and comments, written comments received, and newspaper articles published following the workshop are included in Appendix H.

Table 8.1
PAAC Meeting Special Presentations

Date	Topic	Issues Discussed
December 19, 2002	Part 150 Study Kickoff	• Part 150 Study Team • Part 150 Study Process • Schedule • Questions And Answers
September 18,2003	Part 150 Study Progress	• Data Collection And Analysis Progress • Next Steps • Questions And Answers
January 15, 2004	New PAAC Member Part 150 Process	• Part 150 Study Background • Part 150 Study Approach • NEM Development Process • NCP Development Process • Public Participation Process
March 18, 2004	NEM Presentation NEM Public Meeting Plan	• Study Definition, Goals, Impetus And Requirements • Process And Progress • Representative Flight Operations • Analyzed Tower Counts & GEMS Data • Modeled Average Daily Flight Operations For CY2004 • Fleet Mix For CY2004 • Flight Track Development & Utilization • Nominal Departure Flight Tracks • Nominal Arrival & Missed Approach Flight Tracks • Nominal Training Flight Tracks • Community Noise Equivalent Level • Draft CNEL Contours For 2004 • Forecasting Flight Operations • Draft CNEL Contours For 2009 • Draft CNEL Contours For 2014 • Schedule For Remainder Of Study Update

The second public meeting was held to present the NEMs on March 29, 2004, from 6:00 p.m. to 9:00 p.m. at the Carlsbad's Faraday Center. The meeting was structured as an open house with display boards and information posted throughout the room, followed by an oral/visual presentation, and questions and comments period. This format was used to encourage discussions between the study team and members of the general public. In addition to presenting the existing and five-year noise contours, topics addressed at the individual work stations included land use verification, assistance to the public in locating individual homes and/or neighborhoods in relationship to the noise contours, and historical noise and land use compatibility information. Meeting attendees were also encouraged to provide comments on development of the NCP.

Presentation boards on display included the following:

- Part 150 Study Requirements

- Draft Modeled Departure Flight Tracks
- Draft Modeled Arrival and Missed Approach Flight Tracks
- Draft Modeled Training Flight Tracks
- Existing and Forecast Aircraft Operations
- Flight Operation Density Maps
- Draft 2004 NEM vs. 1989 NEM on Land Use and Aerial Map
- Draft 2004 NEM on Land Use and Aerial Map
- Draft 2009 NEM on Land Use and Aerial Map
- Draft 2014 NEM on Land Use and Aerial Map

Verbal comments, comment sheets collected at the workshop and comments submitted via e-mail, regular mail, and fax until April 14, 2004, were used to compile a summary of the public's comments, which is presented in Appendix H. Attendance records indicate that 32 members of the public, airport users, and media reporters attended. Twenty-four written comment letters were submitted. Approximately 140 individual written and verbal comments/questions were received. Written and verbal comments are summarized in Appendix H. Copies of the presentation, news release, and sign-in sheets, written and verbal comments received, newspaper articles published following the workshop, and workshop photographs are included in Appendix H.

8.3 AIRPORT WORLD WIDE WEB SITE

Relevant information pertaining to the Part 150 Study was posted on a County Website at www.sdcounty.ca.gov/dpw/airports/mcpal.html. Information posted on the Website included the PAAC meeting agenda, the PAAC meeting minutes, the Preliminary Forecast of Aviation Activity, and the presentations from PAAC meetings and the first and second public meetings.

8.4 FAA REVIEW AND ACCEPTANCE

On April 26, 2005, the FAA announced their determination that the Noise Exposure Maps submitted by the County of San Diego for McClellan-Palomar Airport under the provisions of 49 U.S.C. 47501 *et. seq.* (Aviation Safety and Noise Abatement Act) and 14 CFR Part 150 were in compliance with applicable requirements. The transmittal letter to the FAA and the acceptance letter from the FAA are included in Appendix I. In addition, the FAA published the Noise Exposure Map Notice, McClellan-Palomar Airport in the Federal Register, Vol. 70, No. 89, on May 10, 2005. The Federal Register Notice is also included in Appendix I.

As described in Section 47506(b)(1) of the Aviation Safety and Noise Abatement Act of 1979, a legal notice was advertised in several local newspapers. Following is the list of local newspapers and advertisement dates:

- The San Diego Union-Tribute – 3/23/07, 3/26/07, and 4/4/07; and
- North County Times – 3/12/07, 3/21/07, and 3/30/07.

Copies of each advertisement are included in Appendix I.

The legal notice reads as follows:

LEGAL NOTICE

> Pursuant to Section 107(a) & (b) [Title 49, United States Code, Section 47506] of the Airport Safety and Noise Abatement Act of 1979, as amended, notice is hereby given that on April 26, 2005, the Federal Aviation Administration completed its evaluation of, and formally accepted the Noise Exposure Maps (NEM) for McClellan-Palomar Airport, located in Carlsbad, California. The NEM were prepared pursuant to Title 14, Code of Federal Regulations, Part 150 (14 CFR Part 150). The completed noise exposure maps and supporting documentation are available to the general public in the reference section of the Carlsbad City Library, 1775 Dove Lane, Carlsbad, California.

SECTION 9 REFERENCES

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FAR PART 150
NOISE EXPOSURE MAP CHECKLIST

AIRPORT NAME: McClellan-Palomar Airport **REVIEWER:_____**

Item	Yes/No/NA	Page No./Other Reference
I. Identification and Submission of Map Document:		
A. Is this submittal appropriately identified as one of the following, submitted under F.A.R. Part 150:		
1. An NEM only?	Yes	Cover Page and Page 1-2
2. An NEM and NCP?	No	NCP will be submitted separately
a. A revision to NEMs that have previously been determined by FAA to be in compliance with Part 150?	Yes	Page 1-3
B. Is the airport name and the qualified airport operator identified?	Yes	Cover Page and Page 1-2
C. Is there a dated cover letter from the airport operator that indicates the documents are submitted under Part 150 for appropriate FAA determinations?	Yes	Appendix I
II. Consultation: (150.21[b], A150.105[a]):		
A. Is there a narrative description of the consultation accomplished, including opportunities for public review and comment during map development?	Yes	Sections 8.1 and 8.2
B. Identification:		
1. Are the consulted parties identified?	Yes	Section 8
2. Do they include all those required by 150.21[b] and A150.105[a]?	Yes	Section 8
C. Does the documentation include the airport operator's certification, and evidence to support it, that interested persons have been afforded adequate opportunity to submit their views, data, and comments during map development and in accordance with 150.21[b]?	Yes	Sections 8.1, 8.2, and 8.3
D. Does the document indicate whether written comments were received during consultation and, if there were comments that they are on file with the FAA region?	Yes	Sections 8.1 and 8.2, Appendix H
III. General Requirements: (150.21)		
A. Are there two maps, each clearly labeled on the face with year (existing condition year and 5-year)?	Yes	Figures 5.4, 6.1 and 7.1
B. Map currency:		

FAR PART 150
NOISE EXPOSURE MAP CHECKLIST

AIRPORT NAME: McClellan-Palomar Airport **REVIEWER:_____**

Item	Yes/No/NA	Page No./Other Reference
1. Does the existing condition map year match the year on the airport operator's submittal letter?	Yes	Existing condition map year is 2004 and year on submittal letter is 2004.
2. Is the 5-year map based on reasonable forecasts and other planning assumptions and is it for the fifth calendar year after the year of submission?	Yes	5-year map is for 2009, and is based on FAA-approved forecast.
3. If the answer to 1 and 2 above is no, has the airport operator verified in writing that data in the documentation are representative of existing condition and 5-year forecast conditions as of the date of submission?	NA	
C. If the NEM and NCP are submitted together:		
1. Has the airport operator indicated whether the 5-year map is based on 5-year contours without the program vs. contours if the program is implemented?	NA	
2. If the 5-year map is based on program implementation:		
a. Are the specific program measures reflected on the map identified?	NA	
b. Does the documentation specifically describe how these measures affect land use compatibilities depicted on the map?	NA	
c. If the 5-year NEM does not incorporate program implementation, has the airport operator included an additional NEM for FAA determination after the program is approved that shows program implementation conditions and that is intended to replace the 5-year NEM as the new official 5-year map?	NA	
IV. Map Scale Graphics, and Data Requirements: (A150.101, A150.103, A150.105, 150.21[a])		
A. Are the maps of sufficient scale to be clear and readable (they must not be less than 1" to 8,000'), and is the scale indicated on the maps?	Yes	All maps are 1" to 8,000' or greater
B. Is the quality of the graphics such that required information is clear and readable?	Yes	
C. Depiction of the airport and its environs:	Yes	
1. Is the following graphically depicted to scale on both the existing		

FAR PART 150
NOISE EXPOSURE MAP CHECKLIST

AIRPORT NAME: McClellan-Palomar Airport **REVIEWER:_____**

Item	Yes/No/NA	Page No./Other Reference
conditions and 5-year maps:		
a. Airport boundaries?	Yes	Figures 2.1, 2.2, 4.1, 4.2, 4.3, 5.1, 5.2, 5.3, 5.4, 6.1, and 7.1
b. Runway configurations with runway end numbers?	Yes	Figures 2.1, 2.2, 4.1, 4.2, 4.3, 5.1, 5.2, 5.3, 5.4, 6.1, and 7.1
2. Does the depiction of the off-airport data include:		
a. A land use base map depicting streets and other identifiable geographic features?	Yes	Figure 4.1
b. The area within the 65 L_{dn} (or beyond, at local discretion)?	Yes	Figures 5.4, 6.1, and 7.1
c. Clear delineation of geographic boundaries and the names of all jurisdictions with planning and land use control authority within the 65 L_{dn} (or beyond, at local discretion)?	Yes	Figure 4.3
D. Noise Contours		
1. Continuous contours for at least the 65, 70, 75 L_{dn}?	Yes	Figures 5.4, 6.1, and 7.1
2. Based on current airport and operational data for the existing condition year NEM, and forecast data for the 5-year NEM?	Yes	Sections 5.1, 5.2, and 5.3
E. Flight tracks for the existing condition and 5-year forecast timeframes (these may be on supplemental graphics which must use the same land use base map as the existing condition and 5-year NEM), which are numbered to correspond to accompanying narrative?	Yes	Figures 5.1, 5.2, and 5.3
F. Locations of any noise monitoring sites (these may be on supplemental graphics that must use the same land use base map as the official NEMs.	NA	Noise monitoring was not used.
G. Noncompatible land use identification:		
1. Are noncompatible land uses within at least the 65 Ldn depicted on the maps?	Yes	Figures 5.4, 6.1, and 7.1
2. Are noise sensitive public buildings identified?	Yes	Figure 2.1

FAR PART 150
NOISE EXPOSURE MAP CHECKLIST

AIRPORT NAME: McClellan-Palomar Airport **REVIEWER:_____**

Item	Yes/No/NA	Page No./Other Reference
3. Are the noncompatible uses and noise sensitive public buildings readily identifiable and explained on the map legend?	No	There are no non-compatible land use and noise sensitive public buildings within 65 Ldn.
4. Are compatible land uses, which would normally be considered noncompatible, explained in the accompanying narrative?	NA	
V. Narrative Support of Map Data: (150.21[a],A150.1, A150.101, A150.103)		
A.		
1. Are the technical data, including data sources, on which the NEMs are based adequately described in the narrative?	Yes	Sections 5, 6, AND 7 Appendices D, E, and F
2. Are the underlying technical data and planning assumptions reasonable?	Yes	Sections 5, 6, and 7 Appendices D, E, and F
B. Calculation of noise contours:		
1. Is the methodology indicated?	Yes	Section 3
a. Is it FAA approved?	Yes	Section 3
b. Was the same model used for both maps?	Yes	INM V6.1
c. Has AEE approval been obtained for use of a model other than those that have previous blanket FAA approval?	NA	FAA-approved model, INM, was used.
2. Correct use of noise models:		
a. Does the documentation indicate the airport operator has adjusted or calibrated FAA-approved noise models or substituted one aircraft type for another?	Yes	Sections 5.1, 6.1, and 7.1, and Appendix D
b. If so, does this have written approval from AEE?	Yes	Appendix D
3. If noise monitoring was used, does the narrative indicate that Part 150 guidelines were followed?	NA	Noise monitoring was not used.
4. For noise contours below 65 Ldn, does the supporting documentation include explanation of local reasons? (Narrative explanation is highly desirable but not required by the Rule.)	Yes	Sections 5.7, 6.6, and 7.6
C. Noncompatible Land Use Information:		

FAR PART 150
NOISE EXPOSURE MAP CHECKLIST

AIRPORT NAME: McClellan-Palomar Airport **REVIEWER:_____**

Item	Yes/No/NA	Page No./Other Reference
1. Does the narrative give estimates of the number of people residing in each of the contours (L_{DN} 65, 70, and 75, at a minimum) for both the existing condition and 5-year maps?	Yes	Tables 5.12, 6.7, and 7.7
2. Does the documentation indicate whether Table 1 of Part 150 was used by the airport operator?	Yes	Section 4.3 Table 4.1
a. If a local variation to Table 1 was used:		
(1) Does the narrative clearly indicate which adjustments were made and the local reasons for doing so?	NA	Table 1 Of Part 150 Was Used.
(2) Does the narrative include the airport operators complete substitution for Table 1?	NA	Table 1 of Part 150 was used.
3. Does the narrative include information on self- generated or ambient noise where compatible/noncompatible land use identification considers non-airport/aircraft sources?	NA	Non-airport/aircraft sources were not considered.
4. Where normally noncompatible land uses are not depicted as such on the NEMs, does the narrative satisfactorily explain why, with reference to the specific geographic areas?	NA	
5. Does the narrative describe how forecasts will affect land use compatibility?	Yes	Sections 6.6 and 7.6
VI. Map Certification: (150.21[b], 150.21.[e])		
A. Has the operator certified in writing the interested persons have been afforded adequate opportunity to submit views, data, and comments concerning the correctness and adequacy of the draft maps and forecasts?	Yes	Sections 8.1 and 8.2 Appendix H
B. Has the operator certified in writing that each map and description of consultation and opportunity for public comment are true and complete?	Yes	

COMMONLY USED ACOUSTICAL AND AIR TRAFFIC CONTROL TERMS

Air Carrier	A commercial airline with published schedules operating at least five round trips per week.
Air Route Traffic Control Center (ARTCC)	A facility providing air traffic control to aircraft on an IFR flight plan within controlled airspace and principally during the enroute phase of flight.
Air Taxi	Plane that either (1) fly at least five round trips per week between two or more points according to flight schedules that specify the times, days of the week, and places between which such flights are performed, or (2) transport mail pursuant to a current contract with the U.S. Postal Service.
Air Traffic Control Tower (ATCT)	A central operations tower in the terminal air traffic control system with an associated IFR room (if radar equipped) using air/ground communications and/or radar, visual signaling and other devices to provide safe and expeditious movement of air traffic.
Airport Influence Area (AIA)	A planning area designated by the ALUC around each airport which is, or reasonably may become, affected by airport related noise, fumes, or other influence, or which is, or may reasonably become, a site for a hazard to aerial navigation.
Airport Land Use Commission (ALUC)	The Airport Land Use Commission (ALUC) is an agency that is required by state law to exist in counties in which there is a commercial and/or a general aviation airport. The purpose of the ALUC is to protect public health, safety and welfare by ensuring the orderly development of airports and the adoption of land use measures that minimize the public's exposure to excessive noise and safety hazards within areas around public airports, to the extent that these areas are not already devoted to incompatible uses.
Airport Layout Plan (ALP)	The official FAA approved map of an airports' facilities.
Airport Noise And Capacity Act Of 1990	The federal law that mandated the U.S. air fleet convert to Stage 3 aircraft by January 1, 2000 and requires federal approval of an airport's proposed noise and access restrictions on aircraft.
Airport Noise Compatibility Program	The program developed and documented in accordance with Appendix B of 14 CFR 150, including the measures proposed or taken by the airport operator to reduce existing non-compatible land uses and to prevent the introduction of additional non-compatible land uses within the area.
Altitude MSL	The altitude of an aircraft measured in feet above Mean Sea Level.
Approach Lighting Systems (ALS)	Radiating light beams guiding pilots to the extended centerline of the runway on final approach and landing.

Arrival Procedure	A series of directions from air traffic control, using fixes and procedures, to guide an aircraft enroute to an airport for landing.
Avionics	Airborne navigation, communications and data display equipment required for operation under specific air traffic control procedures
California Airport Noise Standards	The rules and regulations codified in Subchapter 6 of Title 21 of the California Code of Regulations, adopted in accordance with the California Public Utilities Code by the California Department of Transportation governing noise problem airports operating under a valid permit to operate.
CNEL Contour	A line of equal CNEL. A contour is computed with an FAA computer program called the Integrated Noise Model (INM), which calculates noise exposure on a plot grid of points on the ground.
Community Noise Equivalent Level (CNEL)	Same as DNL, except that it includes a 5 decibel penalty during the hours of 7:00 p.m. to 10:00 p.m. in addition to the 10 decibel nighttime penalty. CNEL using annual average daily operation is required by the State of California and the FAA to describe the noise impacts of airports.
Compatible Land Use	Land use identified under 14 CFR Part 150 as normally compatible with the outdoor noise at that location (or an adequately attenuated noise level for any indoor activities involved). Areas with noise exposure less than 65 dB DNL are considered "compatible" with residential use; areas at or above 65 dB DNL are designated "incompatible" with residential use.
Day-Night Average Sound Level (DNL)	A level of noise expressed (in decibels) as a 24-hour decibel average. Nighttime noise, between the hours of 10:00 p.m. and 7:00 a.m. is weighted; that is, given an additional 10 decibels to compensate for sleep interference and other disruptions caused by nighttime noise. DNL using annual average daily operations is required by the FAA to describe airport noise exposure.
dBA	The A-weighting characteristic modifies the frequency response of a sound measuring instrument to account approximately for the frequency characteristics of the human ear. The A-weighted decibel is a measure of sound pressure level modified by attenuating the low and very high frequencies.
Decision Height	During a landing, the height at which a decision must be made during an instrument approach either to continue the approach or to execute a missed approach.
Decibel (dB)	A logarithmic ratio of a measured sound pressure and a reference level, which is normally 0.0002 dynes per square centimeter (about the threshold of hearing). A sound doubles in loudness for every increase of 10 decibels.

Departure Procedure	A published IFR departure procedure describing specific criteria for climb, routing, and communications for a specific runway at an airport.
Equivalent Noise Level (L_{eq})	The average (on an energy basis) noise level (usually A-weighted sound level) integrated over some period of time.
FAR Part 150	A regulation governing noise and land use compatibility studies and programs for airports.
FAR Part 161	A regulation governing an airport's imposition of noise and access restrictions on aircraft that requires FAA approval of any such restrictions.
FAR Part 36	A regulation defining maximum noise emissions for aircraft.
FAR Part 91	A regulation governing the phasing out of (noise) Stage 1 and 2 aircraft as defined under FAR Part 36.
Federal Aviation Administration (FAA)	The U.S. government agency responsible for aircraft safety, movement, and control.
Federal Aviation Regulation (FAR)	The rules and regulations codified in the Code of Federal Regulations that govern the operation of aircraft, airways, airports, and airmen.
Fix	A geographical position determined by visual reference to surface features, by reference to one or more Navaids, or by other navigational methods.
Fleet Mix	The distribution of differing aircraft types operated at a particular airport or by an airline.
Flight Plan	Specific information related to the intended flight of an aircraft. A flight plan is filed with an FAA Flight Service Station or an Air Traffic Control facility.
General Aviation (GA)	Civil aviation excluding air carriers, commercial operations, and military aircraft.
Glide Slope	Generally a 3-degree angle of approach to a runway established by means of airborne instruments used during instrument approaches, or visual ground aids for the visual portion of an instrument approach and landing.
Ground Power Unit (GPU)	A source of power, generally from the terminals, for aircraft to use while their engines are off.
Ground Track	The apparent path an aircraft would follow on the ground if its airborne flight path were plotted on the terrain.
Instrument Approach	A series of predetermined maneuvers for the orderly transfer of an aircraft under instrument flight conditions from the beginning of the initial approach to a landing, or to a point from which a landing may be made visually.

Instrument Flight Rules (IFR)	Rules governing the procedures for conducting instrument flight. Also a term used by pilots and controllers to indicate type of flight plan.
Instrument Landing System (ILS)	A system of precise instrumentation that normally consists of a localizer, glide slope, outer marker, middle marker, and approach lights, which aid the pilots approach to an airport.
Instrument Meteorological Conditions (IMC)	Weather conditions expressed in terms of visibility, distance from clouds, and cloud ceilings during which all aircraft are required to operate using instrument flight rules.
Integrated Noise Model (INM)	A noise model developed by the FAA for evaluating aircraft noise impacts in the vicinity of airports. The model utilizes flight track information, aircraft fleet mix, standard and user defined aircraft profiles and terrain as inputs. The model produces noise exposure contours that are used for land use compatibility maps.
Knots	A measure of speed used in aviation. One knot is equal to one nautical mile per hour (1.15 knots = 1 mile).
Localizer	A navigational aid that consists of a directional pattern of radio waves modulated by two signals which, when receding with equal intensity, are displayed by compatible airborne equipment as an “on-course” indication, and received in unequal intensity are displayed as an “off-course” indication.
Localizer Type Directional Aid (LDA)	A facility of comparable utility and accuracy to a localizer, but not part of a complete ILS and not aligned with the runway.
Middle Marker	A beacon that defines a point along the glide slope of an ILS, normally located at or near the point of decision height.
Missed Approach Procedure	A procedure used to redirect a landing aircraft back around to attempt another landing. This may be due to visual contact not established at authorized minimums or instructions from air traffic control, or for training or other reasons.
National Airspace System (NAS)	The common network of US airspace including: air navigation facilities; equipment and services; airports or landing areas; aeronautical charts; information and services; rules, regulations and procedures; technical information; manpower and materials.
Navigational Aid (Navaid)	Any facility used for guiding or controlling flight in the air or during the landing and takeoff of aircraft.
Noise Impact Notification Area (NINA)	The area designated in the 1994 CLUP most impacted by aircraft operations to and from CRQ.

Noise Exposure Map (NEM)	A scaled, geographic depiction of an airport, its noise contours, and surrounding area developed in accordance with section A150.101 of Appendix A of 14 CFR 150, including the accompanying documentation setting forth the required descriptions of forecast aircraft operations at that airport during the fifth calendar year beginning after submission of the map, together with the ways, if any, those operations will affect the map (including noise contours and the forecast land uses).
Non-Directional Beacon (NDB)	A signal that can be read by pilots of aircraft with direction finding equipment. Used to determine bearing and can home in or track to or from the desired point.
Non-Precision Approach Procedure	A standard instrument approach procedure in which no electronic glide slope is provided.
Operation	An arrival, departure or overflight of an aircraft. Every flight requires at least two operations, a take-off and a landing.
Outer Marker	An ILS navigation facility located four to seven miles from the runway on the extended centerline indicating the beginning of the final approach to landing
Overflight	Aircraft originating or terminating outside the metropolitan area that transit the airspace without landing.
Run-up	A procedure used to test aircraft engines (typically after maintenance) to ensure safe operation prior to returning the aircraft to service. The power settings tested range from idle to full power and may vary in duration.
Run-up Location or Areas	Specified areas on the airfield where scheduled engine run-ups may occur. These locations are usually sited so as to produce minimum noise impact in surrounding neighborhoods.
Single Event Noise Exposure Level (SENEL)	The noise exposure level of a single aircraft event measured over the time between the initial and final points when the noise level exceeds a predetermined threshold.
Stage 2 And Stage 3 Aircraft	Commercial jet aircraft currently meet either stage 2 or stage 3 noise standards. Stage 2 engines are older and noisier than stage 3 engines. By the year 2000 most jet engines used in the United States must meet stage 3 noise standards (Airport Noise and Capacity Act of 1990). Stage 3 aircraft incorporate the latest technology for suppressing jet-engine noise and, in general, are 10 dB quieter than stage 2 aircraft. This represents a halving of perceived noise; however, actual noise reduction varies by aircraft.

Terminal Radar Approach Control (TRACON)	An FAA air traffic control facility that controls aircraft arriving and departing or transiting airspace controlled by the facility. The TRACON for all Southern California airports is located in San Diego.
Visual Approach	An arrival procedure in which an aircraft on an IFR flight plan, operating in VFR conditions under the control of an air traffic facility and having air traffic control authorization, may proceed to the destination airport under VFR.
Visual Flight Rules (VFR)	Rules that govern the procedures for conducting flight under visual conditions. The term "VFR" is also used in the United States to indicate weather conditions that are equal to or greater than minimum VFR requirements. In addition, it is used by pilots and controllers to indicate type of flight plan.

C AIRCRAFT NOISE AND ITS METRICS

Aircraft noise originates from the engine as well as the airframe (structure) of aircraft. However, the engines are the most significant source of noise. While noise generated by propeller-driven aircraft can be annoying, jet aircraft are commonly the source of disturbing noise at airports. Three basic types of jet engines are operated today – turboprop, turbofan and turbojet engines.

The core of turbofan and turbojet engines consists of a compressor, combustion chambers and a turbine. A turbofan engine also has a front fan. The major sources of noise include the core engine fan streams, the compressor, turbine blades, and exhaust nozzles. As a turbofan-engined aircraft approaches to land on a runway, the front fan is also a major noise source. It has been found in several cases that the sound energy produced by a turbojet engine is greater than that of a turbofan engine with an equivalent thrust rating.

The noise produced by jet aircraft flyovers is characterized by an increase in sound energy as the aircraft approach, up to a maximum level. This sound level begins to lessen as the aircraft pass overhead and then decreases in a series of lesser peaks as the aircraft departs the area.

Noise produced by propeller driven aircraft and helicopters emanates primarily from the propeller blades, rotors, and engine exhaust. There are two components of blade/rotor noise, namely vortex and periodic. Vortex noise is generated by the formation and shedding of vortices in the airflow past the blade. Periodic noise is produced by the oscillating pressure field in the air that results from the passage of air past the blade. Blade slap is an additional source of noise in helicopters. This is high-amplitude periodic noise and highly modulated vortex noise caused by fluctuating forces as one blade cuts through the tip vortices of another.

The concept of decibels and noise metrics are presented in the following sections.

C.1 THE DECIBEL, DB

Sound is a complex physical phenomenon consisting of complex minute vibrations traveling through a medium, such as air. These vibrations are sensed by the human ear as sound pressure. Because of the vast range of sound pressure or intensity detectable by the human ear, sound pressure level (SPL) is represented on a logarithmic scale known as decibels (dB). Decibels are expressed as a logarithm of the ratio of two pressures. The numerator is the pressure of the sound source of interest and the denominator is the reference pressure (the quietest sound we can hear). A sound level of 0 dB is approximately the threshold of human hearing (of a young person with good hearing) and is barely audible under extremely quiet (laboratory-type) listening conditions. A SPL of 120 dB begins to be felt inside the ear as discomfort and pain at approximately 140 dB. Most environmental sounds have SPLs ranging from 30 to 100 dB.

Because decibels are logarithmic, they cannot be added or subtracted directly like other (linear) numbers. For example, if two sound sources each produce 100 dB, when they are operated together they will produce 103 dB, not 200 dB. Four 100 dB sources operating together again double the sound energy, resulting in a total SPL of 106 dB, and so on. In addition, if one source is much louder than another, the two sources operating together will produce the same SPL as if the louder source were operating alone.

For example, a 100 dB source plus an 80 dB source produce 100 dB when operating together. The louder source masks the quieter one.

Two useful rules to remember when comparing SPLs are: 1) most people perceive a 6 to 10 dB increase in SPL between two noise events to be about a doubling of loudness, and 2) changes in SPL of less than about 3 dB between two events are not easily detected outside of a laboratory.

C.1.1 A-WEIGHTED DECIBEL, DBA

Frequency, or pitch, is a basic physical characteristic of sound and is expressed in units of cycles per second or hertz (Hz). The normal frequency range of hearing for most people extends from about 20 to 15,000 Hertz (Hz). Because the human ear is more sensitive to middle and high frequencies (i.e., 1000 to 4000 Hz), a frequency weighting called “A” weighting is applied to the measurement of sound. The internationally standardized "A" filter approximates the sensitivity of the human ear and helps in assessing the perceived loudness of various sounds. In this document all sound levels are A-weighted sound levels and the adjective "A-weighted" has been omitted.

Figure Noise1-1 charts common indoor and outdoor sound levels. A quiet rural area at nighttime may be 30 dBA or lower while the operator of a typical gas lawn mower may experience a level of 90 dBA. Similarly, the level in a library may be 30 dBA or lower while the listener at a rock band concert may experience levels near 110 dBA.

C.1.2 MAXIMUM SOUND LEVEL, L_{MAX}

Sound levels vary with time. For example, the sound increases as an aircraft approaches, then falls and blends into the ambient or background as the aircraft recedes into the distance. Because of this variation, it is often convenient to describe a particular noise "event" by its highest or maximum sound level (L_{max}). Note L_{max} describes only one dimension of an event; it provides no information on the cumulative noise exposure generated by a sound source. In fact, two events with identical L_{max} may produce very different total exposures. One may be of very short duration, while the other may be much longer.

C.1.3 SOUND EXPOSURE LEVEL, SEL

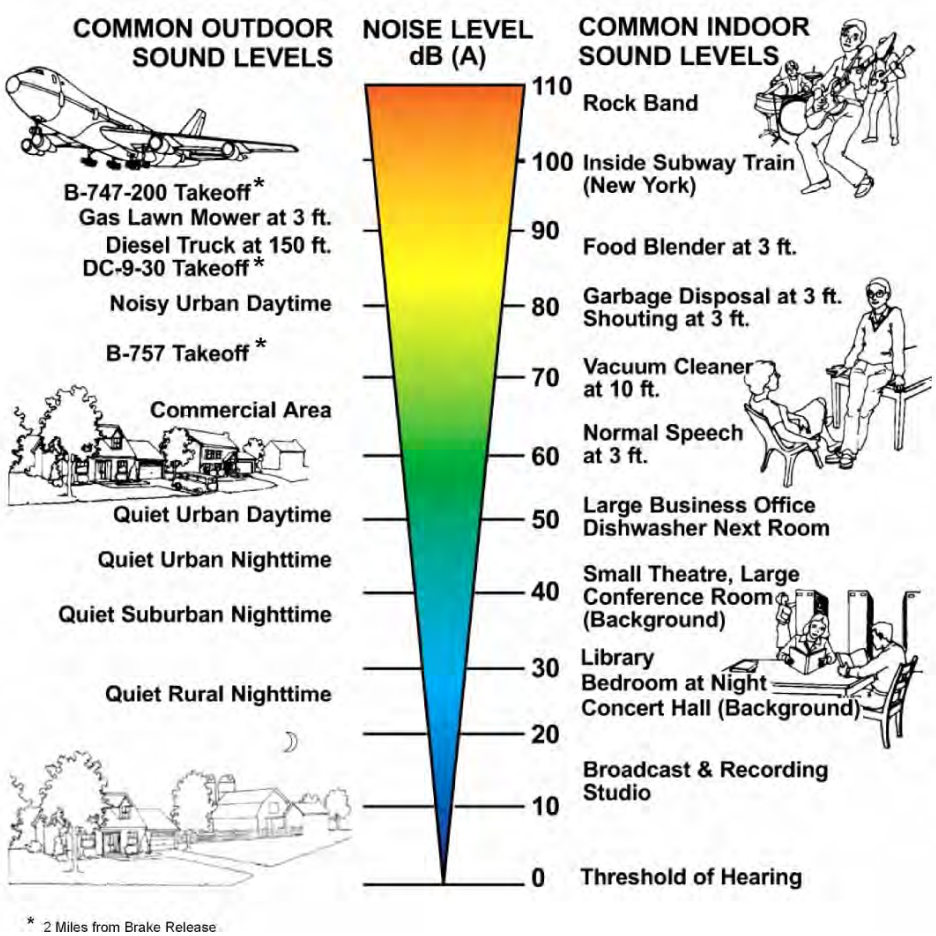
The most common measure of noise exposure for a single aircraft flyover is the sound exposure level (SEL). SEL is a summation of the A-weighted sound energy at a particular location over the true duration of a noise event normalized to a fictional duration of one second. The true duration is defined as the amount of time the noise event exceeds background levels. For events lasting more than one second, SEL does not directly represent the sound level heard at any given time, but rather provides a measure of the net impact of the entire acoustic event.

The normalization to the fictional duration of one second enables the comparison of noise events with differing true duration and/or maximum level. Because the SEL is normalized to one second, it will almost always be larger in magnitude than the L_{max} for the event. In fact, for most aircraft events, the SEL is about 7 to 12 dB higher than the L_{max}. Additionally, since it is a cumulative measure, a higher SEL can result from either a louder or longer event, or some combination.

As SEL combines an event's overall sound level along with its duration, SEL provides a comprehensive way to describe noise events for use in modeling and comparing noise environments. Computer noise models, such as the one employed for this document, base their computations on these SELs.

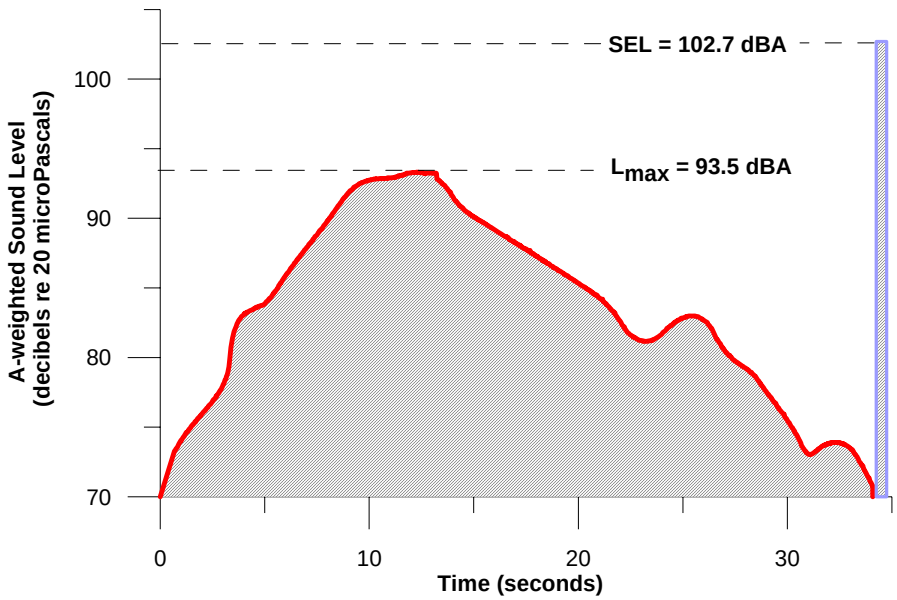
Figure Noise1-2 shows an event's "time history", the variation of sound level with time. For typical sound events experienced by a fixed listener, like a person experiencing an aircraft pass-by, the sound level rises as the source (or aircraft) approaches the listener, peaks and then diminishes as the aircraft flies away from the listener. The area under the time history curve represents the overall sound energy of the noise event. The L_{max} for the event shown in the figure was 93.5 dBA. Compressing the event's total sound energy into one second to compute its SEL yields 102.7 dBA.

Figure Noise1-1
Common Outdoor And Indoor Sound Levels



Source: Draft EIS/EIR LAX Proposed Master Plan Improvements, Los Angeles, CA
U.S. Department of Transportation, FAA, January 2001.

Figure Noise1-2
Comparison Of Maximum Sound Level (L_{max}) And Sound Exposure Level (SEL)



Source: URS Corporation

C.1.4 EQUIVALENT SOUND LEVEL, L_{EQ}

Maximum A-weighted levels and SELs are used to measure the noise associated with individual events. The remaining metrics in this section and in the one following apply to longer-term cumulative noise exposure that often includes many events.

The first cumulative noise metric discussed herein, the Equivalent Sound Level (abbreviated L_{eq}), is a measure of the exposure resulting from the accumulation of A-weighted sound levels over a particular period of interest (e.g., an hour, an 8-hour school day, nighttime, or a full 24-hour day). However, because the length of the period can be different depending on the time frame of interest, the applicable period should always be identified or clearly understood when discussing the metric. Such durations are often identified through a subscript, for example, $L_{eq(8)}$ or $L_{eq(24)}$.

Conceptually, L_{eq} may be thought of as a constant sound level over the period of interest that contains as much sound energy as the actual time-varying sound level with its normal 'peaks' and 'valleys'. In the context of noise from typical aircraft flight events and as noted earlier for SEL, L_{eq} does not represent the sound level heard at any particular time, but rather represents the total sound exposure for the period of interest. Also, it should be noted that the 'average' sound level suggested by L_{eq} is not an arithmetic value, but a logarithmic, or 'energy-averaged,' sound level. Thus, loud events tend to dominate the noise environment described by the L_{eq} metric.

As for its application to airport noise issues, L_{eq} is often presented for consecutive 1-hour periods to illustrate how the hourly noise dose rises and falls throughout a 24-hour period, as well as how certain hours are significantly affected by a few loud aircraft.

C.1.5. DAY-NIGHT AVERAGE SOUND LEVEL, DNL, AND COMMUNITY NOISE EQUIVALENT LEVEL, CNEL

Time-average sound levels are measurements of sound levels averaged over a specified length of time. These levels provide a measure of the average sound energy during the measurement period. For the evaluation of community noise effects, and particularly aircraft noise effects, the Day-Night Average Sound Level (DNL) is often used. DNL (logarithmically) averages aircraft sound levels at a location over a complete 24-hour period, with a 10-decibel adjustment added to those noise events occurring between 10:00 p.m. and 7:00 a.m. (local time) the following morning. The 10:00 p.m. to 7:00 a.m. period is defined as nighttime (or night) and the 7:00 a.m. to 10:00 p.m. period is defined as daytime.

California requires the Community Noise Equivalent Level (CNEL) descriptor. CNEL is identical to DNL except that CNEL's daytime period is defined from 7:00 a.m. to 7:00 p.m. CNEL has an additional period, called evening, which carries an approximate 5-decibel adjustment added to those events occurring between 7:00 p.m. and 10:00 p.m.

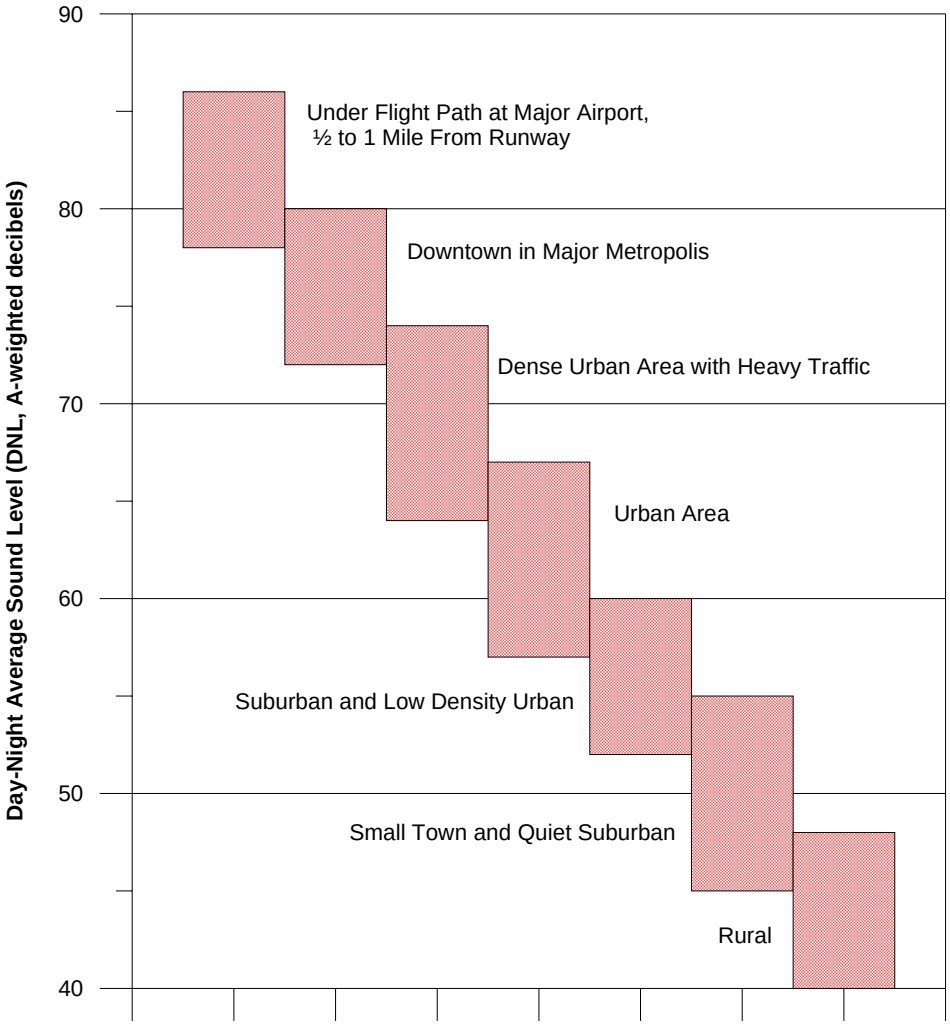
Because of the increased sensitivity to noise during normal sleeping hours and because ambient (without aircraft) sound levels during nighttime are typically about 10 dB lower than during daytime hours, the 10-decibel "penalty" represents the added intrusiveness of sounds occurring during nighttime hours. Similarly, regarding CNEL's evening period, the approximate 5-decibel penalty represents the added intrusiveness of sounds during the evening period when people are most likely having dinner, watching television, etc.

CNEL and DNL account for the noise levels (in terms of SEL) of all individual aircraft events, the number of times those events occur and the period of day/night in which they occur. Values of DNL and CNEL can be measured with standard monitoring equipment or predicted with computer models. This document utilizes estimates of CNEL with an FAA-approved computer-based noise model. CNEL and DNL are used interchangeably in this section.

Typical DNL values for a variety of noise environments are shown in Figure Noise1-3. DNL values can be approximately 85 dBA outdoors under a flight path within a mile of a major airport and 40 dBA or less outdoors in a rural residential area.

Due to the DNL (or CNEL) descriptor's close correlation with the degree of community annoyance from aircraft noise (the subject of the next section), DNL has been formally adopted by most federal agencies for measuring and evaluating aircraft noise for land use planning and noise impact assessment. Federal committees such as the Federal Interagency Committee on Urban Noise (FICUN) and the Federal Interagency Committee on Noise (FICON) which include the EPA, FAA, Department of Defense, Department of Housing and Urban Development (HUD), and Veterans Administration (VA), found DNL to be the best metric for land use planning. They also found no new cumulative sound descriptors or metrics of sufficient scientific standing to substitute for DNL. Other cumulative metrics could be used only to supplement, not replace DNL. Furthermore, Part 150 requires that DNL (or CNEL in California) be used in describing cumulative noise exposure and in identifying aircraft noise/land use compatibility issues (EPA, 1974; FICUN, 1980; FICON, 1992; 14 CFR Part 150, 1995).

Figure Noise1-3
Typical Range Of Outdoor Community Day-Night Average Sound Levels



Source: U.S. Department of Defense. Departments of the Air Force, the Army, and the Navy, 1978. *Planning in the Noise Environment*. AFM 19-10. TM 5-803-2, and NAVFAC P-970. Washington, D.C.,: U.S. DoD.

C.2 THE EFFECTS OF AIRCRAFT NOISE ON PEOPLE

This section addresses three ways humans can be affected by aircraft noise: annoyance, speech interference and sleep disturbance.

The guidelines described below represent a compilation of the results of extensive scientific research into noise-related activity interference and attitudinal response. However, reviewers of CNEL contours should recognize the highly subjective nature of response to noise, and that special circumstances can affect individuals' tolerances. For example, a high non-aircraft background noise level can reduce the

significance of aircraft noise (relative to the observer), such as in areas constantly exposed to relatively high levels of traffic noise. Alternatively, residents of areas with unusually low background levels may find relatively low levels of aircraft noise annoying.

Response may also be affected by expectation and experience. People may get used to a level of exposure that guidelines indicate may be unacceptable, and changes in exposure may generate response that is far greater than that which the guidelines might suggest.

C.2.1 COMMUNITY ANNOYANCE

The primary potential effect of aircraft noise on exposed communities is one of annoyance. Noise annoyance is defined by the U.S. Environmental Protection Agency (EPA) as any negative subjective reaction on the part of an individual or group (EPA, 1974). Scientific studies and a large number of social/attitudinal surveys have been conducted to appraise people's annoyance to all types of environmental noise, especially aircraft events. These studies and surveys have found the DNL to be the best measure of this annoyance (EPA, 1974; FICUN, 1980; FICON, 1992; ANSI, 1980; ANSI, 1988; Schultz, 1978; Fidell, et. al., 1991).

The relationship between annoyance and DNL determined by the scientific community and endorsed by many federal agencies, including the FAA, is shown in FigureNoise 1-4. For a DNL of 65 dBA, approximately 13% of the exposed population would be highly-annoyed. The figure also shows at very low values of DNL, such as 45 dB or less, 1% or less of the exposed population would be highly annoyed. At very high values of DNL, such as 90 dBA, more than 80% of the exposed population would be highly annoyed.

The use of DNL (or CNEL) has been criticized as not accurately representing community annoyance and land use compatibility with aircraft noise. One frequent criticism is based on the inherent feeling that people react more to single noise events and not as much to 'meaningless' time-average sound levels. In fact, a time-average noise metric, such as CNEL, takes into account both the noise levels of all individual events which occur during a 24-hour period and the number of times those events occur. As described briefly above, the logarithmic nature of the decibel unit causes the noise levels of the loudest events to control the 24-hour average.

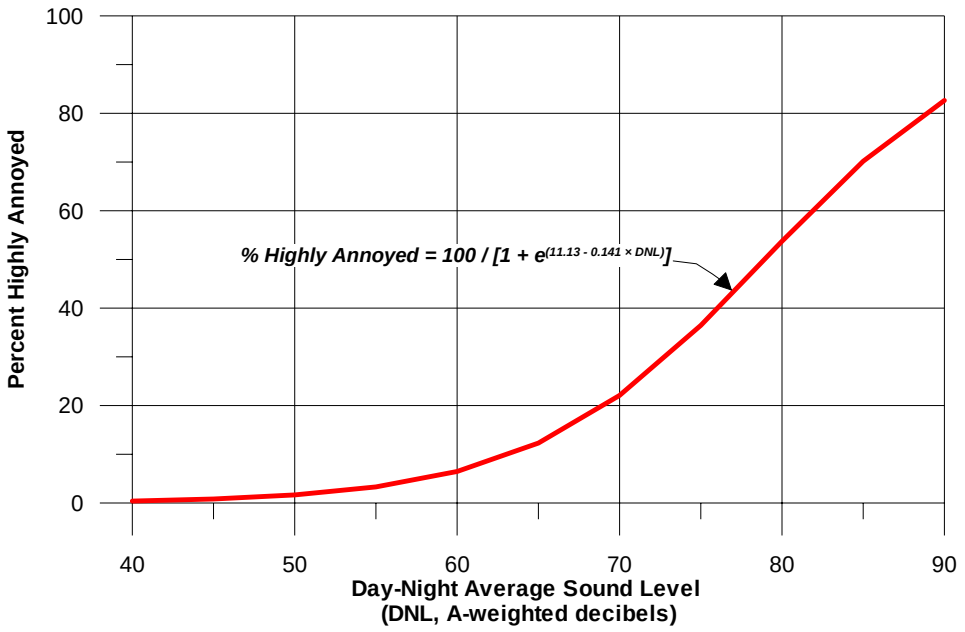
As a simple example of this characteristic, consider a case in which only one aircraft overflight occurs in daytime hours during a 24-hour period, creating a (real time, measured) sound level of 100 dBA L_{eq} for 30 seconds. During the remaining 24 hours, 59 minutes and 30 seconds of the day, the ambient sound level is 50 dBA. The CNEL for this example 24-hour period is 66.0 dBA. As a second example, assume that 10 such 30-second overflights (of 100 dBA L_{eq} each) occur in daytime hours during the next 24-hour period, with the same ambient sound level of 50 dBA during the remaining 23 hours and 55 minutes of the day. The CNEL for this second 24-hour period is 75.5 dBA. Clearly, the average of noise over a 24-hour period does not ignore the louder single events and tends to emphasize both the sound levels and number of those events. This is the basic concept of a time-average sound metric, and, specifically, the CNEL.

It is often suggested a lower DNL, such as 60 or 55 dB, be adopted as the threshold of community noise annoyance for FAA environmental analysis documents. While there is no technical reason why a lower level cannot be measured or calculated for comparison purposes, a DNL of 65 dB:

1. Provides a valid basis for comparing and assessing community noise effects.
2. Represents a noise exposure level normally dominated by aircraft noise and not other community or nearby highway noise sources.
3. Reflects the FAA's threshold for grant-in-aid funding of airport noise mitigation projects.
4. HUD also established a DNL standard of 65 dBA for eligibility for federally guaranteed home loans.

For this Part 150, CNEL equal to or greater than 65 dB were used for assessing community noise impact.

Figure Noise1-4
Relationship Between Annoyance And Day-Night Average Sound Level



Source: Federal Interagency Committee on Noise (FICON), "*Federal Agency Review of Selected Airport Noise Analysis Issues*", August 1992, p. 3-6, Figure 3.1, USAF (Finegold et. al. 1992) curve based on 400 points.

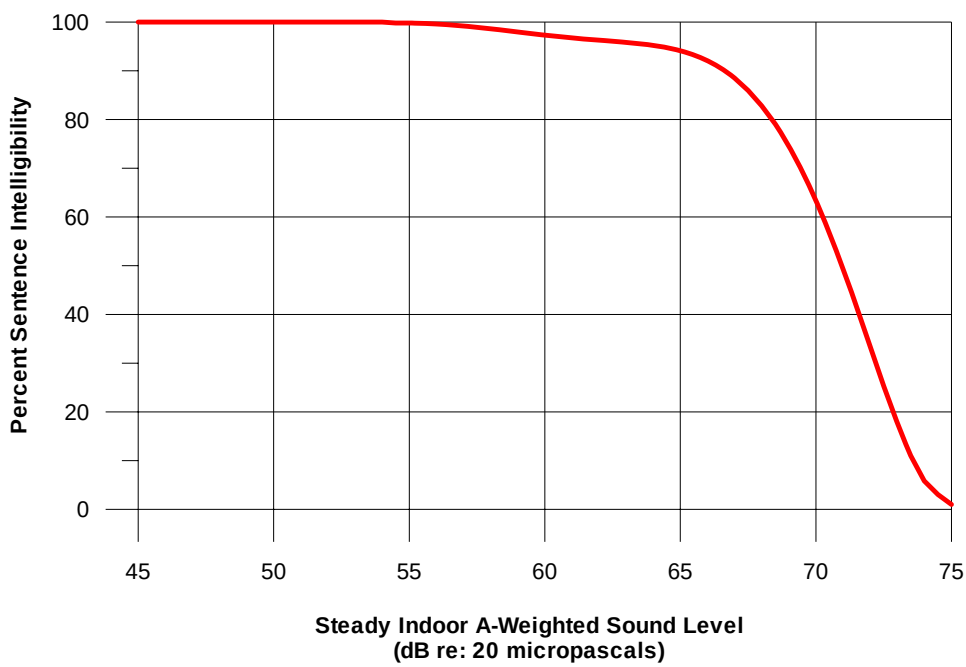
C.2.2 SPEECH INTERFERENCE

A primary effect of aircraft noise is its tendency to drown out or "mask" speech, making it difficult to carry on a normal conversation. As an aircraft approaches and its sound level increases, speech becomes harder to hear. As the ambient level increases, the talker must raise his/her voice, or the individuals must get closer together to continue talking.

For typical communication distances of 3 or 4 feet (1 to 1.5 meters), acceptable outdoor conversations can be carried on in a normal voice as long as the ambient noise outdoors is less than about 65 dBA (FICON, 1992). If the noise exceeds this level, intelligibility would be lost unless vocal effort was increased or communication distance was decreased.

Indoor speech interference can be expressed as a percentage of sentence intelligibility between two people speaking in relaxed conversation approximately one meter apart in a typical living room or bedroom (EPA, 1974). As shown in Figure Noise1-5, the percentage of sentence intelligibility is a non-linear function of the (steady) indoor ambient or background sound level. Indoor sentence intelligibility is 100 percent for background levels below 57 dBA and less than 10 percent for background levels above 73 dBA. In the same document from which Figure Noise 1-5 was taken, the EPA established an indoor criterion of 45 dBA DNL as requisite to protect against speech interference indoors (EPA, 1974).

Figure Noise1-5
Percent Sentence Intelligibility For Indoor Speech



Source: U.S. Environmental Protection Agency, 1974.

C.2.3 SLEEP DISTURBANCE

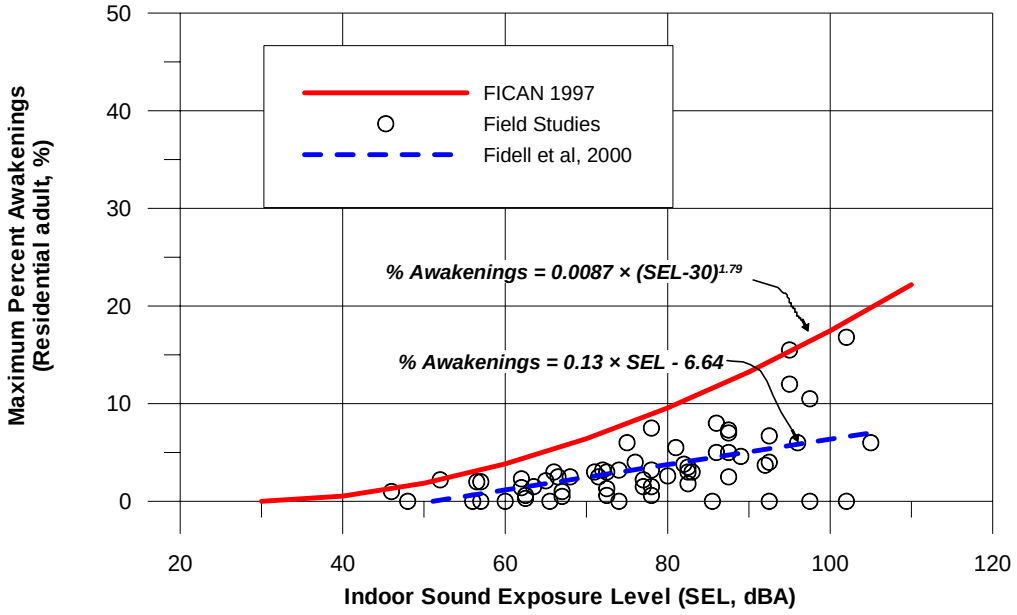
Research on sleep disruption from noise has led to widely varying observations. In part, this is because: (1) sleep can be disturbed without causing awakening, (2) the deeper the sleep the more noise it takes to cause arousal, (3) the tendency to awaken increases with age, and other factors. The U.S. Environmental Protection Agency identified an indoor DNL of 45 dB as necessary to protect against sleep interference (EPA, 1974). Assuming a conservative structural noise insulation of 20 dB for typical dwellings with

windows closed, an indoor DNL of 45 dB corresponds to an outdoor DNL of 65 dB as minimizing sleep interference.

In June 1997, the Federal Interagency Committee on Aviation Noise (FICAN) reviewed the sleep disturbance issue and presented a sleep disturbance dose-response prediction curve (FICAN, 1997) as the recommended tool for analysis of potential sleep disturbance for residential areas. The FICAN curve, shown in Figure Noise1-6, was based on data from field studies of major civilian and military airports. For an indoor SEL of 60 dBA, Figure NoiseE1-6 predicts a maximum of approximately 5 percent of the exposed residential population would be behaviorally awakened. FICAN cautions that his curve should only be applied to long-term adult residents. Furthermore, the relationship between SEL and awakenings presented herein is for each event, not a cumulative percent awakening for all nighttime events.

It should be noted that the FICAN curve shown in the figure is conservative as it is aligned with the upper bounds of the field studies. If the field data was curve-fitted (Fidell, et. al, 2000), the maximum percent awakenings would be less than the upper bound depicted by the FICAN curve. In a range of indoor SEL from 50 dBA to 90 dBA, the curve-fit methodology would yield from 1% to approximately 7% less awakenings than the FICAN curve.

Figure Noise1-6
Sleep Disturbance Dose-Response Relationship



Source: FICAN, 1997; Fidell, et. al., 2000;

D.1 MODELING SUPPORT DATA

Table D-1 describes all of the representative INM types used in this study. Table D-2 shows the representative INM aircraft associated with each of the Flight Progress Strips database's aircraft types.

D.2 FLIGHT OPERATIONS DENSITY MAPS

The Airport's Global Environment Management System (GEMS) records the position as a function of time of most aircraft as they fly in the vicinity of the airport. With built-in algorithms, GEMS determines the type of operation (departure, arrival, training, flyover or unknown) and the runway (06, 24, or unknown). With the flight's time stamp, time of day relative to the CNEL metric (daytime, evening or nighttime) can also be ascertained. As the flight passes over a set of user-defined grid area, GEMS counts the number of passes for each grid point in a user-defined gridded area. Knowing the total number of flights for each grid point allows a map of flight density to be created.

GEMS's flight density mapping function was used to generate grids of flight densities for most airport operations for all of CY2002. The gridded area was a rectangle encompassing the County's Noise Impact Notification Area (NINA) for CRQ with grid points spaced 100 meters in north-south and east-west directions. The gridded area included approximately 32,000 grid points. Flight tracks with points up to 10,000 ft altitude re MSL were included.

Grids for 35 combinations of runway, operation type and time period were computed. Table D-1 shows the inventory of computed grids. One combination not obtained or plotted was daytime flyovers (with unknown runway). These would be non-airport operations and would not be included in the Part 150 study would have been for informational purposes only. There was insufficient time available to have GEMS compute this particular combination. Nearly 239,000 flights are represented by the combinations shown in Table D-3.

Of the 35 computed grids, 30 were plotted and are shown in Figures D-1 through D-30. After consultation with the Airport and FAA Air Traffic Control Tower staff, these flight track density plots were the basis of the modeled runway use, 'nominal' flight tracks and track use and, therefore, the basis for the NEMs.

Table D-1
Description of INM Aircraft Types

INM ID	Description	Fixed or Rotary-Wing	Engine Type	Number of Engines	Civilian Jet FAR36 Noise Stage	Maximum Gross Takeoff Weight (lbs)	Maximum Gross Landing Weight (lbs)
B206L	Bell 206L	Rotary	Ts	1	NA	NA	NA
B222	Bell 222	Rotary	Ts	2	NA	NA	NA
BEC58P	BARON 58P/TS10-520-L	Fixed	P	2	NA	6,100	6,100
C12	C-12 Huron	Fixed	T	2	NA	12,500	12,500
C9A	C-9 Nightingale (similar to civilian DC-9)	Fixed	J	2	NA	121,000	110,000
CIT3	Cessna Citation 3/TFE731-3-100S	Fixed	J	2	3	20,000	17,000
CL600	Challenger CL600/ALF502L	Fixed	J	2	3	36,000	33,000
CL601	Challenger CL601/CF34-3A	Fixed	J	2	3	43,100	36,000
CNA172	Cessna 172R / Lycoming IO-360-L2A	Fixed	P	1	NA	2,450	2,450
CNA206	Cessna 206H / Lycoming IO-540-AC	Fixed	P	1	NA	3,600	3,600
CNA441	Cessna Conquest II/TPE331-8	Fixed	T	2	NA	9,900	9,400
CNA500	Cessna Citation 2/JT15D-4	Fixed	J	2	3	14,700	14,000
CNA750	Cessna Citation X / Rolls Royce Allison AE3007C	Fixed	J	2	3	35,700	31,800
CVR580	Convair 580	Fixed	T	2	NA	58,000	52,000
DHC6	DeHavilland Dash 6/PT6A-27	Fixed	T	2	NA	12,500	12,300
DHC8	DeHavilland Dash 8-100/PW121	Fixed	T	2	NA	34,500	33,900
EMB120	Embraer 120 ER/ Pratt & Whitney PW118	Fixed	T	2	NA	26,433	25,794
FAL20	Falcon 20/CF700-2D-2	Fixed	J	2	2	28,700	27,300
GASEPF	Generic 1985 Single-engine fixed-pitch propeller-driven	Fixed	P	1	NA	2,200	2,200
GASEPV	Generic 1985 Single-engine variable-pitch propeller-driven	Fixed	P	1	NA	3,000	3,000
GIIB	Gulfstream GIIB/SPEY MK511-8	Fixed	J	2	2	69,700	58,500

Table D-1 (continued)
Description of INM Aircraft Types

INM ID	Description	Fixed or Rotary-Wing	Engine Type	Number of Engines	Civilian Jet FAR36 Noise Stage	Maximum Gross Takeoff Weight (lbs)	Maximum Gross Landing Weight (lbs)
GIV	Gulfstream GIV/TAY 611	Fixed	J	2	3	74,600	66,000
GV	Gulfstream GV/BR 710	Fixed	J	2	3	90,500	75,300
H500D	McDonnell Douglas Model 500D	Rotary	Ts	1	NA	NA	NA
IA1125	Israeli Industries Astra 1125/TFE731-3A	Fixed	J	2	3	23,500	20,700
LEAR25	Lear 25/CJ610-8	Fixed	J	2	2	15,000	13,500
LEAR35	Lear 36/TFE731-2	Fixed	J	2	3	18,300	15,300
MU3001	Mitsubishi MU300-10/JT15D-4	Fixed	J	2	3	14,100	13,200
SA350D	Aerospatiale AS350 A-Star	Rotary	Ts	1	NA	NA	NA
SA365N	Aerospatiale SA.365 Dauphin 2	Rotary	Ts	2	NA	NA	NA

* J=Jet; T=Turboprop; P=Piston; Ts=Turboshaft; NA = not applicable

Table D-2
INM Aircraft Types Associated With Flight Progress Strips Aircraft Types

Aircraft Type (No Slants)	Manufacturer	Model	Number & Type Engines	Weight Class	INM V6.1 Type	FAA Substitute	Comment
AA5	Grumman Aerospace Corp.	Cheetah AA-5,Traveller,Tiger	1P	S	GASEPF	Y	
AC11	Rockwell International Corp.	Commander 112/114	1P	S	GASEPV		Per CRQ
AC12	Rockwell International Corp.	Aero Commander 112	1P	S	GASEPV		Per CRQ
AC69	Rockwell International Corp.	Jet Prop Commander	2T	S	CNA441	Y	
AEST	Piper Aircraft Corp.	Aero Star 600/700	2P	S	BEC58P	Y	
ASTR	Israel Aircraft Industries & Astra Jet	Astra 1125	2J	S	IA1125	Y	
B190	Beech Aircraft Company	Beech 1900/C-12J	2T	S	DHC6	Y	
B222	Bell Helicopter Textron	Model 222, 230, 430	2T	S	Helo8222		Helicopter
B35	Beech	Bonanza	1P	S	GASEPV	Y	
BE20	Beech Aircraft Company	Super King Air 200, 1300	2T	S	DHC6		SD330 Or DHC6
BE23	Beech Aircraft Company	Sundowner 23, Musketeer 23	1P	S	GASEPF	Y	
BE24	Beech Aircraft Company	Sierra 24, Musketeer Super	1P	S	GASEPF	Y	
BE30	Beech Aircraft Company	Super King Air 300/300LW	2T	S	DHC6	Y	
BE33	Beech Aircraft Company	Bonanza 33, Debonair (E-24)	1P	S	GASEPV	Y	
BE35	Beech Aircraft Company	Bonanza 35	1P	S	GASEPV	Y	
BE36	Beech Aircraft Company	Bonanza 36	1P	S	GASEPV		
BE40	Beech Aircraft Company	Beechjet 400/T-1 Jayhawk	2J	S	LEAR35	Y	
BE55	Beech Aircraft Company	Baron 55/Chochise	2P	S	BEC58P	Y	
BE58	Beech Aircraft Company	Baron 58, Foxstar	2P	S	BEC58P	Y	
BE60	Beech Aircraft Company	Duke 60	2P	S	BEC58P	Y	
BE76	Beech Aircraft Company	Duchess 76	2P	S	BEC58P	Y	
BE90	Beech	King Air C90, E90	2T	S	CNA441	Y	
BE9L	Beech Aircraft Company	King Air 90, A90 To E90 (T-44, V-C6), Taurus 90	2T	S	CNA441		
Bi-wing		Bi-plane (Travelair)	1P	S	GASEPF		
BL17	Bellanca Aircraft	Super Viking,Turbo Viking	1P	S	GASEPV		Per CRQ
BL26		Bellanca Model 17-30A, Super Viking 300A	1P	S	GASEPV	Y	Per CRQ
BSR20	Cirrus	SR20	1P	S	GASEPV		Per CRQ
C12	Beech	King Air	2T	S	C12		
C150	Cessna Aircraft Company	Cessna 150	1P	S	GASEPF		
C152	Cessna Aircraft Company	Cessna 152	1P	S	CNA172	Y	
C170	Cessna Aircraft Company	Cessna 170	1P	S	CNA172	Y	

Table D-2 (continued)
INM Aircraft Types Associated With Flight Progress Strips Aircraft Types

Aircraft Type (No Slants)	Manufacturer	Model	Number & Type Engines	Weight Class	INM V6.1 Type	FAA Substitute	Comment
C172	Cessna Aircraft Company	Skyhawk 172/Cutlass/Mescalero	1P	S	CNA172	Y	
C175	Cessna Aircraft Company	Skylark 175	1P	S	GASEPF		
C177	Cessna Aircraft Company	Cardinal 177	1P	S	CNA172	Y	
C180	Cessna Aircraft Company	Skywagon 180 (U-17C)	1P	S	CNA206	Y	
C182	Cessna Aircraft Company	Skylane 182	1P	S	CNA206	Y	
C185	Cessna Aircraft Company	Skywagon 185 (U-17A/B)	1P	S	CNA206	Y	
C210	Cessna Aircraft Company	Centurion 210, Turbo Centurion	1P	S	CNA206	Y	
C25A		Citation525	2J	S	CNA500		
C310	Cessna Aircraft Company	Cessna 310/Riley 65, Rocket	2P	S	BEC58P	Y	
C320	Cessna Aircraft Company	Skyknight 320	2P	S	BEC58P	Y	
C336	Cessna Aircraft Company	Skymaster 336	2P	S	BEC58P	Y	CRQ Suggests CNA441
C337	Cessna Aircraft Company	Super Skymaster 337	2P	S	BEC58P	Y	CRQ Suggests CNA441
C340	Cessna Aircraft Company	Cessna 340	2P	S	BEC58P	Y	
C414	Cessna Aircraft Company	Chancellor 414, Rocket Power	2P	S	BEC58P	Y	
C421	Cessna Aircraft Company	Golden Eagle 421	2P	S	BEC58P	Y	
C425	Cessna Aircraft Company	Corsair/Conquest I-425	2T	S	CNA441	Y	
C441	Cessna Aircraft Company	Conquest/Conquest 2 - 441	2T	S	CNA441	Y	
C500	Cessna Aircraft Company	Citation 1	2J	S	CNA500	Y	
C501	Cessna Aircraft Company	Citation 1-SP	2J	S	CNA500	Y	
C525	Cessna Aircraft Company	Citationjet C525	2J	S	CNA500	Y	
C526	Cessna Aircraft Company	Citationjet C526	2J	S	CNA500		
C550	Cessna Aircraft Company	Citation 2/-S2	2J	S	MU3001	Y	
C560	Cessna Aircraft Company	Citation 5	2J	S	MU3001	Y	
C56E		Citation5	2J	S	MU3001		
C56X		Citation5	2J	S	MU3001		
C650	Cessna Aircraft Company	Citation 3/6/7	2J	S	CIT3	Y	
C72R	Cessna Aircraft Company	Cutlass RG, 172RG	1P	S	CNA172	Y	
C750	Cessna Aircraft Company	Citation 10	2J	S	CNA750	Y	
C9	Mcdonnell Douglas	DC-9 (Military)	2J	L	C9A		
CH10		Bellanca Champion Citabria	1P	S	GASEPF	Y	

Table D-2 (continued)
INM Aircraft Types Associated With Flight Progress Strips Aircraft Types

Aircraft Type (No Slants)	Manufacturer	Model	Number & Type Engines	Weight Class	INM V6.1 Type	FAA Substitute	Comment
CH7B	Bellanca Aircraft	7 Champion Challenger, Citabria,DX'er, Olympia, Skytrac 7GC/7GCAI7GCAA/7GCB/7GCBA/7GCBC/7HC/7KC/7KCAB	1P	S	GASEPF		
CL60	Canadair Bombardier Ltd.	CL600/610Challenger	2J	L	CL600		
CL61		Challenger 610	2J	L	CL601		
CL64		Challenger 640	2J	L	CL601		
DA40		Diamond Star	1P	S	GASEPV		Per CRQ
DA50		Dehavilland DASH 8-300/PW123	2T	L	DHC830		
DH8B	Dehavilland	Dash 8, DHC8 -200	2T	L	DHC8		
DV40		Diamond Star	1P	S	GASEPV		Per CRQ
E120	Embraer	Brasilia EMB-120	2T	S	EMB120	Y	
F2TH	Dassault-Breguet	Falcon 2000	2J	S	CL600	Y	
F900	Dassault-Breguet	Falcon 900, Mystere 900 (T-18)	3J	L	CL600		
FA10	Dassault-Breguet	Falcon 10, Mystere 10	2J	S	LEAR35	Y	
FA20	Dassault-Breguet	Falcon 20, Mystere 20(T-11)	2J	S	FAL20	Y	
FA50	Dassault-Breguet	Falcon 50, Mystere 50 (T-16)	3J	S	GIV		Replace CL600 with Lear 35
GALX		Gulfstream 5 Galaxy	2J	L	GV		Model Desc. Per ATC
GLF3	Gulfstream Aerospace Corp.	Gulfstream 3	2J	L	GIIB	Y	
GLF4	Gulfstream Aerospace Corp.	Gulfstream 4	2J	L	GIV	Y	
GLF5	Gulfstream Aerospace Corp.	Gulfstream 5	2J	L	GV	Y	
H25		Bae HS 125	2J	S	LEAR25	Y	
H25A	British Aerospace (Bae)	Bae HS 125 Series1/2/3/400/600	2J	S	LEAR25	Y	
H25B	British Aerospace (Bae)	Bae HS 125 Series700/800	2J	S	LEAR35	Y	
H25C	British Aerospace (Bae)	Bae HS 125 Series 1000	2J	S	LEAR35		
H269	Mcdonnell-Douglas Helicopters	Model 269, 200, 280, 300, Skynight, TH-55 Osage	1P	S	Helo		HELICOPTER

Table D-2 (continued)
INM Aircraft Types Associated With Flight Progress Strips Aircraft Types

Aircraft Type (No Slants)	Manufacturer	Model	Number & Type Engines	Weight Class	INM V6.1 Type	FAA Substitute	Comment
H60	Sikorsky Aircraft	Blackhawk S-70, WS-70, Seahawk, Pavehawk, Rescuehawk, Thunderhawk,Jayhawk, Oceanhawk, Deserthawk, Yanshuf, LAMPS MK3, Blackhawk	2T	S	Helo		HELICOPTER
HELO					Helo		
LANC		Lancair SEP (4-Passenger)	1P	S	GASEPV		
LC20		Lancair SEP (2-Passenger)	1P	S	GASEPF		
LEZE		Longez	1P	S	GASEPF		
LJ24	Gates Learjet Corp.	Learjet 24	2J	S	LEAR25	Y	
LJ25	Gates Learjet Corp.	Learjet 25	2J	S	LEAR25	Y	
LJ31	Gates Learjet Corp.	Learjet 31	2J	S	LEAR35	Y	
LJ35	Gates Learjet Corp.	Learjet 35, 36	2J	S	LEAR35	Y	
LJ45	Gates Learjet Corp.	Learjet 45	2J	S	LEAR35	Y	
LJ55	Gates Learjet Corp.	Learjet 55	2J	S	LEAR35	Y	
LJ60	Gates Learjet Corp.	Learjet 60	2J	S	LEAR35	Y	
LR60	Gates Learjet Corp.	Learjet 60	2J	S	LEAR35	Y	
M20P	Mooney Aircraft Corp.	M20/A/B/C/D/E/F/G/J/L/R, Mark 21, Ranger, Master, Super 21, Chaparral, Executive, Statesman, Ovation, 201, 205, ATS, MSE, PFM	1P	S	GASEPV	Y	
M20T	Mooney Aircraft Corp.	Turbo Mooney M20K/M20M, Encore, 231, 252, TLS, TSE	1P	S	GASEPV	Y	
M5	Maule Aircraft Corp.	M-5 180C/200/235C Lunar-Rocket, 210TC Strata-Rocket, Patroller	1P	S	GASEPV		
MO20		Mooney Mark 20	1P	S	GASEPV		
P180		Cherokee 180	1P	S	GASEPF		
P210	Cessna Aircraft Company	Pressurized Centurion	1P	S	GASEPV		
P28		Cherokee	1P	S	GASEPF		
P28A	Piper Aircraft Corp.	Cherokee, Archer, Warrior, Cadet, Cruiser (PA-28-140/150/151/	1P	S	GASEPF		
P28R	Piper Aircraft Corp.	Cherokee Arrrow 2/3, Turbo Arrow 3	1P	S	GASEPV		Per CRQ

Table D-2 (continued)
INM Aircraft Types Associated With Flight Progress Strips Aircraft Types

Aircraft Type (No Slants)	Manufacturer	Model	Number & Type Engines	Weight Class	INM V6.1 Type	FAA Substitute	Comment
P28T		Turbo Arrow	1P	S	GASEPV		Per CRQ
P46		Malibu	1P	S	GASEPV		
P46T	Piper Aircraft Corp.	Malibu Meridian	1T	S	GASEPV		
PA23	Piper Aircraft Corp.	Apache 150/160	2P	S	BEC58P	Y	
PA24	Piper Aircraft Corp.	Comanche	1P	S	GASEPV	Y	
PA27	Piper Aircraft Corp.	Aztec, Turbo Aztec	2P	S	BEC58P		
PA28		Piper Cherokee, Archer, Dakota/Warrior	1P	S	GASEPF		
PA30	Piper Aircraft Corp.	Twin Comanche, Turbo Twin Comanche	2P	S	BEC58P	Y	
PA31	Piper Aircraft Corp.	Chieftan, Mohave, Navajo, T-1020	2P	S	BEC58P		
PA32	Piper Aircraft Corp.	Cherokee Six, Lance, (Turbo) Saratoga	1P	S	GASEPV		
PA34	Piper Aircraft Corp.	Seneca 2/3	2P	S	BEC58P	Y	
PA44	Piper Aircraft Corp.	Seminole, Turbo Seminole	2P	S	BEC58P	Y	
PA46		Malibu	1P	S	GASEPV		
PA46	Piper Aircraft Corp.	Malibu, Malibu Mirage	1P	S	GASEPV	Y	
PA60		Piper Aero Star 600/700	2P	S	BEC58P	Y	
PARO		Piper Cherokee Arrow IV	1P	S	GASEPV		
PAY1	Piper Aircraft Corp.	Cheyenne 1	2T	S	CNA441		
PAY2	Piper Aircraft Corp.	Cheyenne 2	2T	S	CNA441		
PAY3	Piper Aircraft Corp.	Cheyenne 3	2T	S	CNA441		
PAY4	Piper Aircraft Corp.	Cheyenne 400	2T	S	CNA441		
PAYE		Piper Cheyenne/II	2T	S	CNA441		
PC12	Pilatus Flugzeugwerke Ag	PC-12	1T	S	CNA441		Per CRQ
PRM1		Premierjet	2J	S	CNA500		
R22	Robinson Helicopter Company Inc.	Model R22	1P	S	Helor22		HELICOPTER
SBR1	Rockwell International Corp.	Sabreliner 65/40/50/60	2J	S	LEAR35		
SR20	Cirrus	SR20	1P	S	GASEPV		Per CRQ
SR22	Cirrus	SR22	1P	S	GASEPV		Per CRQ
SW3	Fairchild Industries	Merlin 3	2T	S	CNA441	Y	
T41		Cessna 172 (AFROTC)	1P	S	CNA172		

Table D-2 (continued)
INM Aircraft Types Associated With Flight Progress Strips Aircraft Types

Aircraft Type (No Slants)	Manufacturer	Model	Number & Type Engines	Weight Class	INM V6.1 Type	FAA Substitute	Comment
TBM7	Aerospatiale	TBM TB-700	1T	S	CNA441		Per CRQ
TRIN	Aerospatiale	Trinidad TB-20/21	1P	S	GASEPV		Per CRQ

Table D-3
Flight Track Density File Inventory

Runway	Op Type	Period	Unique Flights Represented	Filename	FTD Used for Modeled Tracks Set							
					24 Dep	24 Arr	24 Tng	24 Miss	06 Dep	06 Arr	06 Tng	Helo
06	dep	day	762	ftd_06_dep_day					Yes			Yes
06	dep	eve	35	ftd_06_dep_eve					Yes			
06	dep	nit	129	ftd_06_dep_nit					Yes			
06	arr	day	998	ftd_06_arr_day					Yes	Yes		Yes
06	arr	eve	126	ftd_06_arr_eve						Yes		
06	arr	nit	164	ftd_06_arr_nit						Yes		
06	tng	day	12	ftd_06_tng_day							Yes	
06	tng	eve	0	n/a								
06	tng	nit	0	n/a								
06	fly	day	16	*								
06	fly	eve	2	**								
06	fly	nit	1	**								
24	dep	day	27616	ftd_24_dep_day	Yes							
24	dep	eve	1507	ftd_24_dep_eve	Yes							
24	dep	nit	848	ftd_24_dep_nit	Yes							
24	arr	day	38080	ftd_24_arr_day		Yes						
24	arr	eve	3935	ftd_24_arr_eve		Yes						
24	arr	nit	1402	ftd_24_arr_nit		Yes						

Table D-3 (continued)
Flight Track Density File Inventory

Runway	Op Type	Period	Unique Flights Represented	Filename	FTD Used for Modeled Tracks Set							
					24 Dep	24 Arr	24 Tng	24 Miss	06 Dep	06 Arr	06 Tng	Helo
24	tng	day	292	ftd_24_tng_day			Yes					Yes
24	tng	eve	14	ftd_24_tng_eve			Yes					
24	tng	nit	2	ftd_24_tng_nit			Yes					
24	fly	day	726	ftd_24_fly_day	Yes	Yes		Yes				
24	fly	eve	39	ftd_24_fly_eve				Yes				
24	fly	nit	10	ftd_24_fly_nit	Yes			Yes				
U	dep	day	30253	ftd_U_dep_day	Yes			Yes				
U	dep	eve	1445	ftd_U_dep_eve	Yes			Yes				
U	dep	nit	856	ftd_U_dep_nit	Yes				Yes			Yes
U	arr	day	16261	ftd_U_arr_day		Yes						Yes
U	arr	eve	825	ftd_U_arr_eve		Yes						Yes
U	arr	nit	344	ftd_U_arr_nit		Yes						Yes
U	tng	day	22858	ftd_U_tng_day			Yes					Yes
U	tng	eve	1817	ftd_U_tng_eve			Yes					Yes
U	tng	nit	452	ftd_U_tng_nit			Yes					Yes
U	fly	day										
U	fly	eve	59215	ftd_U_fly_eve				Yes				
U	fly	nit	27536	ftd_U_fly_nit		Yes						

Notes: All files span CY2002
dep=departure
arr=arrival
tng=Touch-and-Go
fly=flyover (supposedly not an airport operation)

day=daytime (0700-1859)
eve=evening (1900-2159)
nit=nighttime (2200-0659)

n/a=not applicable
* density not computed as only a few flights were airport operations
** inspection of flight tracks revealed non-airport operations

McClellan-Palomar Airport
FAR Part 150 Study Update

Noise Exposure Maps
Volume 2 of 2

Prepared For:

McClellan-Palomar Airport

URS Project No. 27653003.01301

Accepted by FAA on
April 26, 2005

McCLELLAN-PALOMAR AIRPORT
FAR PART 150 STUDY UPDATE

NOISE EXPOSURE MAPS
VOLUME 2 OF 2

Prepared for

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This appendix provides the document submitted to the FAA regarding user-defined flight profiles developed for the McClellan-Palomar Airport Part 150 Noise Compatibility Study Update. The appendix also contains the URS response to the FAA comments and associated errata pages for the submitted document.

McClellan-Palomar Airport
FAR Part 150 Study Update

FAA Profile Review

Prepared for

McClellan-Palomar Airport

URS Project No. 27653003

Revised December 3, 2003

McCLELLAN-PALOMAR AIRPORT

FAR PART 150 STUDY UPDATE
FAA PROFILE REVIEW

Prepared for

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OFFICE OF ENVIRONMENT AND ENERGY
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SECTION 1 – BACKGROUND

The County of San Diego, as owner and operator of McClellan-Palomar Airport (CRQ), is preparing an update to its FAR Part 150 Noise Compatibility Program. Noise-exposure maps (NEMs) being prepared for Federal Aviation Administration (FAA) review represent a revision to the NEMs determined by FAA to comply with Part 150 on December 20, 1991. User-defined profiles described herein will be used in the revision of the NEMs.

This document addresses the aircraft and operation types listed in Table 1. The fixed-wing aircraft are transient military types, whereas the rotary-wing aircraft are primarily based helicopters.

This document follows the FAA Profile Review Checklist found in Appendix B of the Integrated Noise Model (INM) User's Guide. Section 2 provides a statement of benefit, Section 3 shows an analysis demonstrating the benefit of the user-defined profiles (for applicable aircraft), Section 4 describes how aircraft performance data were obtained, Section 5 contains a certification of the new profile parameters, and Section 6 contains a graphical and tabular display (and/or comparison for applicable aircraft) of the profile data.

Table 1
Required User-Defined Profiles and Aircraft Substitution

Class	Category	Aircraft Type	Operation Type(s)	Modeled Type	Comment Regarding Modeled Type and/or Noise Data
Fixed-Wing	Military	C-9 Nightingale	Practice approaches	C9A	INM's Noisemap database for noise
		C-2 Greyhound	Practice approaches	CVR580	URS conservative assumption re modeled type
		C-12 Huron	Touch-and-go only	C12	INM's Noisemap database for noise and arrival & departure profiles
Rotary-Wing		CH-53E Super Stallion	Practice approaches	CH-53E	**Noise data obtained from noise map**
		OH-58 Kiowa	Practice approaches	SA341G	HNM substitution list
		H-60 Blackhawk	Practice approaches	S70	Sikorsky S-70 (UH-60A) in HNM/INM
	Civilian	Robinson R22BII	All (1)	H500D	URS assumption; HNM substitution list has H500D for Robinson R22HP
		Schweitzer S300C	All (1)	H500D	URS assumption; HNM substitution list has H500D for Schweizer 330
		MD500D	All (1)	H500D	HNM substitution list
		Bell 206BIII	All (1)	B206L	HNM substitution list
		Eurocopter EC120	All (2)	SA365N	URS assumption re modeled type
		Bell 222	All (2)	B222	Bell 222 in HNM/INM
		MD900 (NOTAR, future)	All (2)	H500D	URS conservative assumption re modeled type
		Aerospatiale AS350 A-Star (future)	All (2)	SA350D	Aerospatiale SA-350D (AS 350 Astar) in HNM/INM

Notes:

(1) Departure, arrival, and touch-and-go.

(2) Departure and arrival only; do not conduct touch-and-go typically.

NOTAR = no tail rotor

SECTION 2 – STATEMENT OF BENEFIT

Military fixed- and rotary-wing aircraft, based at nearby air stations, practice approaches at CRQ regularly, albeit infrequently. The aircraft listed in Table 1 with the "practice approaches" operation type do not land at or takeoff from CRQ, so use of standard arrival and departure profiles does not represent accurately the way these aircraft operate at CRQ. Furthermore, because practice-approach profiles do not exist in the standard INM database, user-defined profiles had to be developed to model their operations in the INM.

Transient military C-12 aircraft (fixed-wing) land, depart, and conduct touch-and-go operations at CRQ; INM's generic standard profiles for arrival and departure operations were used accordingly. Because touch-and-go profiles do not exist in the INM database, user-defined profiles based on information obtained from C-12 operators had to be developed to model their operations in the INM.

INM does not contain standard profiles for rotary-wing aircraft. To model their operations in the INM, user-defined profiles had to be developed. Profile information was obtained from operators of each aircraft type.

SECTION 3 – ANALYSIS DEMONSTRATING BENEFIT

This section primarily addresses the C9A and C2 aircraft because they are the only aircraft for which user-defined profiles are used in place of generic standard INM profiles for arrival and departure operations. The following graphics provide sound-exposure level (SEL) contours comparing standard arrival and departure profiles to the user-defined profiles. Graphics comparing the contours produced by the standard and user-defined profiles for helicopter operations and C12 touch-and-go operations are not provided, because there are no standard INM profiles for helicopter or C12 touch-and-go operations.

The SEL contours of Figures 1 and 2 illustrate points along the flight track where the user-defined profile generates less noise than the INM standard profile and more noise than the INM standard profile. Tables 2 and 3 compare SEL values for grid points spaced 0.5 nautical miles apart underneath the flight track, beginning at the rightmost point. In general, the figures and tables show that the user-defined profiles produce higher SEL along the approach portions and lower SEL along the departure portions.

User-defined profiles presented thus far represent the way transient military fixed-wing aircraft operate at CRQ. Therefore, the proposed benefit associated with their use (in lieu of standard INM profiles) represents more accurately the actual noise exposure resulting from their operation at CRQ. These user-defined profiles are exclusive to the CRQ Part 150 Study Update.

The user-defined profiles for the helicopters and C12 touch-and-go operations represent the way these aircraft operations are conducted at CRQ. Therefore, the proposed benefit associated with their use represents more accurately the actual noise exposure resulting from said operations at CRQ. These user-defined profiles are also exclusive to the CRQ Part 150 Study Update.

A compact disk containing INM files needed to perform the above analyses is included with this submittal.

SEL 95 dB Contours

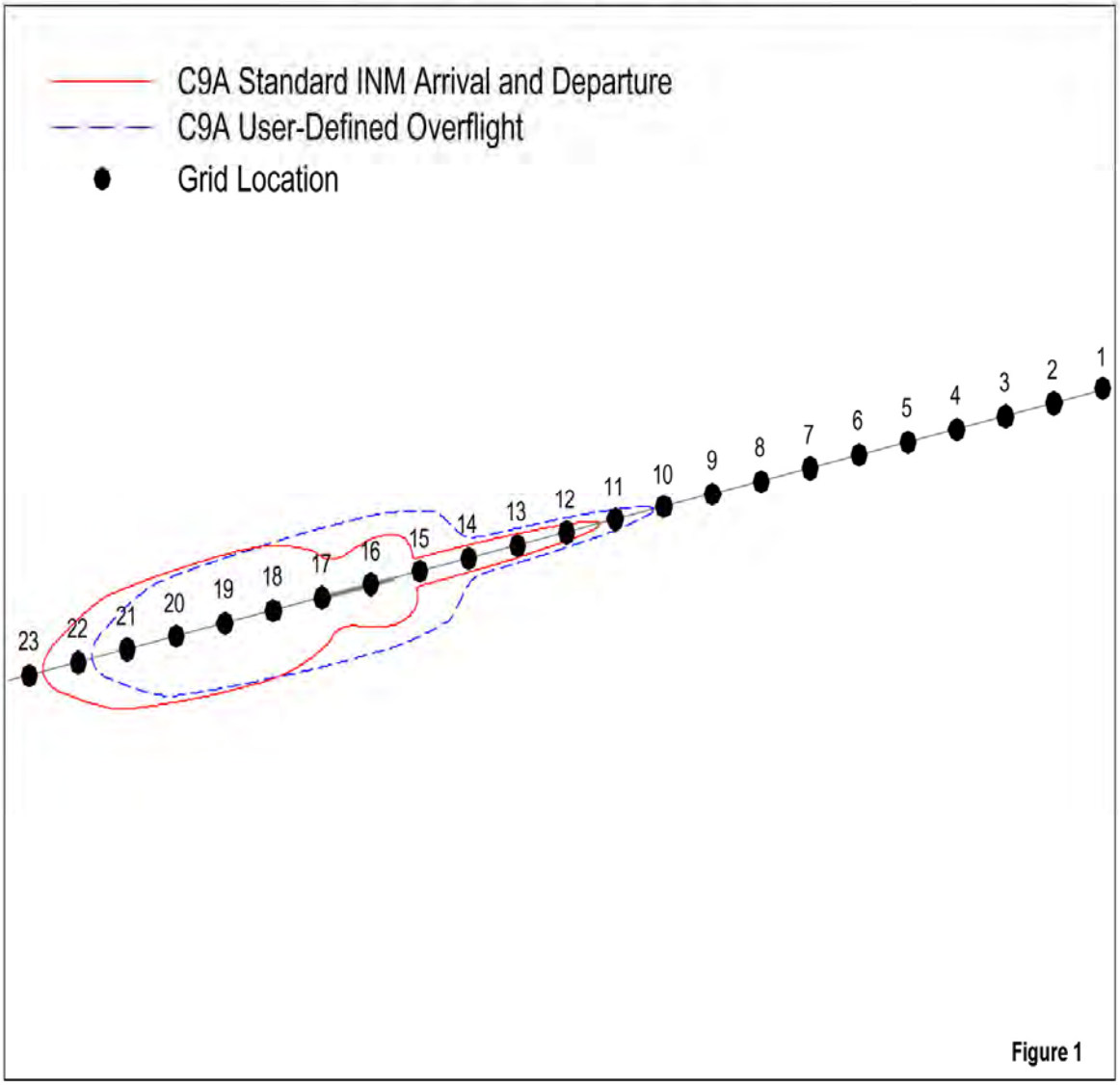


Figure 1

Table 2
C9A Grid Point Comparison

			SEL (dBA)		
GRID POINT	X_COORD	Y_COORD	STANDARD PROFILE	USER-DEFINED PROFILE	DIFFERENCE (Standard minus User-Defined, dBA)
1	7.5406	1.4616	82.6	82.1	0.5
2	7.0528	1.3505	84.0	85.6	-1.6
3	6.5618	1.2565	85.5	86.7	-1.2
4	6.0707	1.1625	86.5	87.7	-1.2
5	5.5796	1.0684	87.3	88.6	-1.3
6	5.0885	0.9744	88.1	89.6	-1.5
7	4.5975	0.8804	89.0	90.6	-1.6
8	4.1064	0.7864	90.1	91.8	-1.7
9	3.6153	0.6924	91.4	93.2	-1.8
10	3.1243	0.5984	92.8	94.7	-1.9
11	2.6332	0.5043	94.4	96.3	-1.9
12	2.1421	0.4103	96.5	98.3	-1.8
13	1.6510	0.3163	98.9	100.8	-1.9
14	1.1600	0.2223	102.2	104.5	-2.3
15	0.6689	0.1283	106.7	116.7	-10.0
16	0.1778	0.0343	141.4	112.0	29.4
17	-0.3133	-0.0597	122.9	108.7	14.2
18	-0.8043	-0.1538	113.7	106.2	7.5
19	-1.2954	-0.2478	108.6	104.1	4.5
20	-1.7865	-0.3418	105.1	102.1	3.0
21	-2.2775	-0.4358	102.3	98.1	4.2
22	-2.7686	-0.5298	98.1	93.7	4.4
23	-3.2597	-0.6238	93.7	90.5	3.2

SEL 80 dB Contours

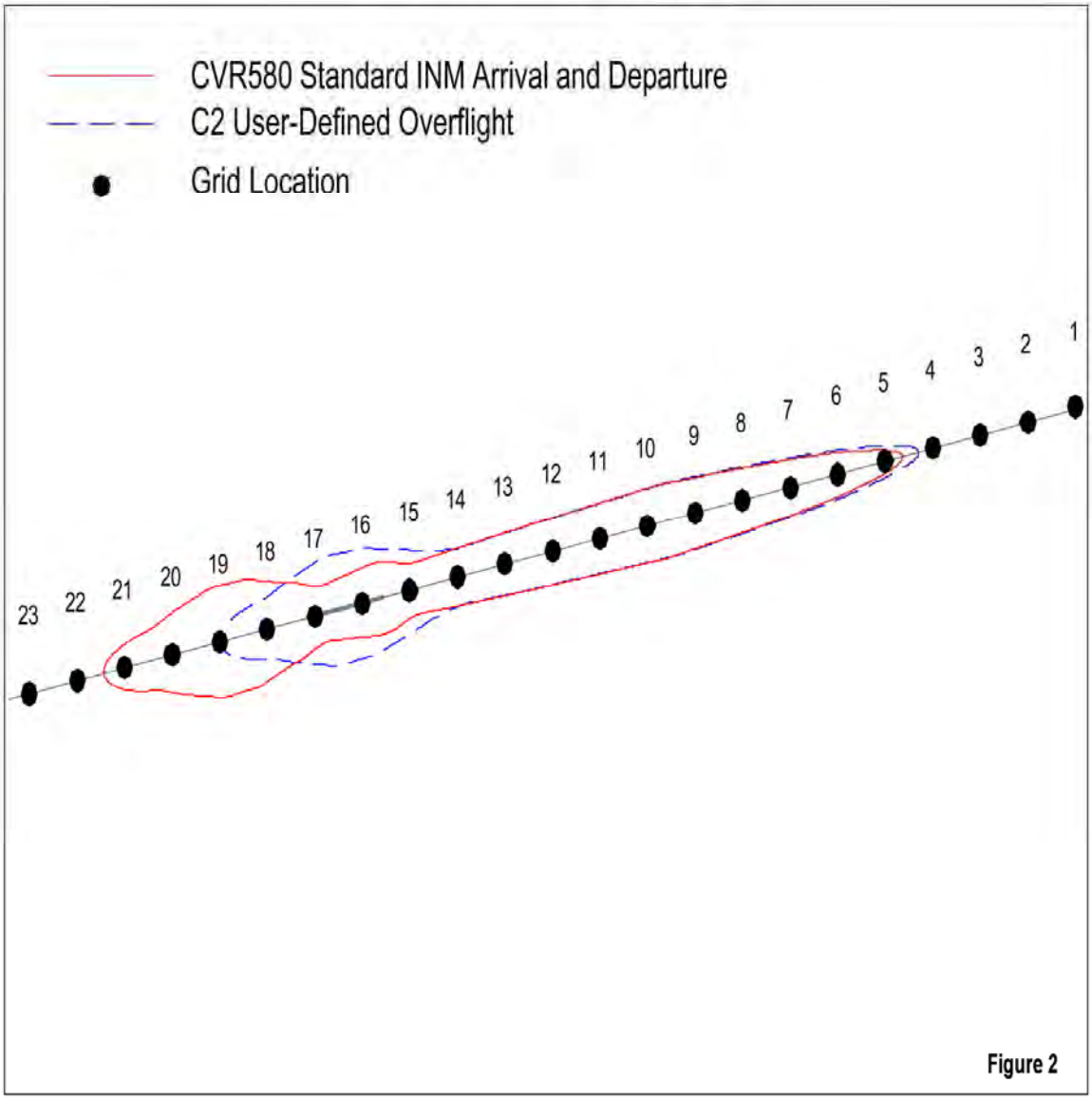


Figure 2

Table 3
C2 Grid Point Comparison

			SEL (dBA)		
GRID POINT	X_COORD	Y_COORD	STANDARD PROFILE	USER-DEFINED PROFILE	DIFFERENCE (Standard minus User-Defined, dBA)
1	7.5406	1.4616	76.6	74.3	2.3
2	7.0528	1.3505	77.5	86.5	-9.0
3	6.5618	1.2565	78.5	87.9	-9.4
4	6.0707	1.1625	79.4	89.5	-10.1
5	5.5796	1.0684	80.3	91.5	-11.2
6	5.0885	0.9744	81.4	94.5	-13.1
7	4.5975	0.8804	82.4	93.4	-11.0
8	4.1064	0.7864	83.5	88.2	-4.7
9	3.6153	0.6924	84.8	84.4	0.4
10	3.1243	0.5984	86.1	81.7	4.4
11	2.6332	0.5043	87.5	80.0	7.5
12	2.1421	0.4103	89.2	77.8	11.4
13	1.6510	0.3163	91.2	78.5	12.7
14	1.1600	0.2223	94.0	77.2	16.8
15	0.6689	0.1283	98.0	76.1	21.9
16	0.1778	0.0343	121.9	74.9	47.0
17	-0.3133	-0.0597	102.1	78.9	23.2
18	-0.8043	-0.1538	90.1	79.7	10.4
19	-1.2954	-0.2478	86.1	80.7	5.4
20	-1.7865	-0.3418	82.9	81.7	1.2
21	-2.2775	-0.4358	80.8	82.8	-2.0
22	-2.7686	-0.5298	79.1	83.9	-4.8
23	-3.2597	-0.6238	77.7	85.3	-7.6

SECTION 4 – CONCURRENCE ON AIRCRAFT PERFORMANCE

The user-defined overflight profile for the C9A included in this submittal was developed using data from the Department of Defense's (DoD) NOISEMAP computer model.

The user-defined overflight profile for the C2 included in this submittal was developed using data from CVR580 standard INM arrival and departure profiles.

The user-defined C-12 touch-and-go and user-defined helicopter profiles included in this submittal were developed from data collected from operators of these aircraft. Data collected from operators specific to CRQ is the best available and preferred information to use in the INM. Where necessary, the helicopter information was supplemented with data from the INM database for the Bell 212 default profile.

Because INM does not contain every make and type of aircraft, representative-modeled aircraft types were assigned to each specific aircraft type; the assignments are shown in Table 1. In most cases, the FAA-approved substitutions (via the FAA-imported data from its Helicopter Noise Model [HNM]) were employed. The INM Convair 580 (CVR580) was the URS Corporation (URS)-assumed substitution for the C-2 Greyhound. Although the CVR580 and Greyhound share a similar engine (output), the CVR580 is a conservative choice because it is longer and generally heavier (thus noisier) than the Greyhound. The INM/HNM H500D was the URS-assumed substitution for the Robinson R22BII, Schweizer S300C, EC120, and the future MD900 helicopters.

Reference noise-power-distance (NPD) data exist in the INM for all modeled aircraft types in Table 1 except the CH-53E Super Stallion. NPD data were extracted from the DoD's NOISEMAP computer model for the CH-53E.

SECTION 5 – CERTIFICATION OF NEW PARAMETERS

Aircraft performance characteristics extracted from NOISEMAP and INM have been translated correctly into the INM formatted profile.

For user-defined profiles provided in terms of profile points:

- Altitude is above field elevation in feet.
- Speed is true airspeed in knots.
- Thrust setting is in units that match units of the thrust-setting parameter used in the aircraft's associated NPD curves.

SECTION 6 – GRAPHICAL AND TABULAR COMPARISON

Figures 3 and 4 compare graphically user-defined arrival, departure, and practice approach ("overflight") profiles and generic standard INM arrival and departure profiles for the C9A and C2 aircraft, respectively, in terms of:

- Altitude versus distance.
- Speed versus distance.
- Thrust (or power) versus distance.

Figures 3 and 4 were generated in an external graphing program so that user-defined profiles and standard INM 6.1 arrival and departure profiles could be plotted together on the same graph at the same scale. Tables 4 and 5 list the profile points upon which Figures 3 and 4 are based.

The C12 (user-defined) touch-and-go profile points and user-defined profile points for helicopter operations for representative flight tracks are presented in Figures 5 through 23. Tables 6 through 16 list the profile points upon which Figures 5 through 23 are based. Comparison to standard INM profiles is not applicable, because standard INM profiles do not exist for these aircraft/operation-type combinations. The graphics of Figures 5 through 23 were generated by the INM and plotted three to a page.

Figure 3
C9A Profile Graphs

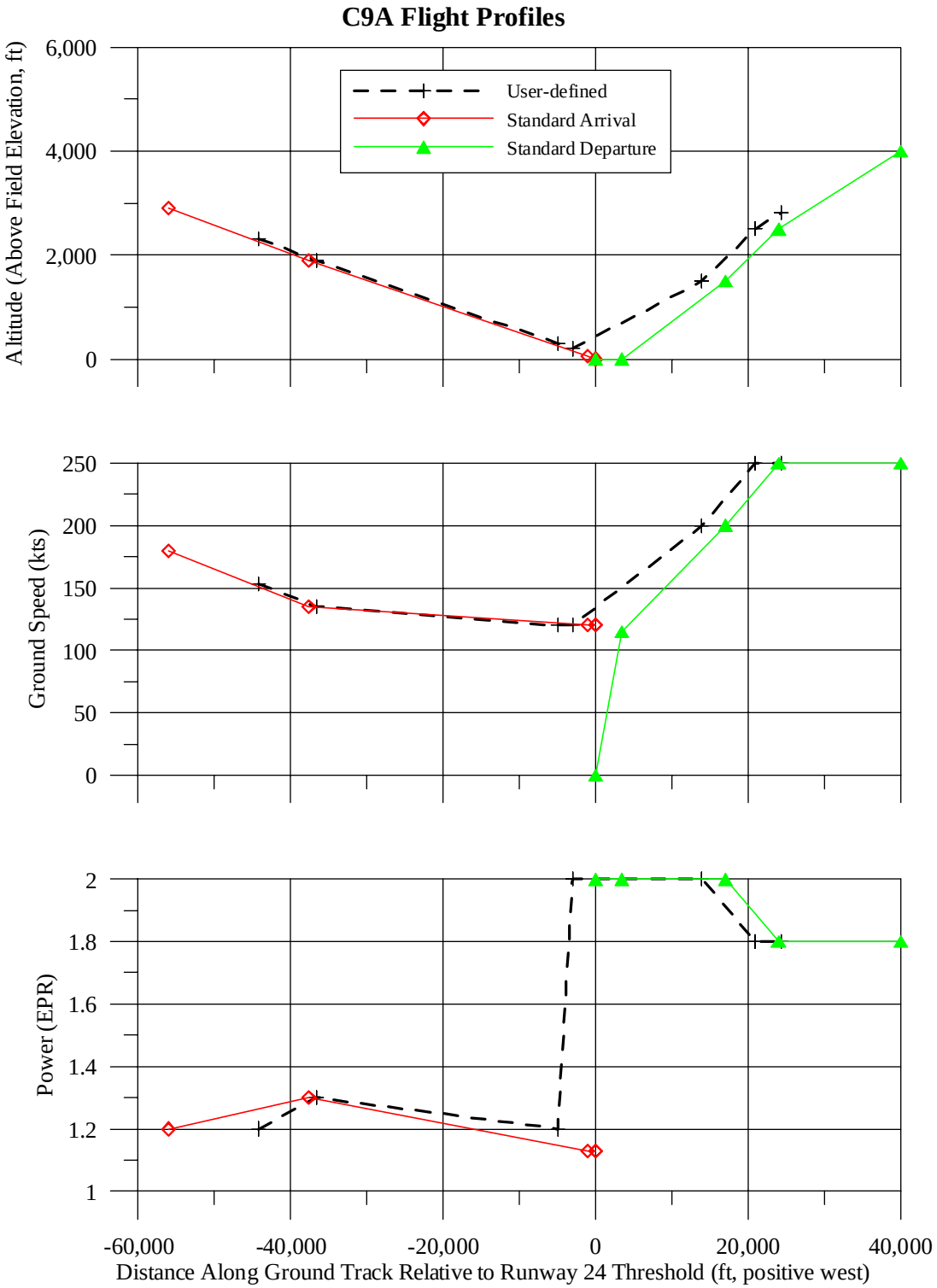


Table 4
C9A Profile Points

Aircraft ID	Operation Type	Profile ID	Profile Stage*	Point ID	Distance (feet)	Altitude (feet, AFE)	Ground Speed (knots)	Corrected Net Thrust per Engine (EPR)	Operational Mode
C9A	Arrival	NOISEMAP	1	1	-200989.2	10532.0	250.0	1.30	A
				2	-100989.2	5000.0	220.0	1.30	A
				3	-55989.2	2900.0	180.0	1.20	A
				4	-37589.2	1900.0	135.0	1.30	A
				5	-989.2	50.0	120.0	1.13	A
				6	0.0	0.0	120.0	1.13	A
				7	10.0	0.0	120.0	1.13	A
C9A	Departure	NOISEMAP	1	1	0.0	0.0	0.0	2.00	D
				2	3500.0	0.0	115.0	2.00	D
				3	17000.0	1500.0	200.0	2.00	D
				4	24000.0	2500.0	250.0	1.80	D
				5	40000.0	4000.0	250.0	1.80	D
				6	200000.0	15000.0	250.0	1.80	D
C9A	Overflight	USER	1	1	0.0	2310.0	153.4	1.20	D
				2	7618.0	1900.0	135.0	1.30	D
				3	39271.9	300.0	120.0	1.30	D
				4	41180.0	200.0	120.0	2.00	D
				5	58180.0	1500.0	200.0	2.00	D
				6	65180.0	2500.0	250.0	1.80	D
				7	68580.0	2818.8	250.0	1.80	D

Source: URS Corporation, 2003

*Stage length for departures; arrival group (glide slope), if applicable.

Figure 4
C2 (CVR580) Profile Graphs

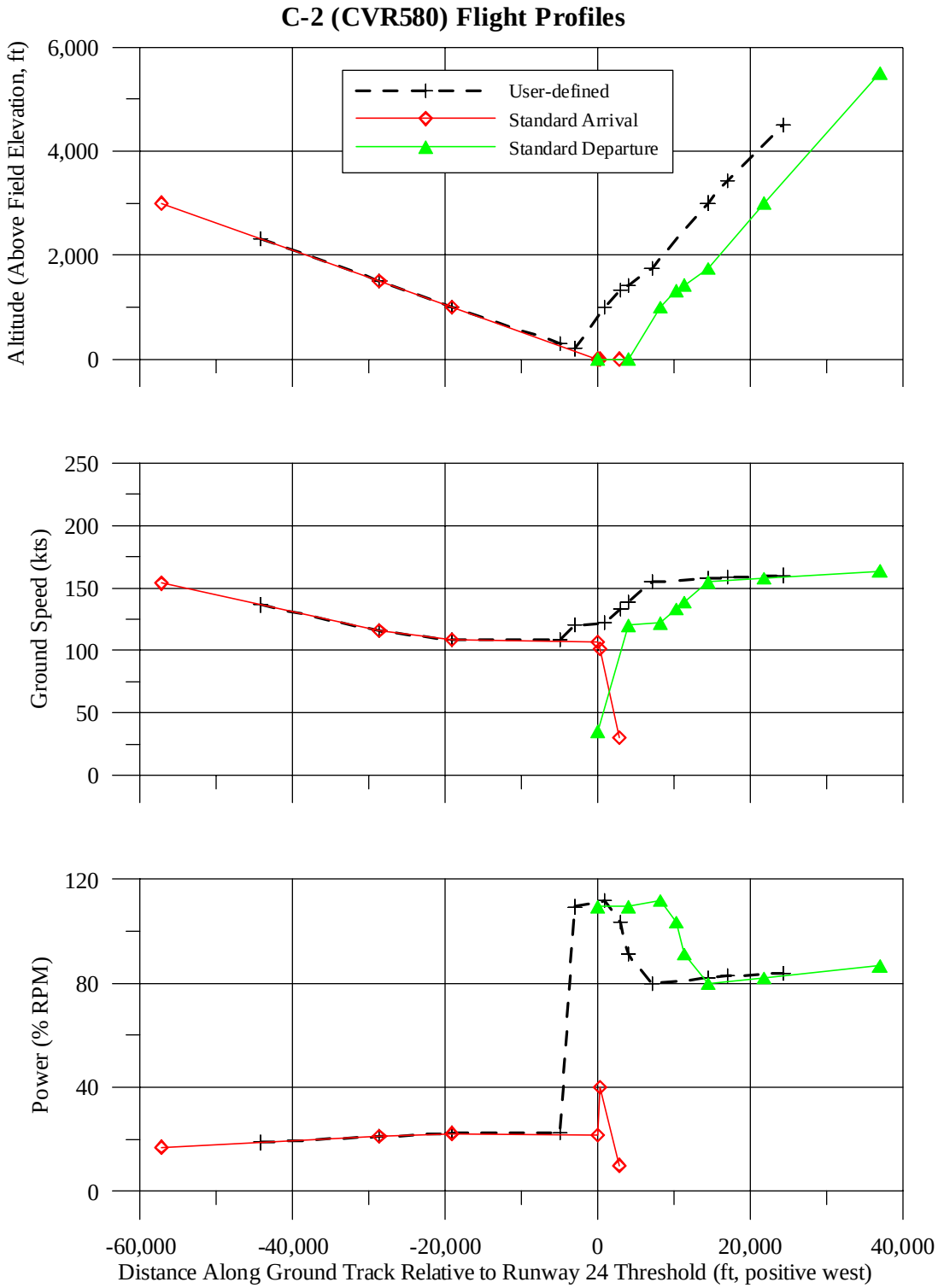


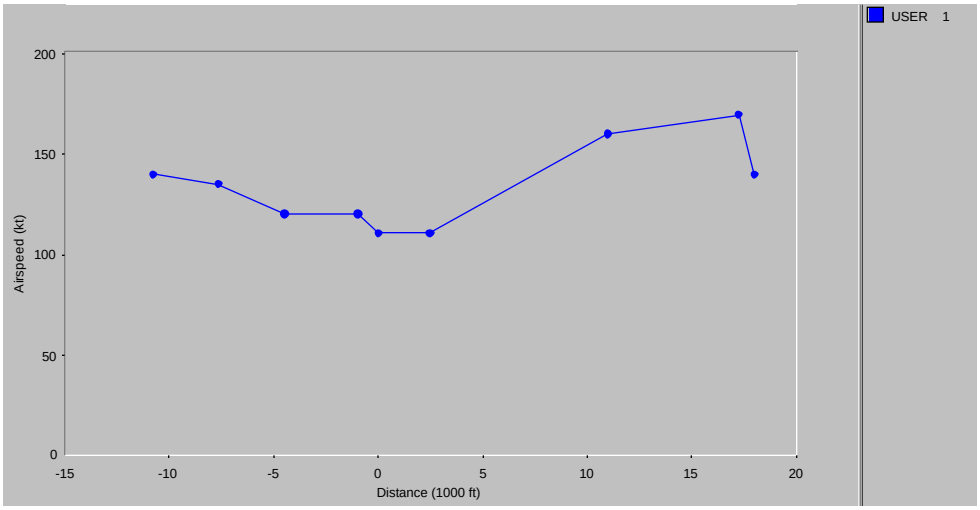
Table 5
C2 (CVR580) Profile Points

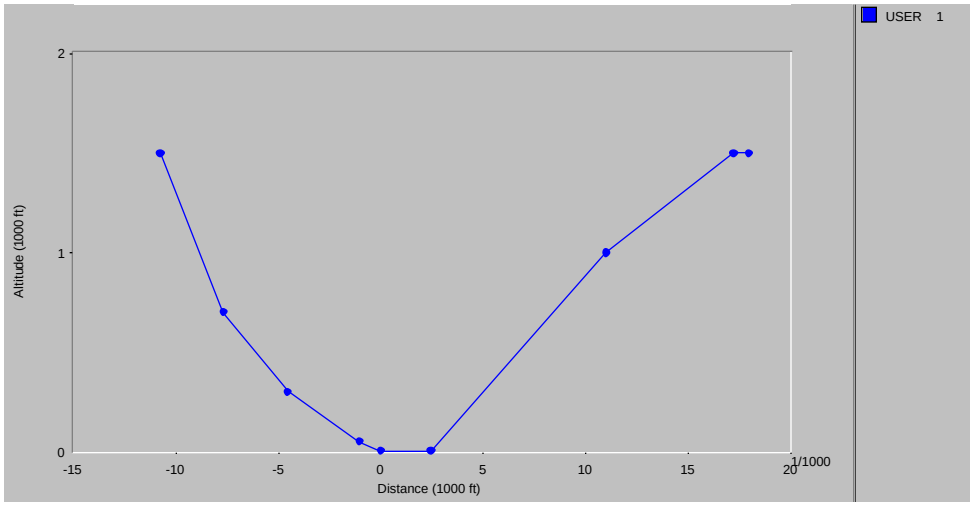
Aircraft ID	Operation Type	Profile ID	Profile Stage*	Point ID	Distance (feet)	Altitude (feet, AFE)	Ground Speed (knots)	Corrected Net Thrust per Engine (% RPM)	Operational Mode
CVR580	Arrival	STANDARD	1	1	-114486.8	6000.0	219.9	8.83	A
				2	-57243.4	3000.0	153.7	16.98	A
				3	-28621.7	1500.0	115.5	21.04	A
				4	-19081.1	1000.0	108.4	22.26	A
				5	0.0	0.0	106.8	21.46	A
				6	287.6	0.0	101.4	40.00	D
				7	2876.0	0.0	30.1	10.00	A
CVR580	Departure	STANDARD	1	1	0.0	0.0	35.0	109.47	D
				2	3975.3	0.0	120.1	109.47	D
				3	8275.3	1000.0	121.9	111.86	D
				4	10323.9	1318.3	133.2	103.59	D
				5	11323.9	1421.6	138.4	91.16	D
				6	14446.1	1744.1	154.7	79.74	D
				7	21777.1	3000.0	157.6	81.97	D
				8	36999.8	5500.0	163.6	86.65	D
				9	49827.8	7500.0	168.7	90.65	D
				10	66746.0	10000.0	175.5	96.00	D
CVR580	Overflight	USER	1	1	0.0	2317.5	136.3	18.80	A
				2	15596.3	1500.0	115.5	21.00	A
				3	25136.9	1000.0	108.4	22.30	A
				4	39271.9	300.0	108.4	22.30	D
				5	41180.0	200.0	120.1	109.40	A
				6	45155.3	1000.0	121.9	111.80	D
				7	47203.9	1318.3	133.2	103.50	D
				8	48203.9	1421.6	138.4	91.20	D
				9	51326.1	1744.1	154.7	79.70	D
				10	58657.1	3000.0	157.6	82.00	D
				11	61242.0	3425.0	158.6	82.80	D
				12	68580.0	4509.0	160.0	83.80	D

Source: URS Corporation, 2003

*Stage length for departures; arrival group (glide slope), if applicable.

Figure 5
C12 Touch-and-Go Profile Graphs





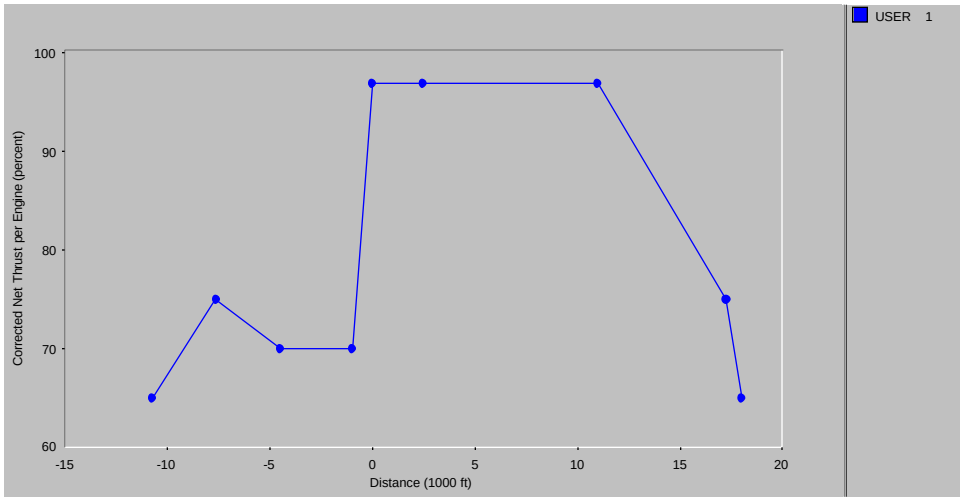
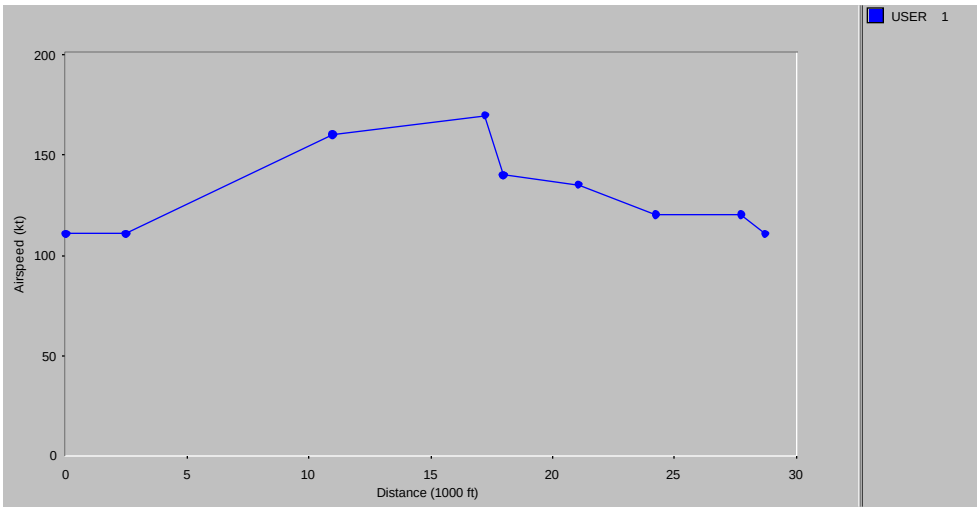
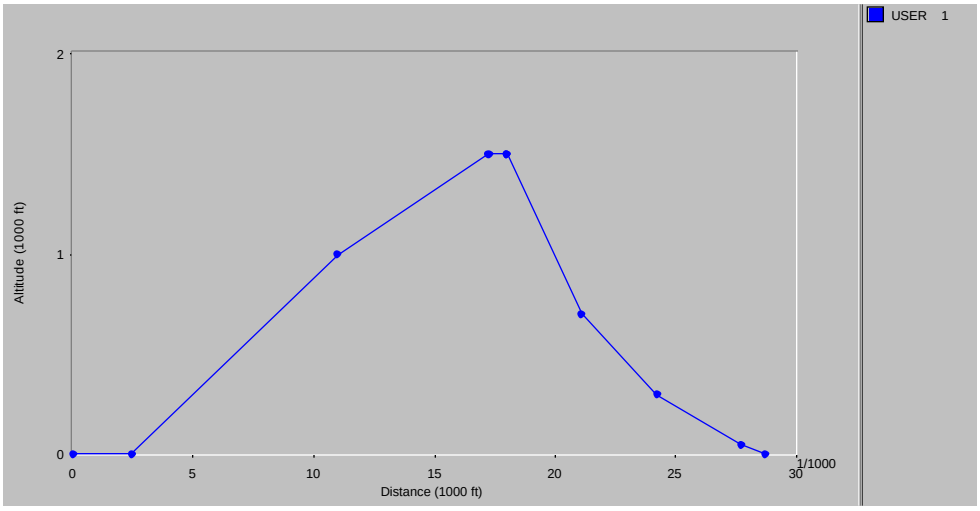


Figure 6
C12 Circuit Profile Graphs





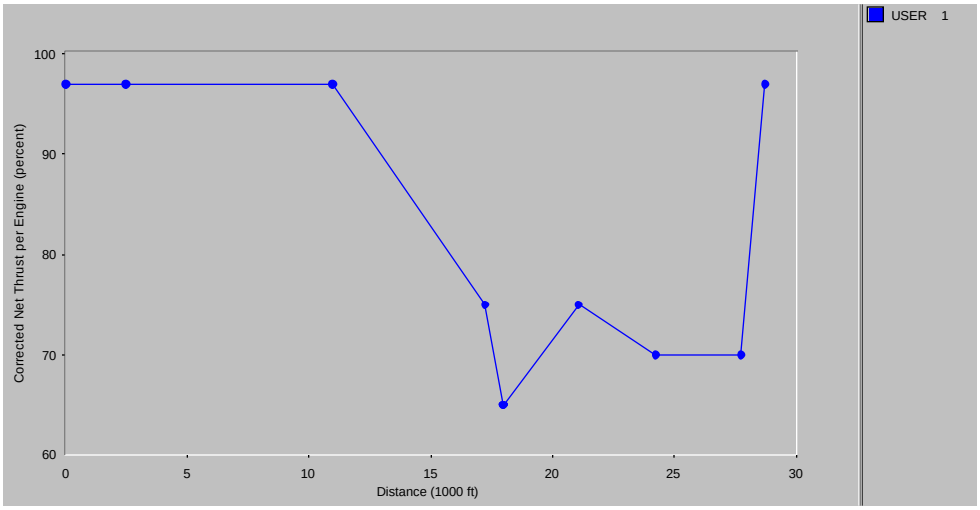


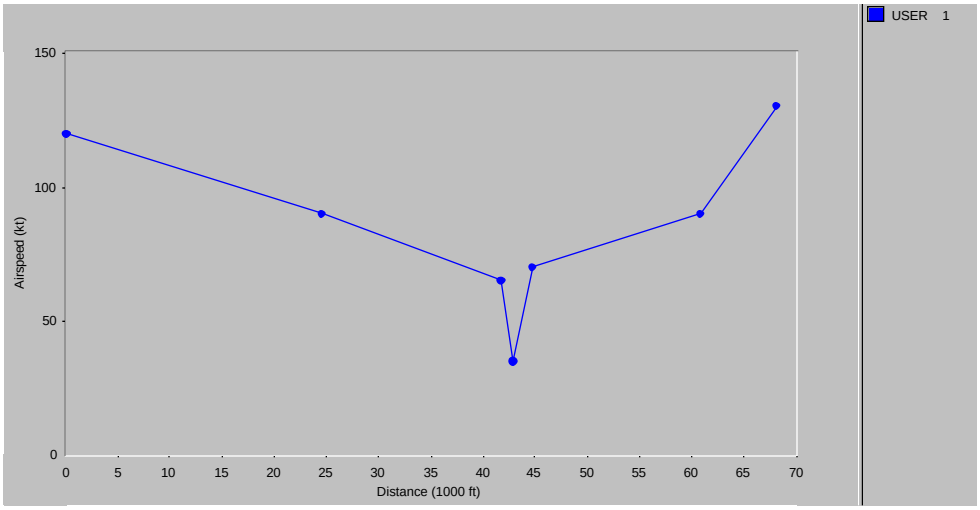
Table 6
C12 Profile Points

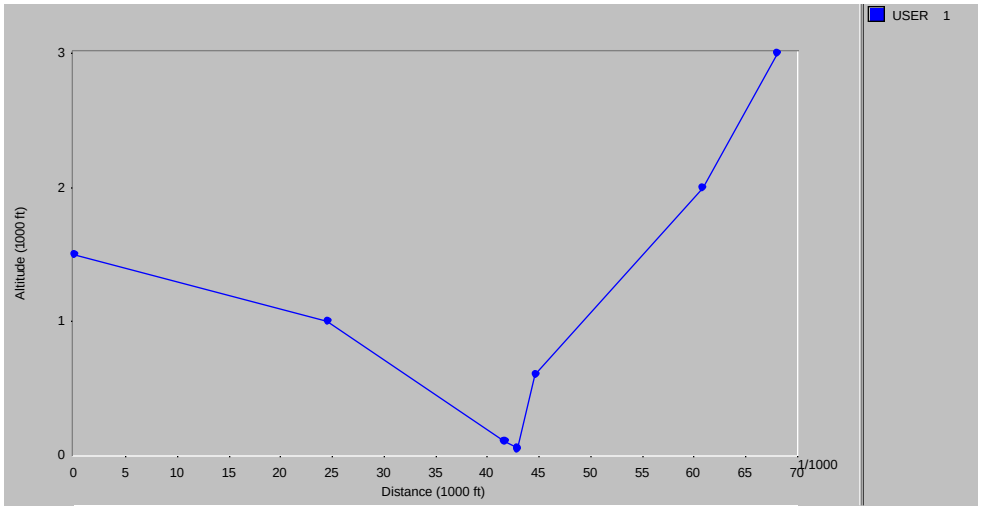
Aircraft ID	Operation Type	Profile ID	Profile Stage*	Point ID	Distance (feet)	Altitude (feet, AFE)	Ground Speed (knots)	Corrected Net Thrust per Engine (% RPM)	Operational Mode
C12	Circuit	USER	1	1	0.0	0.0	111.0	97.00	A
				2	2491.2	0.0	111.0	97.00	D
				3	10997.8	1000.0	160.0	97.00	D
				4	17256.2	1500.0	170.0	75.00	D
				5	18000.0	1500.0	140.0	65.00	D
				6	18000.0	1500.0	140.0	65.00	D
				7	21099.0	700.0	135.0	75.00	D
				8	24258.0	300.0	120.0	70.00	A
				9	27754.0	50.0	120.0	70.00	A
				10	28754.0	0.0	111.0	97.00	A
C12	Touch and Go	USER	1	1	-10754.7	1500.0	140.0	65.00	D
				2	-7655.9	700.0	135.0	75.00	D
				3	-4496.3	300.0	120.0	70.00	A
				4	-1000.0	50.0	120.0	70.00	A
				5	0.0	0.0	111.0	97.00	A
				6	2491.2	0.0	111.0	97.00	D
				7	10997.8	1000.0	160.0	97.00	D
				8	17256.2	1500.0	170.0	75.00	D
				9	18000.0	1500.0	140.0	65.00	D

Source: URS Corporation, 2003

*Stage length for departures; arrival group (glide slope), if applicable.

Figure 7
CH-53E Practice Approach ("Overflight") Profile Graphs





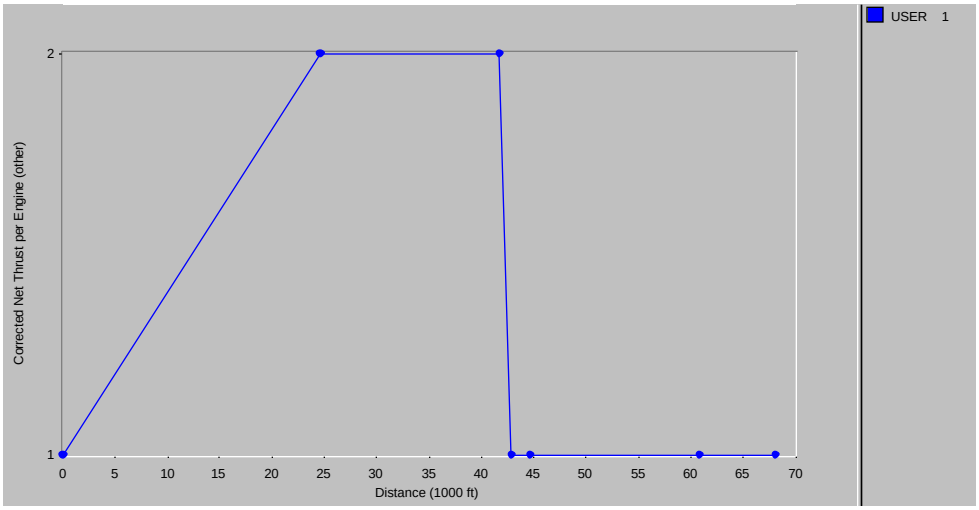


Table 7
CH-53E Profile Points

Aircraft ID	Operation Type	Profile ID	Profile Stage*	Point ID	Distance (feet)	Altitude (feet, AFE)	Ground Speed (knots)	Thrust Setting	Operational Mode
CH-53E	Overflight	USER	1	1	0.0	1500.0	120.0	1.00	A
				2	24560.0	1000.0	90.0	2.00	A
				3	41706.0	100.0	65.0	2.00	A
				4	42913.0	50.0	35.0	1.00	A
				5	44714.0	600.0	70.0	1.00	D
				6	60862.0	2000.0	90.0	1.00	D
				7	68133.0	3000.0	130.0	1.00	D

Source: URS Corporation, 2003

*Stage length for departures; arrival group (glide slope), if applicable.

**Thrust setting 1 is 90% QBPA; 2 is 56%QBPA.

Figure 8
OH-58 (SA341G) Practice Approach ("Overflight") Profile Graphs

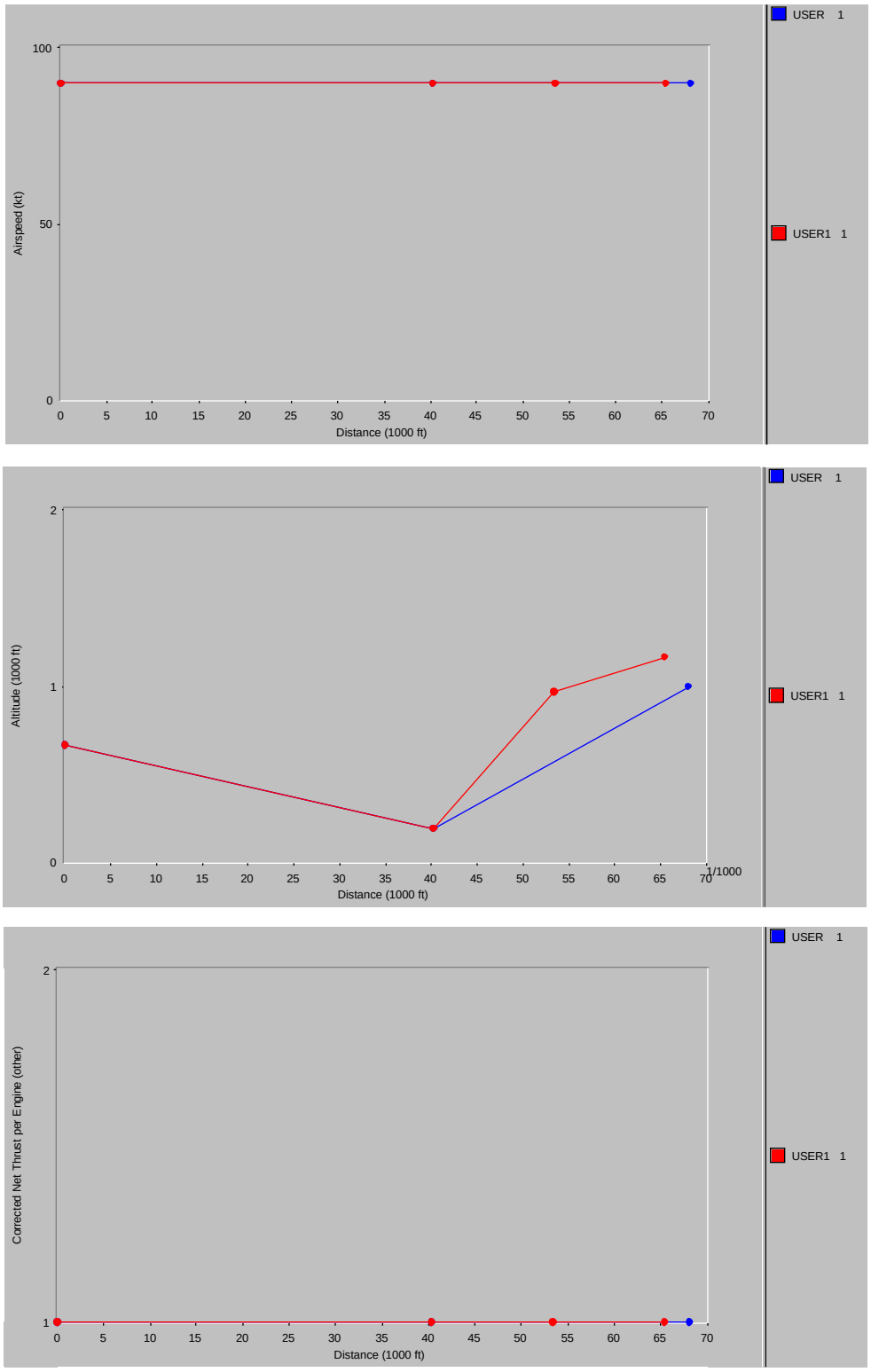


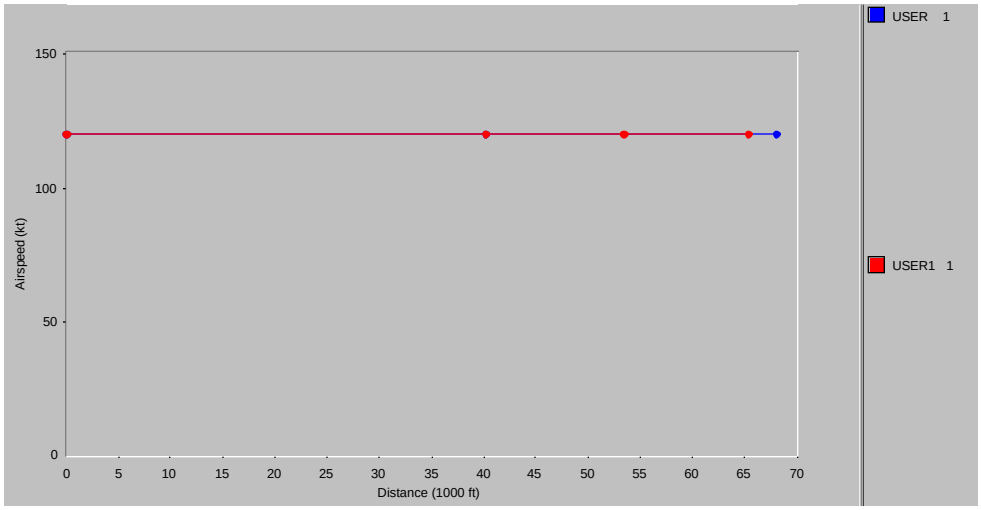
Table 8
OH-58 (SA341G) Profile Points

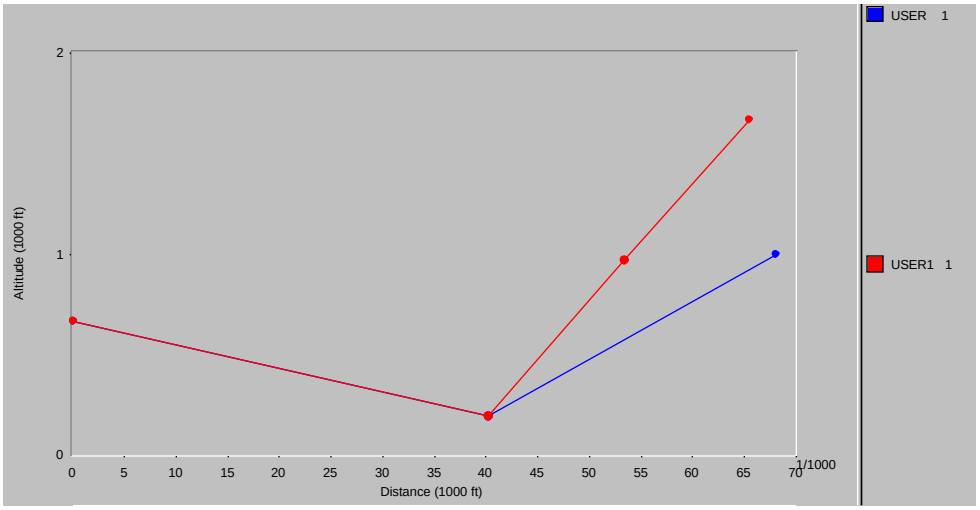
Aircraft ID	Operation Type	Profile ID	Profile Stage*	Point ID	Distance (feet)	Altitude (feet, AFE)	Ground Speed (knots)	Thrust Setting	Operational Mode
SA341G	Overflight	USER (straight out)	1	1	0.0	669.0	90.0	1.00	A
				2	40285.0	195.0	90.0	1.00	D
				3	68133.0	1000.0	90.0	1.00	D
SA341G	Overflight	USER1 (turns to southwest)	1	1	0.0	669.0	90.0	1.00	A
				2	40285.0	195.0	90.0	1.00	D
				3	53451.0	969.0	90.0	1.00	D
				4	65498.0	1169.0	90.0	1.00	D

Source: URS Corporation, 2003

*Stage length for departures; arrival group (glide slope), if applicable.

Figure 9
H-60 (S70) Practice Approach ("Overflight") Profile Graphs





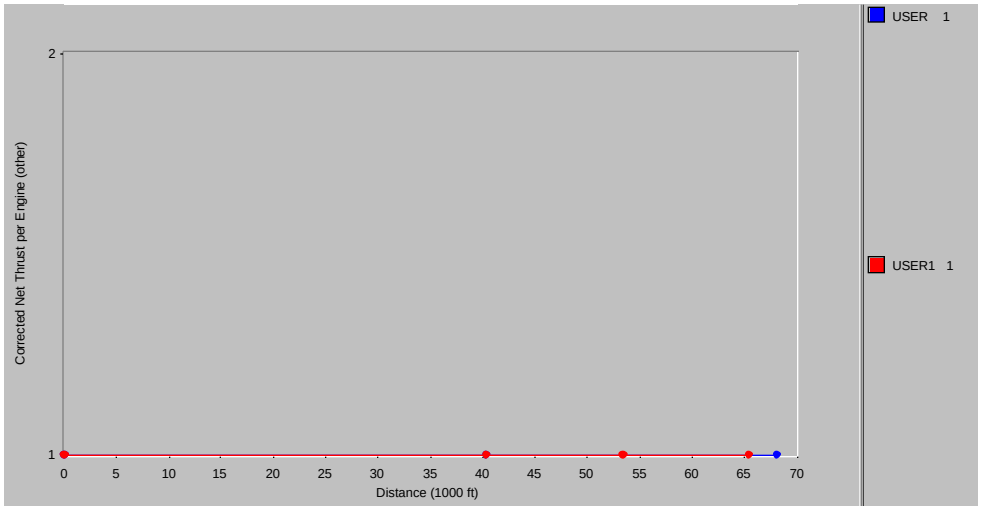


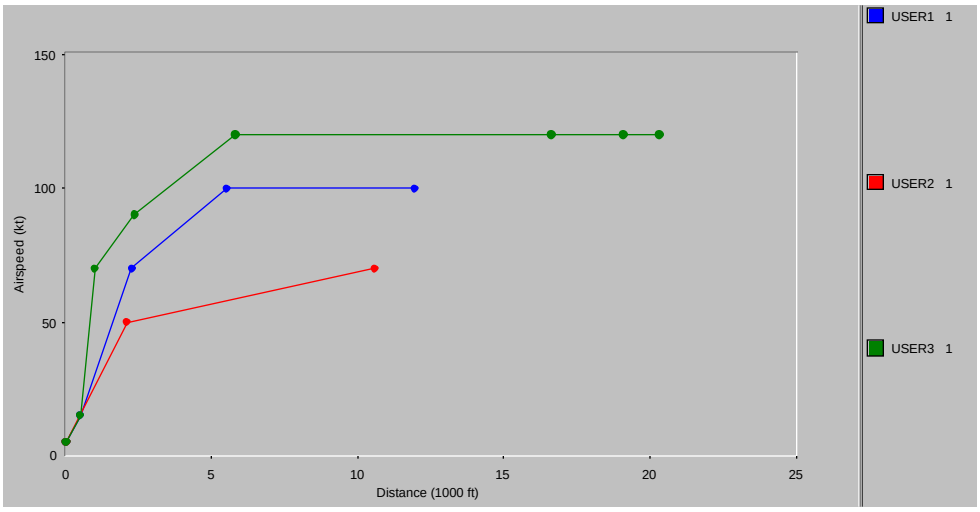
Table 9
H-60 (S70) Profile Points

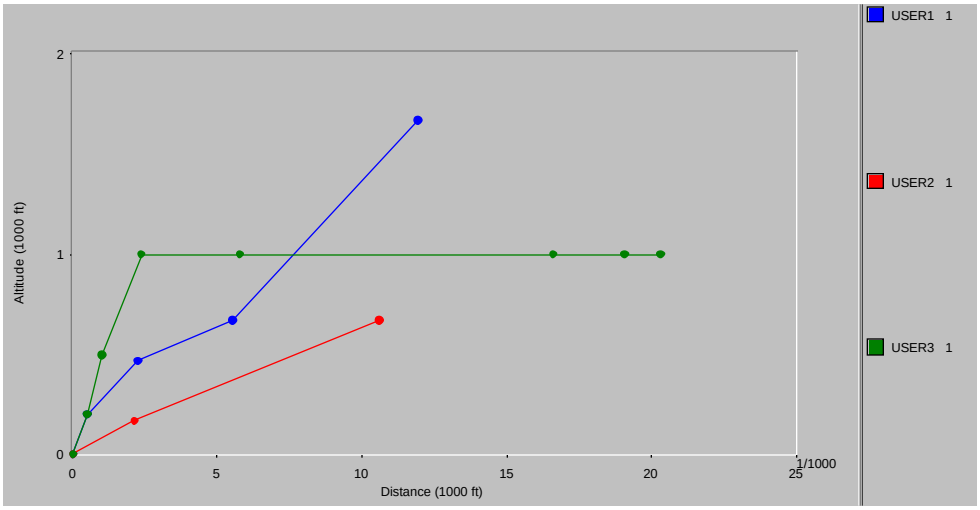
Aircraft ID	Operation Type	Profile ID	Profile Stage*	Point ID	Distance (feet)	Altitude (feet, AFE)	Ground Speed (knots)	Thrust Setting	Operational Mode
S70	Overflight	USER (straight out)	1	1	0.0	669.0	120.0	1.00	A
				2	40285.0	195.0	120.0	1.00	D
				3	68133.0	1000.0	120.0	1.00	D
S70	Overflight	USER1 (turns to southwest)	1	1	0.0	669.0	120.0	1.00	A
				2	40285.0	195.0	120.0	1.00	D
				3	53451.0	969.0	120.0	1.00	D
				4	65498.0	1669.0	120.0	1.00	D

Source: URS Corporation, 2003

*Stage length for departures; arrival group (glide slope), if applicable.

Figure 10
R22BII, S300C, MD500D, and MD900 (H500D) Departure Profile Graphs





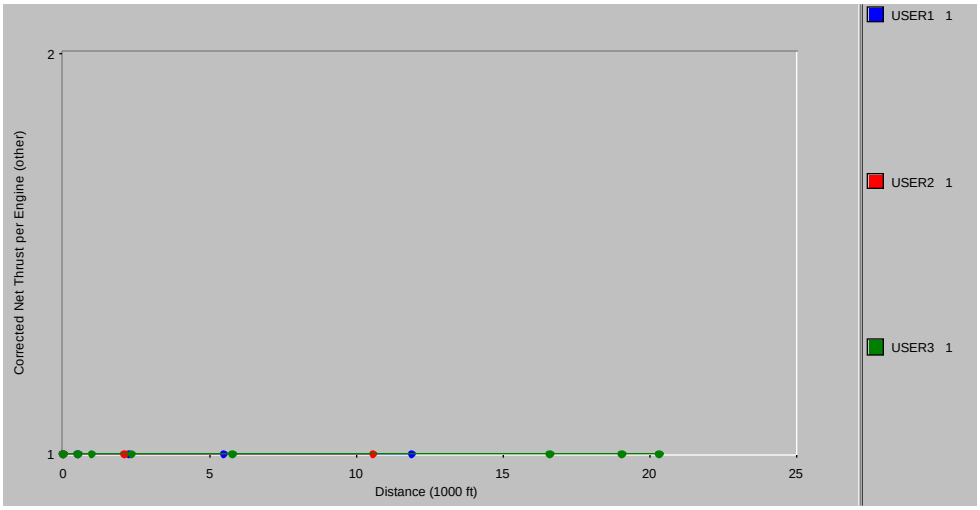


Figure 11
R22BII, S300C, MD500D, and MD900 (H500D) Arrival Profile Graphs

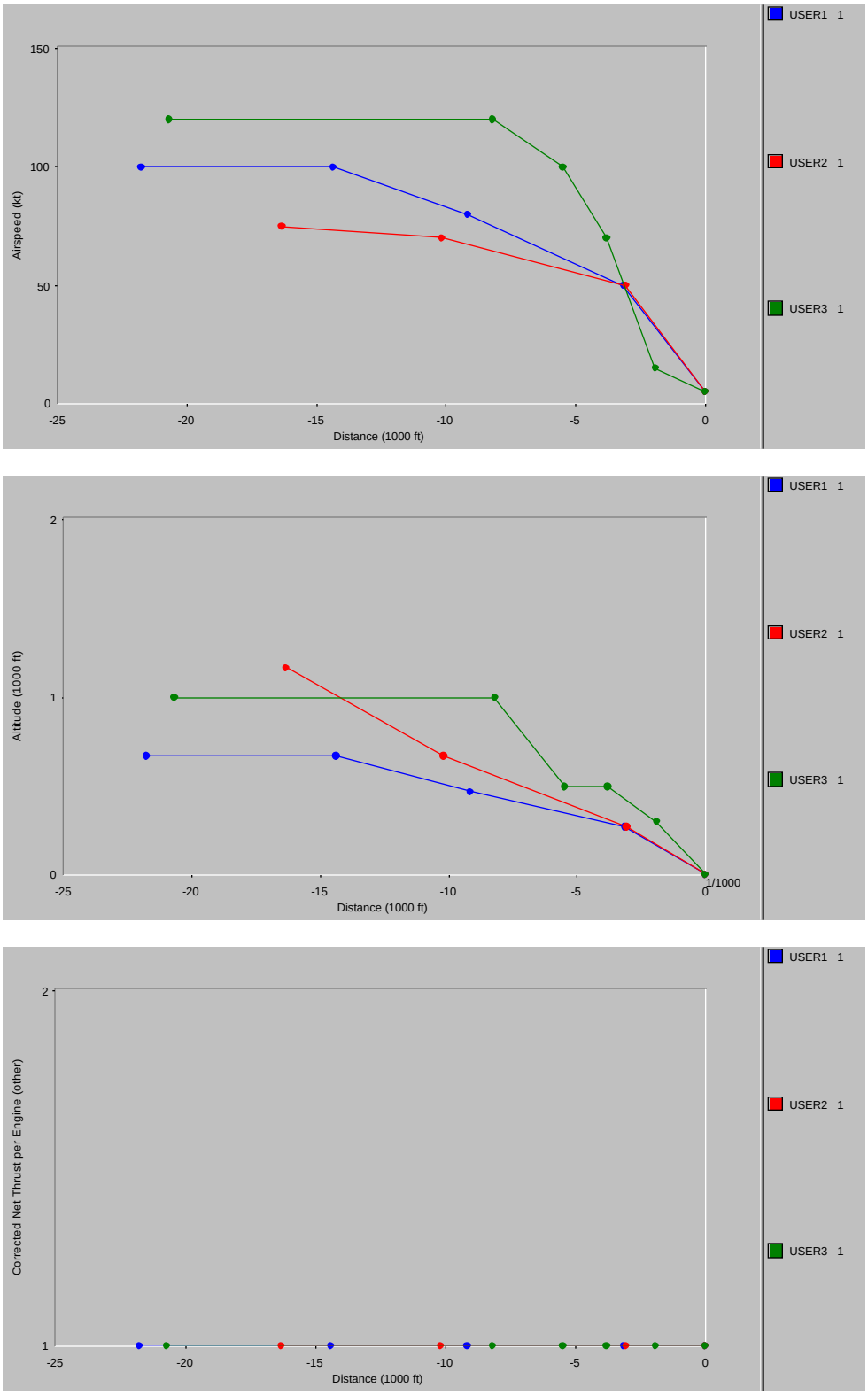
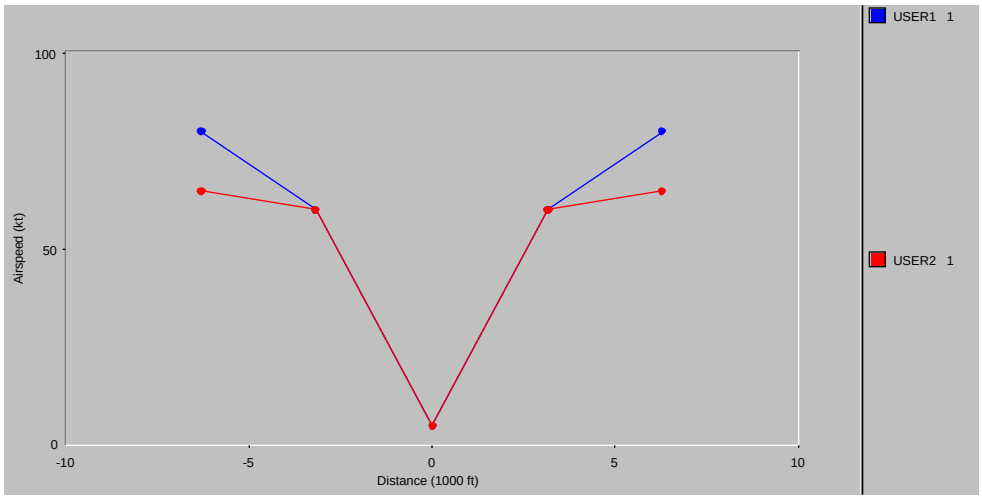
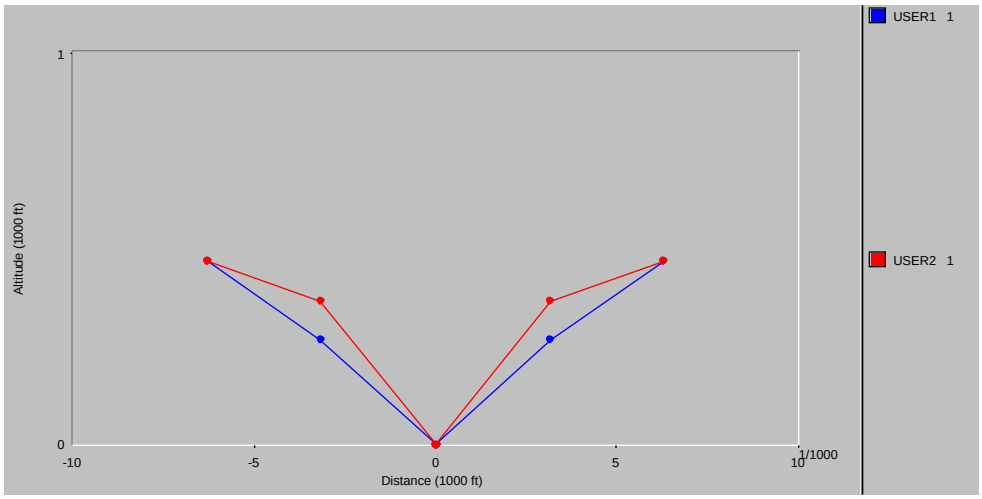


Figure 12
R22BII, S300C, MD500D, and MD900 (H500D) Touch-and-Go Profile Graphs





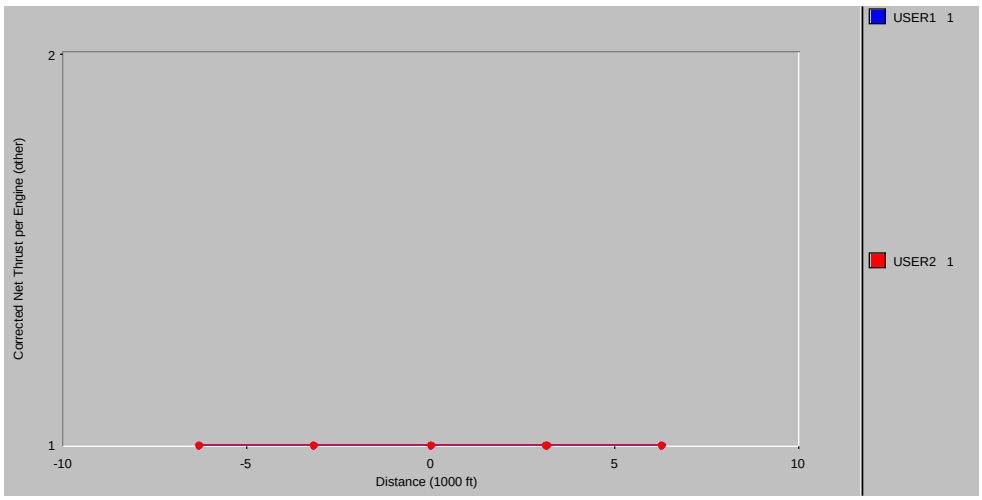
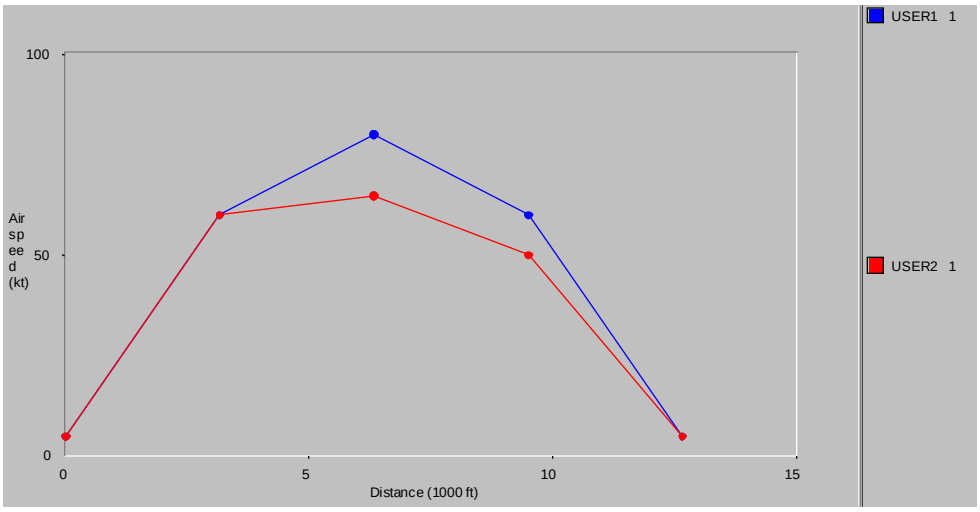
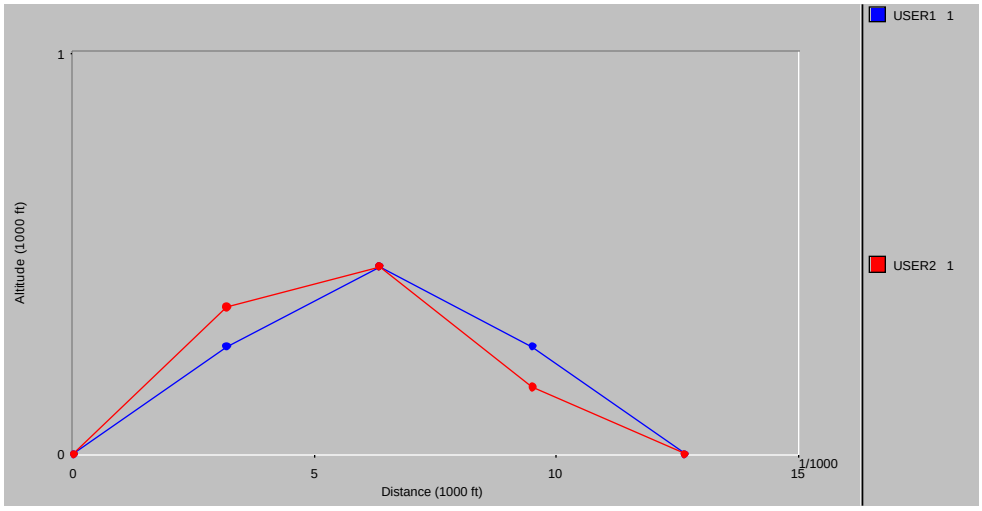


Figure 13
R22BII, S300C, MD500D, and MD900 (H500D) Circuit Profile Graphs





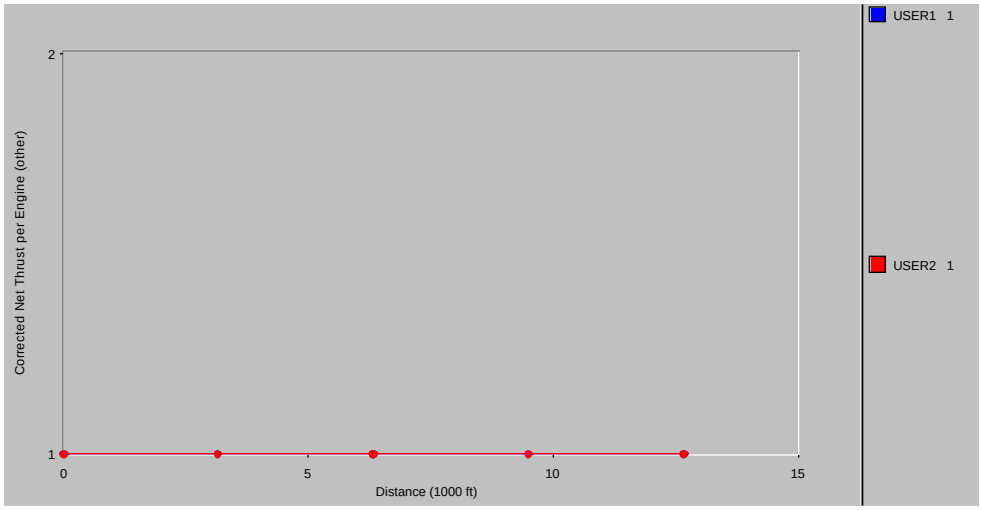


Table 10
R22BII and S300C (H500D) Profile Points

Aircraft ID	Operation Type	Profile ID	Profile Stage*	Point ID	Distance (feet)	Altitude (feet, AFE)	Ground Speed (knots)	Thrust Setting	Operational Mode
H500D	Circuit	USER2	1	1	0.0	0.0	5.0	1.00	D
				2	3168.0	369.0	60.0	1.00	D
				3	6337.0	469.0	65.0	1.00	D
				4	6337.0	469.0	65.0	1.00	D
				5	9504.0	169.0	50.0	1.00	A
				6	12675.0	0.0	5.0	1.00	A
H500D	Touch and Go	USER2	1	1	-6300.0	469.0	65.0	1.00	D
				2	-3168.0	369.0	60.0	1.00	A
				3	0.0	0.0	5.0	1.00	A
				4	3168.0	369.0	60.0	1.00	D
				5	6300.0	469.0	65.0	1.00	D
H500D	Departure	USER2	1	1	0.0	0.0	5.0	1.00	D
				2	2125.0	169.0	50.0	1.00	D
				3	10606.0	669.0	70.0	1.00	D
H500D	Arrival	USER2	1	1	-16345.0	1169.0	75.0	1.00	A
				2	-10187.0	669.0	70.0	1.00	A
				3	-3070.0	269.0	50.0	1.00	A
				4	0.0	0.0	5.0	1.00	A

Source: URS Corporation, 2003

*Stage length for departures; arrival group (glide slope), if applicable.

Table 11
MD500D (H500D) Profile Points

Aircraft ID	Operation Type	Profile ID	Profile Stage*	Point ID	Distance (feet)	Altitude (feet, AFE)	Ground Speed (knots)	Thrust Setting	Operational Mode
H500D	Circuit	USER1	1	1	0.0	0.0	5.0	1.00	D
				2	3168.0	269.0	60.0	1.00	D
				3	6337.0	469.0	80.0	1.00	D
				4	6337.0	469.0	80.0	1.00	A
				5	9504.0	269.0	60.0	1.00	A
				6	12675.0	0.0	5.0	1.00	A
H500D	Touch and Go	USER1	1	1	-6300.0	469.0	80.0	1.00	D
				2	-3168.0	269.0	60.0	1.00	A
				3	0.0	0.0	5.0	1.00	A
				4	3168.0	269.0	60.0	1.00	D
				5	6300.0	469.0	80.0	1.00	D
H500D	Departure	USER1	1	1	0.0	0.0	5.0	1.00	D
				2	500.0	200.0	15.0	1.00	D
				3	2263.0	469.0	70.0	1.00	D
				4	5524.0	669.0	100.0	1.00	D
				5	11925.0	1669.0	100.0	1.00	D
H500D	Arrival	USER1	1	1	-21784.0	669.0	100.0	1.00	A
				2	-14386.0	669.0	100.0	1.00	A
				3	-9140.0	469.0	80.0	1.00	A
				4	-3139.0	269.0	50.0	1.00	A
				5	0.0	0.0	5.0	1.00	A

Source: URS Corporation, 2003

*Stage length for departures; arrival group (glide slope), if applicable.

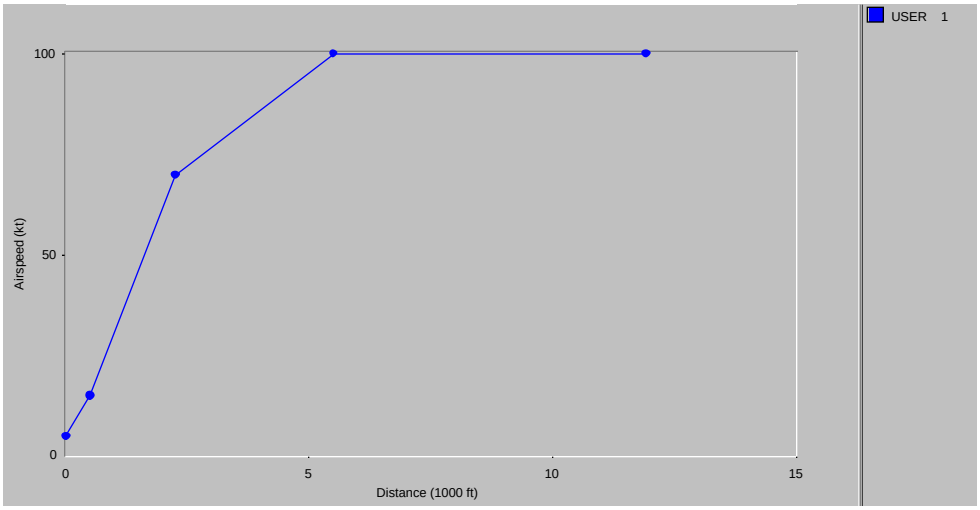
Table 12
MD900 (H500D) Profile Points

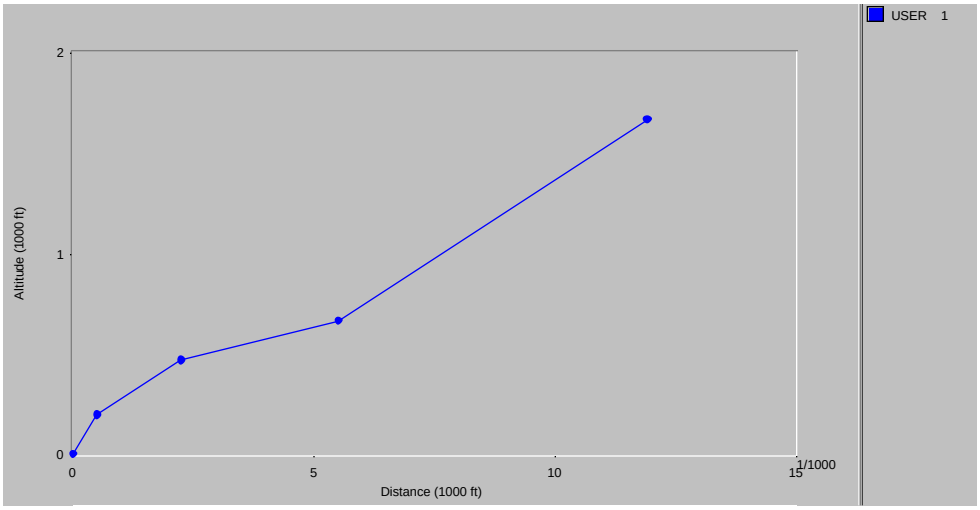
Aircraft ID	Operation Type	Profile ID	Profile Stage*	Point ID	Distance (feet)	Altitude (feet, AFE)	Ground Speed (knots)	Thrust Setting	Operational Mode
H500D	Departure	USER3	1	1	0.0	0.0	5.0	1.00	D
				2	500.0	200.0	15.0	1.00	D
				3	1000.0	500.0	70.0	1.00	D
				4	2376.0	1000.0	90.0	1.00	D
				5	5808.0	1000.0	120.0	1.00	D
				6	16632.0	1000.0	120.0	1.00	D
				7	19096.0	1000.0	120.0	1.00	D
				8	20328.0	1000.0	120.0	1.00	D
H500D	Arrival	USER3	1	1	-20705.0	1000.0	120.0	1.00	A
				2	-8192.0	1000.0	120.0	1.00	A
				3	-5479.0	500.0	100.0	1.00	A
				4	-3800.0	500.0	70.0	1.00	A
				5	-1900.0	300.0	15.0	1.00	A
				6	0.0	0.0	5.0	1.00	A

Source: URS Corporation, 2003

*Stage length for departures; arrival group (glide slope), if applicable.

Figure 14
Bell 206BIII (B206L) Departure Profile Graphs





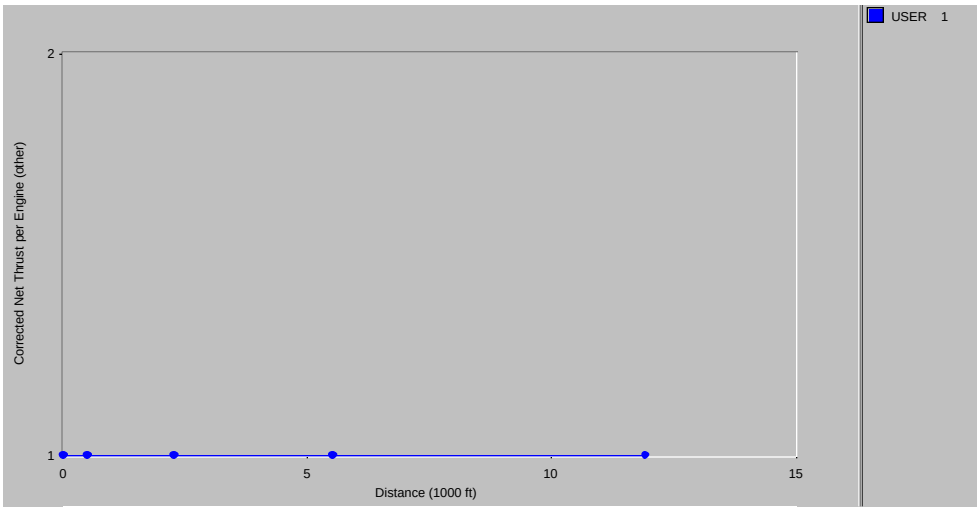
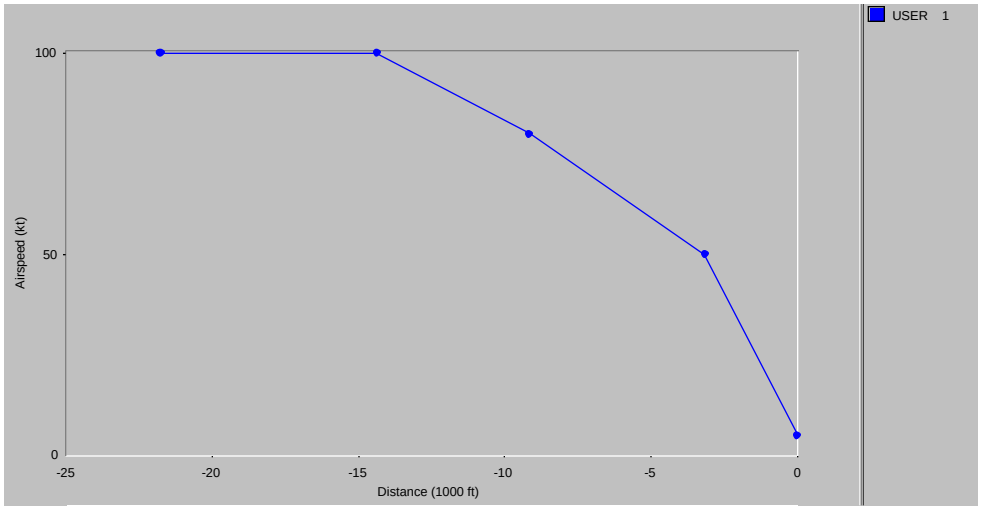
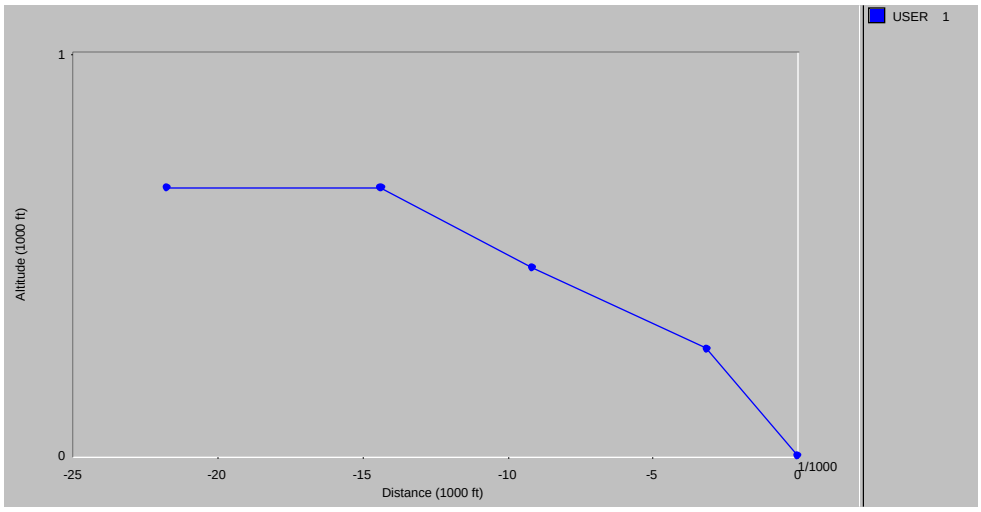


Figure 15
Bell 206BIII (B206L) Arrival Profile Graphs





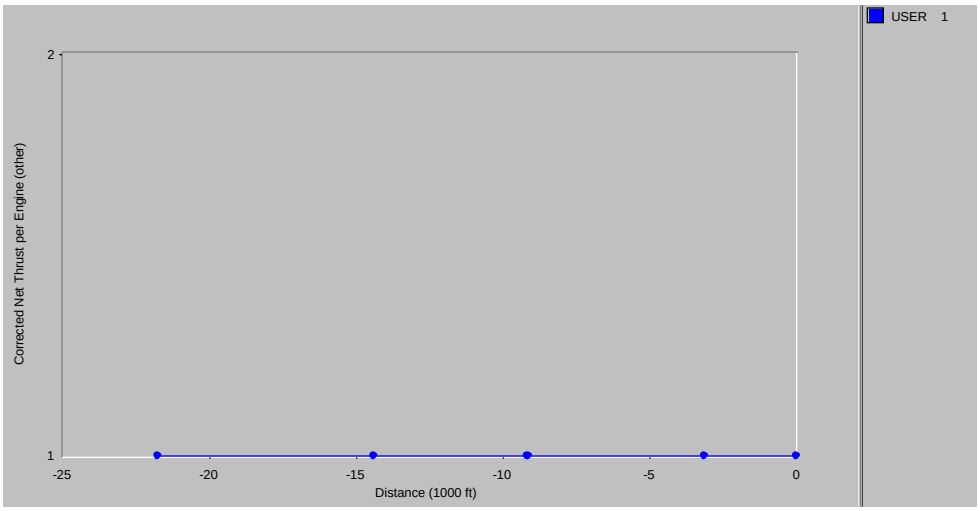
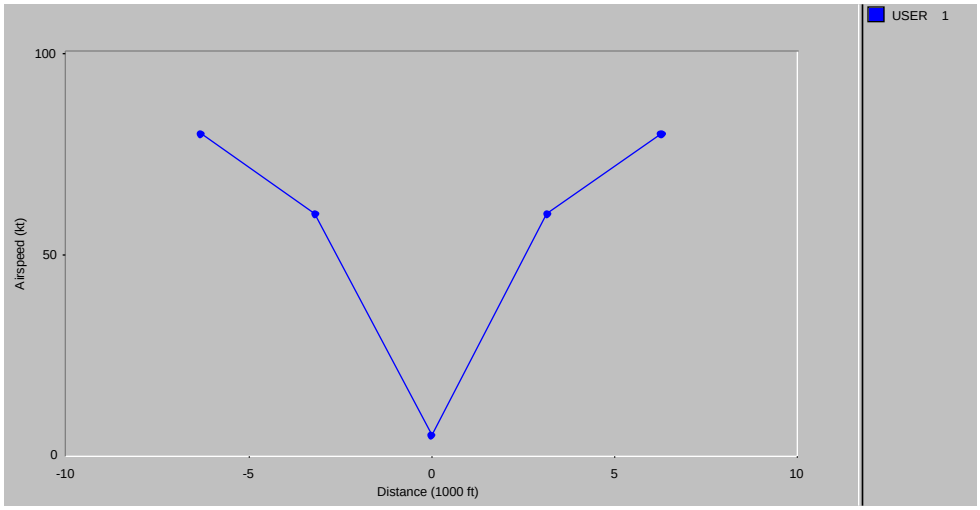
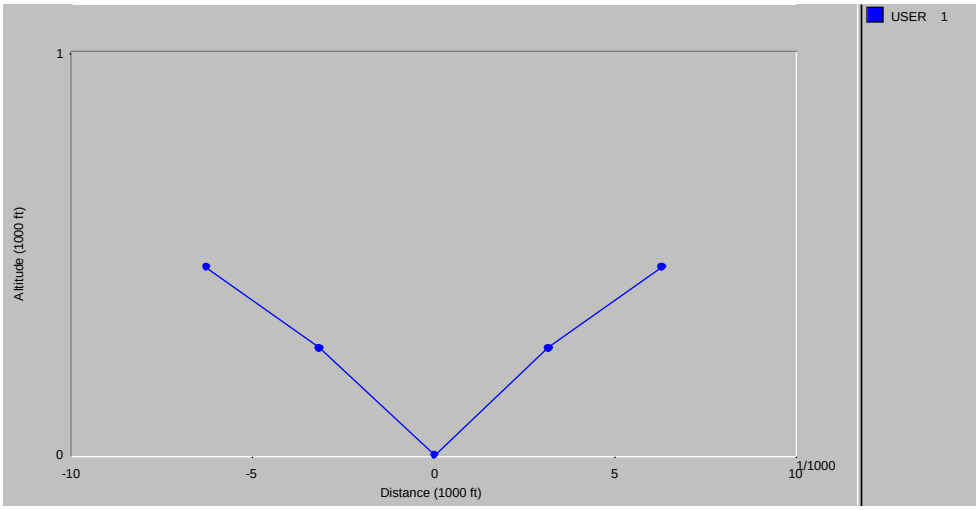


Figure 16
Bell 206BIII (B206L) Touch-and-Go Profile Graphs





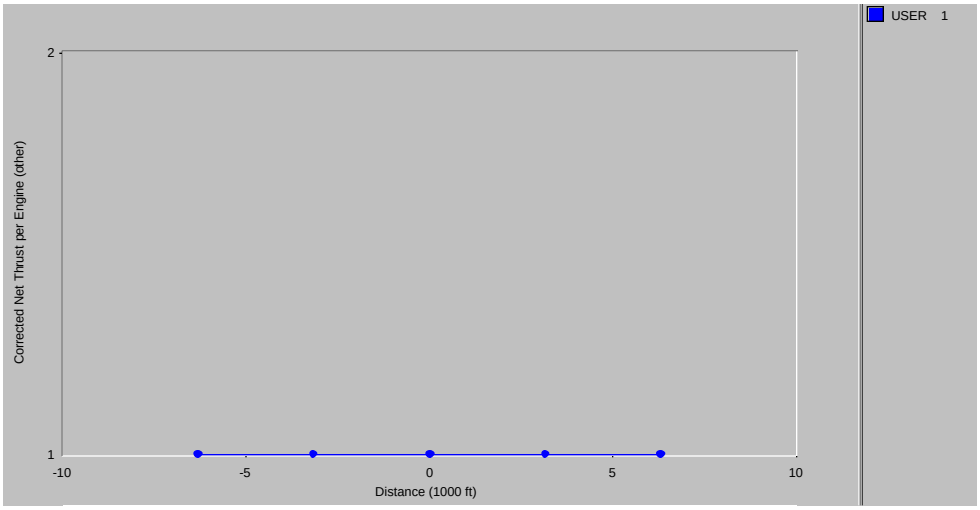
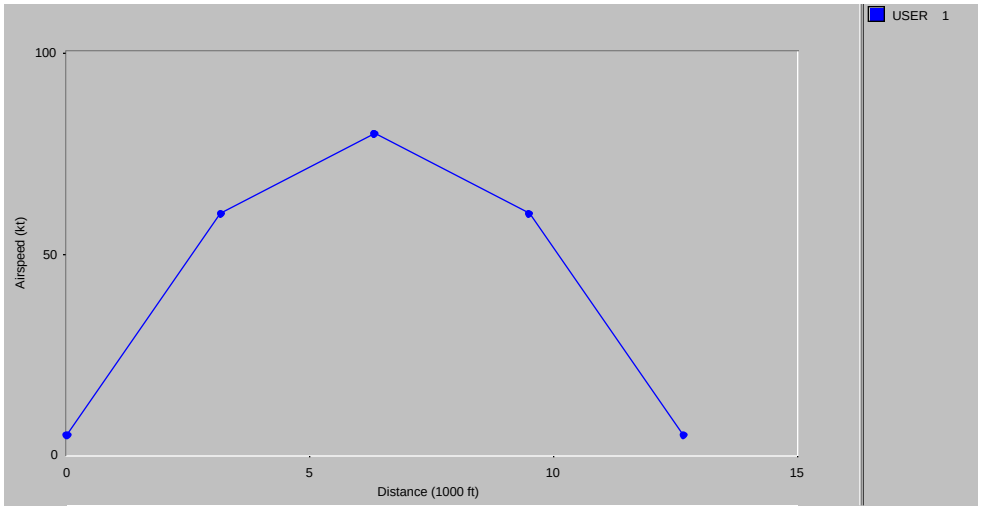
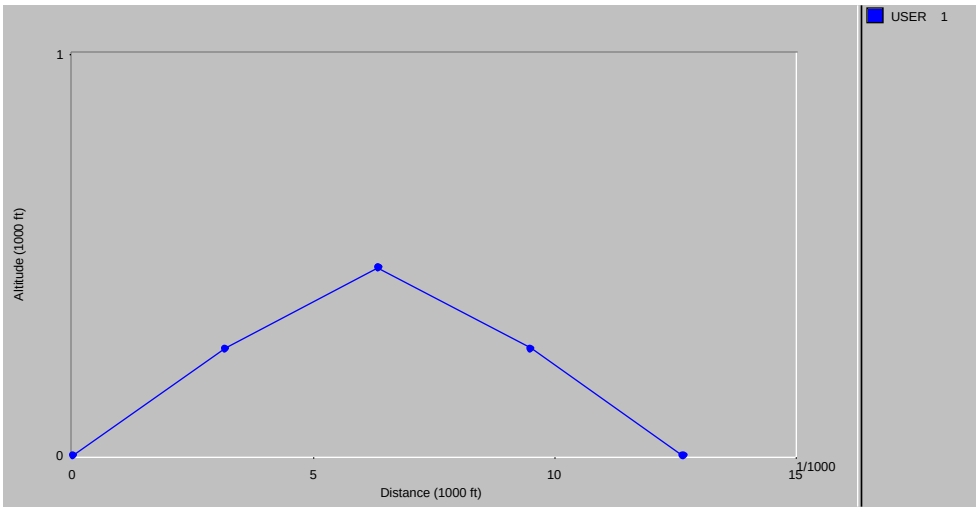


Figure 17
Bell 206BIII (B206L) Circuit Profile Graphs





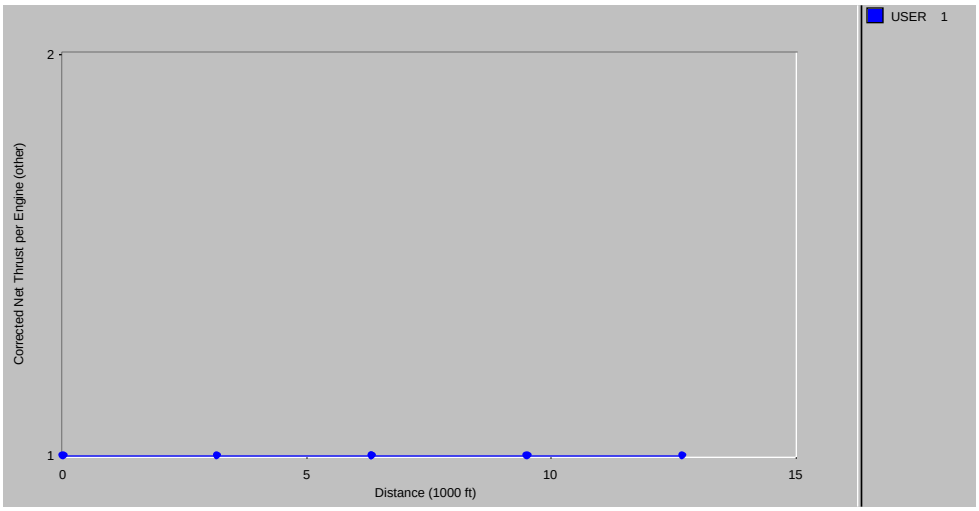


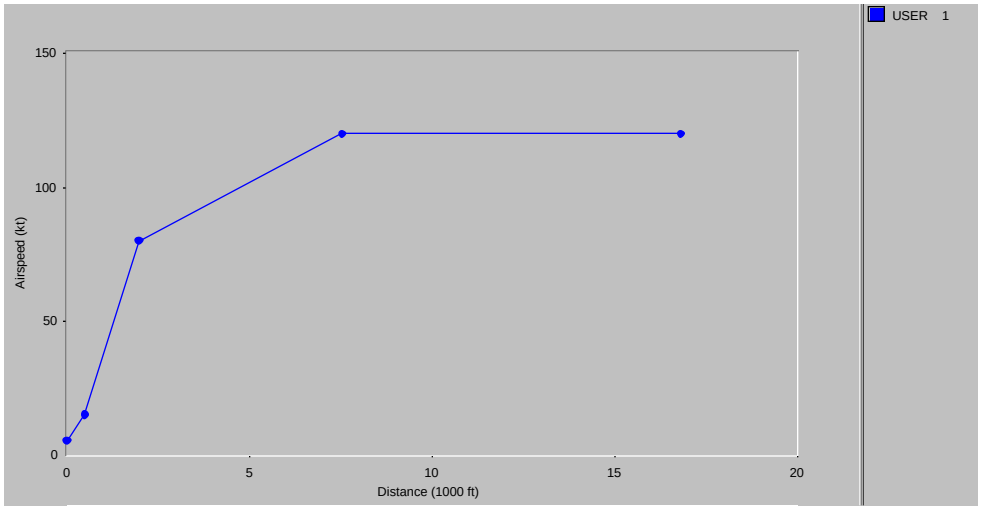
Table 13
Bell 206BIII (B206L) Profile Points

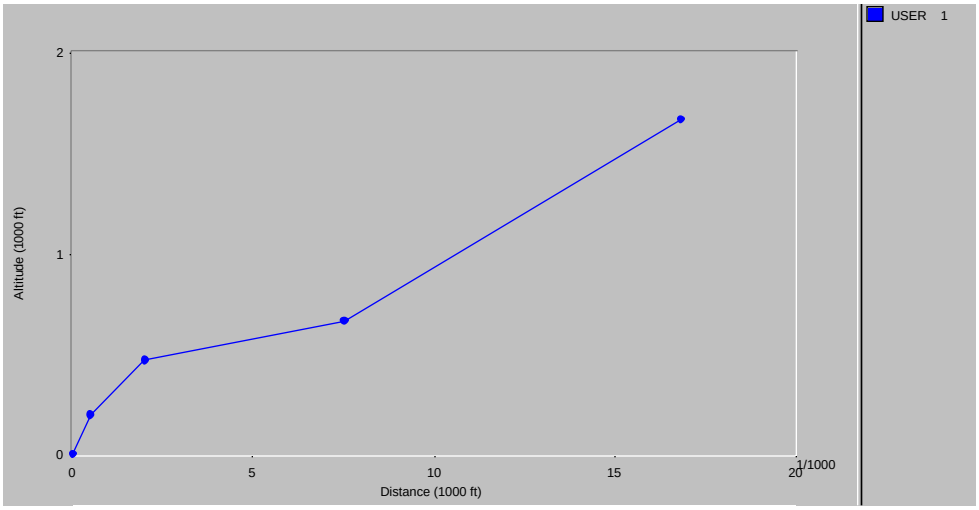
Aircraft ID	Operation Type	Profile ID	Profile Stage*	Point ID	Distance (feet)	Altitude (feet, AFE)	Ground Speed (knots)	Thrust Setting	Operational Mode
B206L	Circuit	USER	1	1	0.0	0.0	5.0	1.00	D
				2	3168.0	269.0	60.0	1.00	D
				3	6337.0	469.0	80.0	1.00	D
				4	6337.0	469.0	80.0	1.00	D
				5	9504.0	269.0	60.0	1.00	A
				6	12675.0	0.0	5.0	1.00	A
B206L	Touch and Go	USER	1	1	-6300.0	469.0	80.0	1.00	D
				2	-3168.0	269.0	60.0	1.00	A
				3	0.0	0.0	5.0	1.00	A
				4	3168.0	269.0	60.0	1.00	D
				5	6300.0	469.0	80.0	1.00	D
B206L	Departure	USER	1	1	0.0	0.0	5.0	1.00	D
				2	500.0	200.0	15.0	1.00	D
				3	2263.0	469.0	70.0	1.00	D
				4	5524.0	669.0	100.0	1.00	D
				5	11925.0	1669.0	100.0	1.00	D
B206L	Arrival	USER	1	1	-21784.0	669.0	100.0	1.00	A
				2	-14386.0	669.0	100.0	1.00	A
				3	-9140.0	469.0	80.0	1.00	A
				4	-3139.0	269.0	50.0	1.00	A
				5	0.0	0.0	5.0	1.00	A

Source: URS Corporation, 2003

*Stage length for departures; arrival group (glide slope), if applicable.

Figure 18
EC120 (SA365N) Departure Profile Graphs





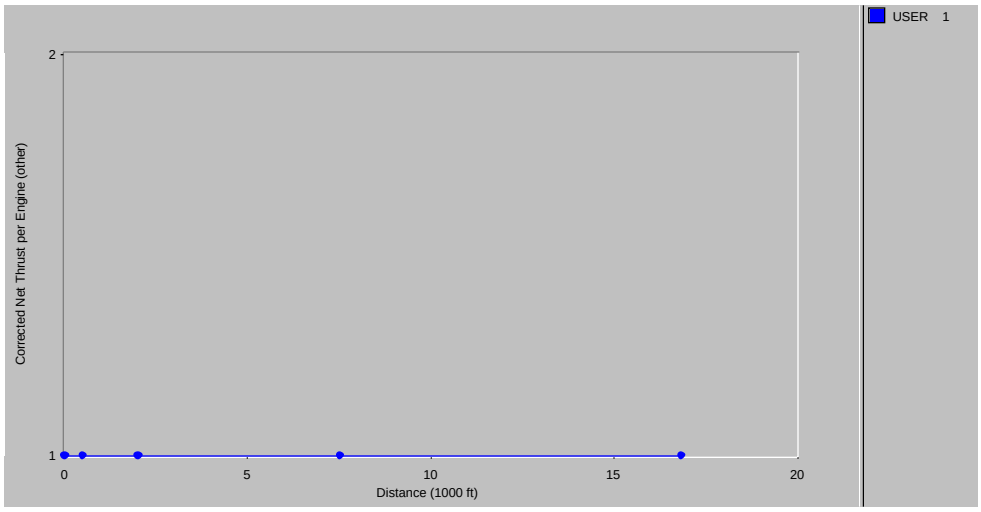
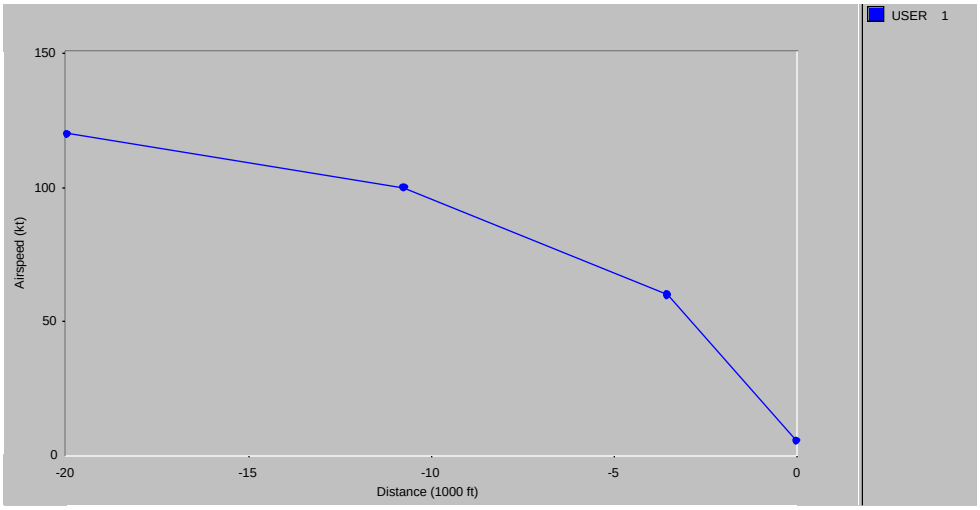
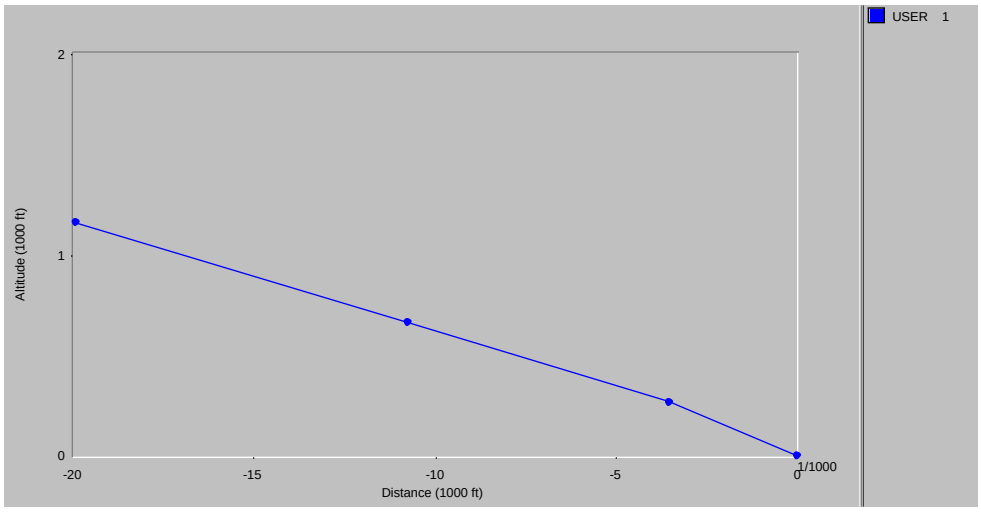


Figure 19
EC120 (SA365N) Arrival Profile Graphs





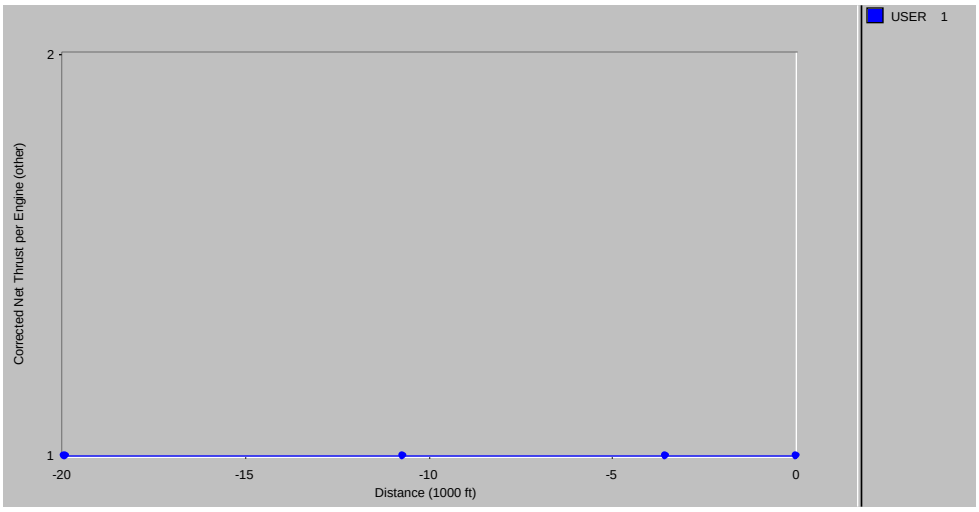


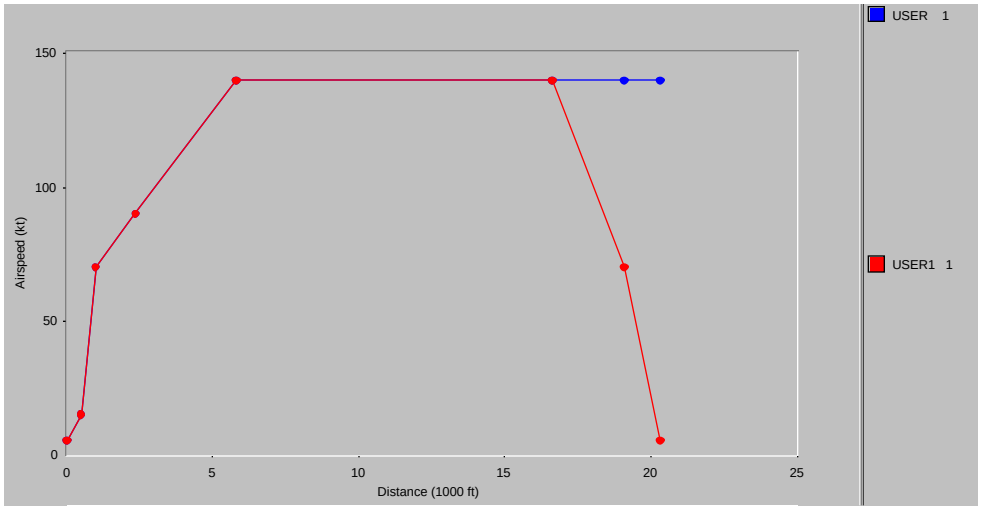
Table 14
EC120 (SA365N) Profile Points

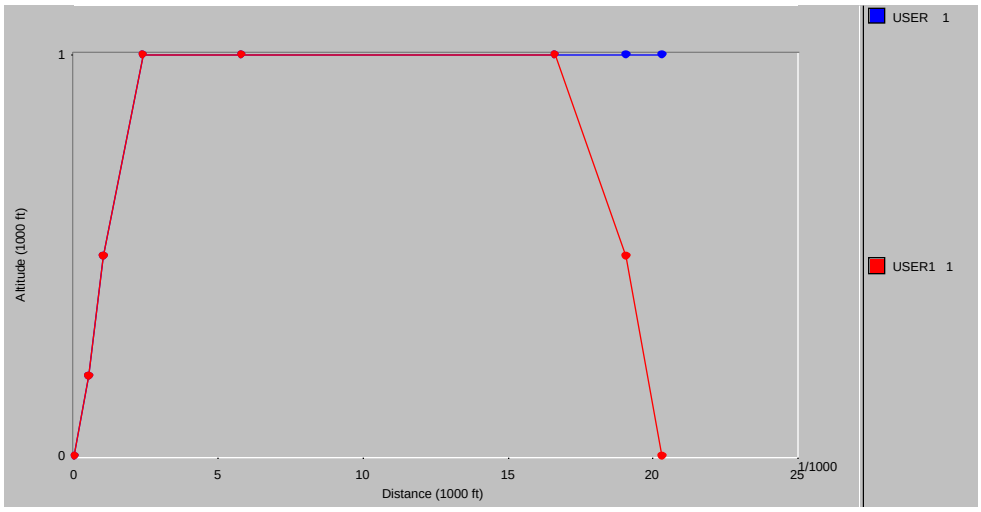
Aircraft ID	Operation Type	Profile ID	Profile Stage*	Point ID	Distance (feet)	Altitude (feet, AFE)	Ground Speed (knots)	Thrust Setting	Operational Mode
SA365N	Departure	USER	1	1	0.0	0.0	5.0	1.00	D
				2	500.0	200.0	15.0	1.00	D
				3	2000.0	469.0	80.0	1.00	D
				4	7539.0	669.0	120.0	1.00	D
				5	16840.0	1669.0	120.0	1.00	D
SA365N	Arrival	USER	1	1	-19960.0	1169.0	120.0	1.00	A
				2	-10754.0	669.0	100.0	1.00	A
				3	-3546.0	269.0	60.0	1.00	A
				4	0.0	0.0	5.0	1.00	A

Source: URS Corporation, 2003

*Stage length for departures; arrival group (glide slope), if applicable.

Figure 20
Bell 222 (B222) Departure Profile Graphs





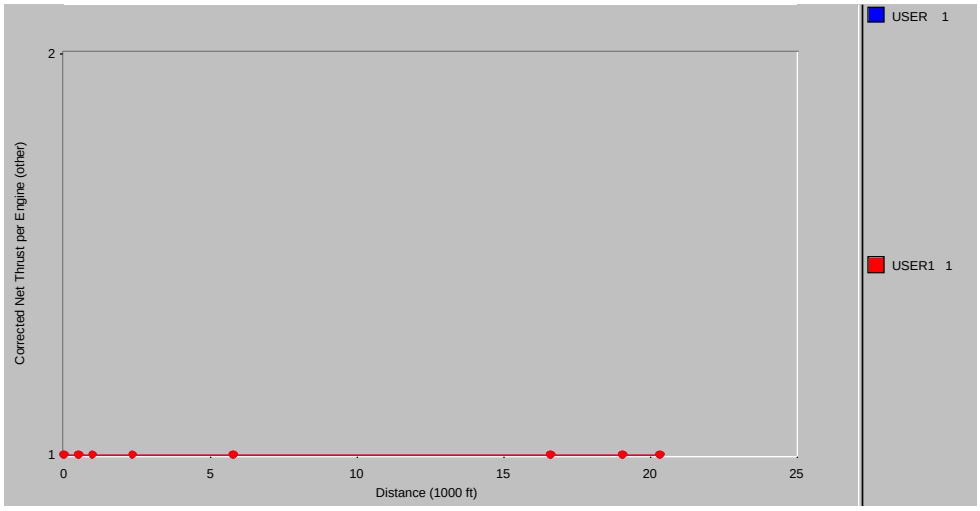
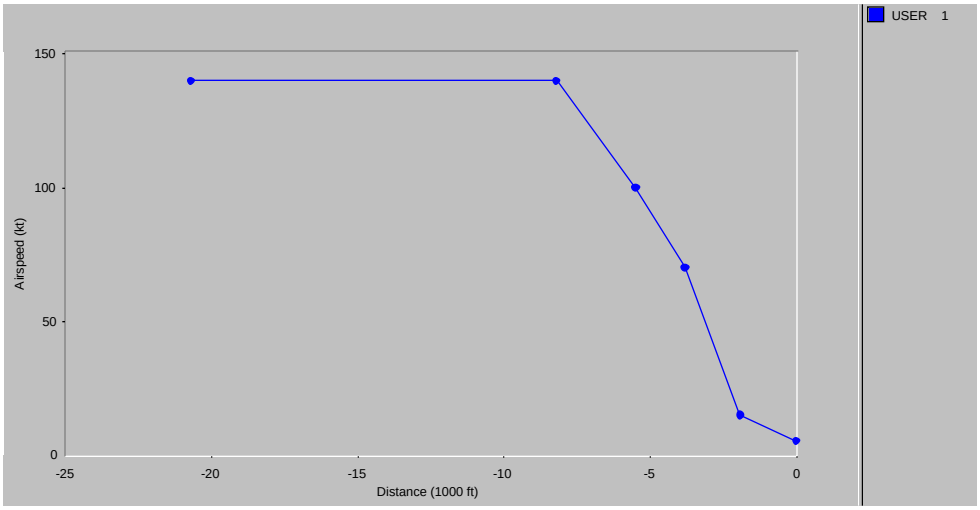
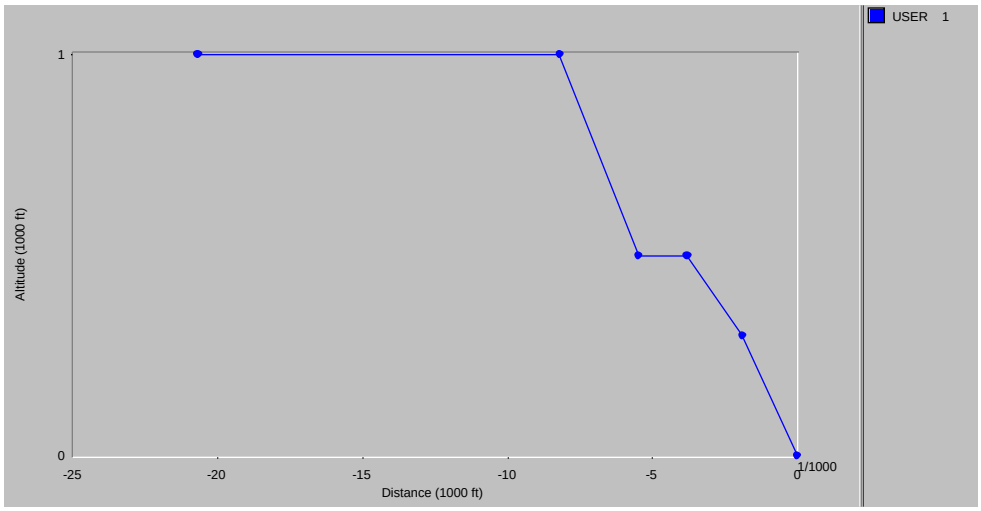


Figure 21
Bell 222 (B222) Arrival Profile Graphs





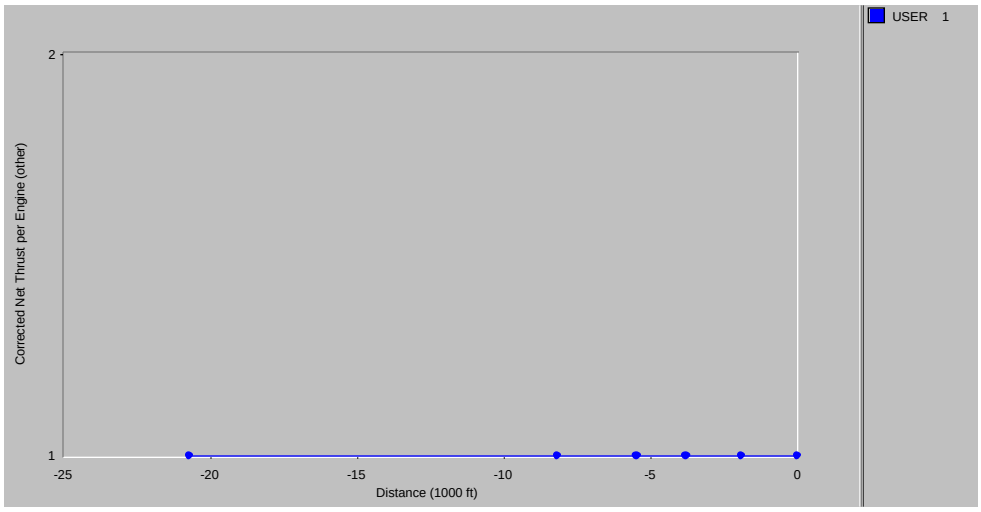


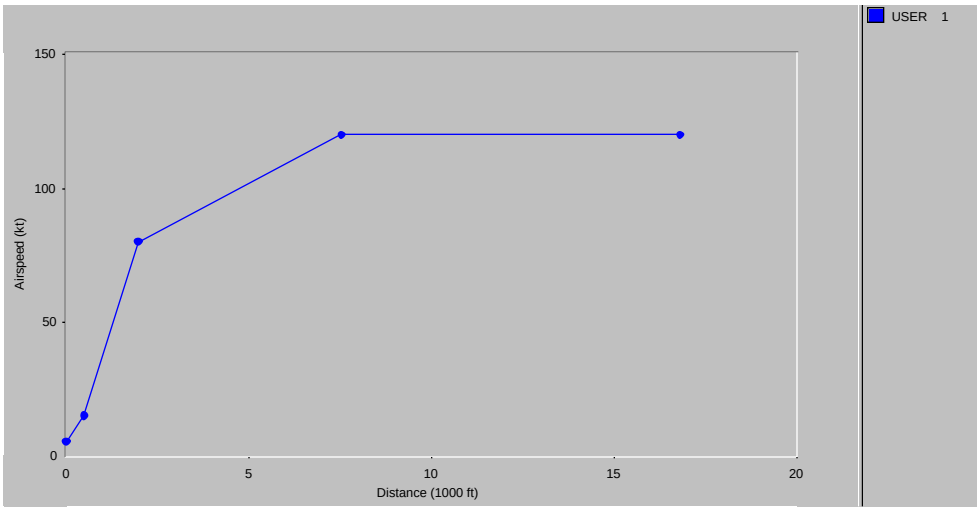
Table 15
Bell 222 (B222) Profile Points

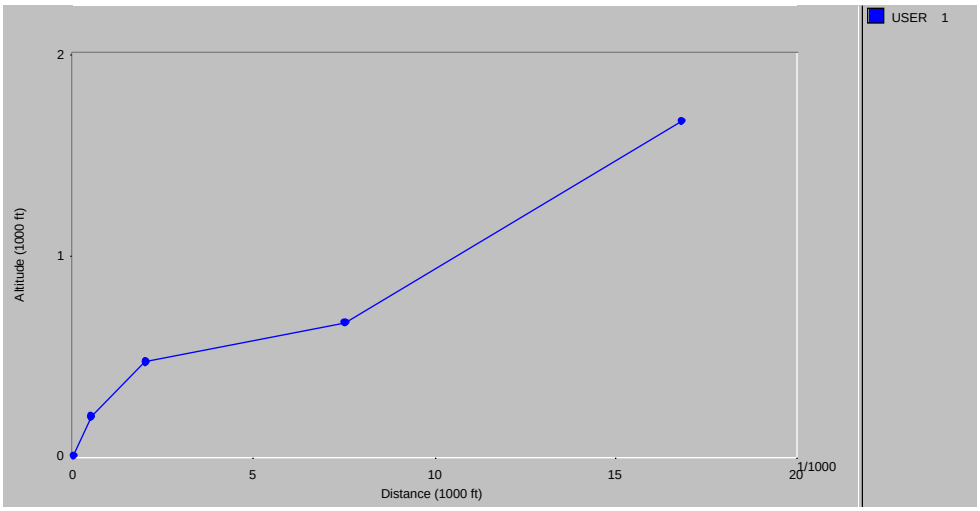
Aircraft ID	Operation Type	Profile ID	Profile Stage*	Point ID	Distance (feet)	Altitude (feet, AFE)	Ground Speed (knots)	Thrust Setting	Operational Mode
B222	Departure (to / from hospital)	USER1	1	1	0.0	0.0	5.0	1.00	D
				2	500.0	200.0	15.0	1.00	D
				3	1000.0	500.0	70.0	1.00	D
				4	2376.0	1000.0	90.0	1.00	D
				5	5808.0	1000.0	140.0	1.00	D
				6	16632.0	1000.0	140.0	1.00	A
				7	19096.0	500.0	70.0	1.00	A
				8	20328.0	0.0	5.0	1.00	A
B222	Departure	USER	1	1	0.0	0.0	5.0	1.00	D
				2	500.0	200.0	15.0	1.00	D
				3	1000.0	500.0	70.0	1.00	D
				4	2376.0	1000.0	90.0	1.00	D
				5	5808.0	1000.0	140.0	1.00	D
				6	16632.0	1000.0	140.0	1.00	D
				7	19096.0	1000.0	140.0	1.00	D
				8	20328.0	1000.0	140.0	1.00	D
B222	Arrival	USER	1	1	-20705.0	1000.0	140.0	1.00	A
				2	-8192.0	1000.0	140.0	1.00	A
				3	-5479.0	500.0	100.0	1.00	A
				4	-3800.0	500.0	70.0	1.00	A
				5	-1900.0	300.0	15.0	1.00	A
				6	0.0	0.0	5.0	1.00	A

Source: URS Corporation, 2003

*Stage length for departures; arrival group (glide slope), if applicable.

Figure 22
AS350 (SA350D) Departure Profile Graphs





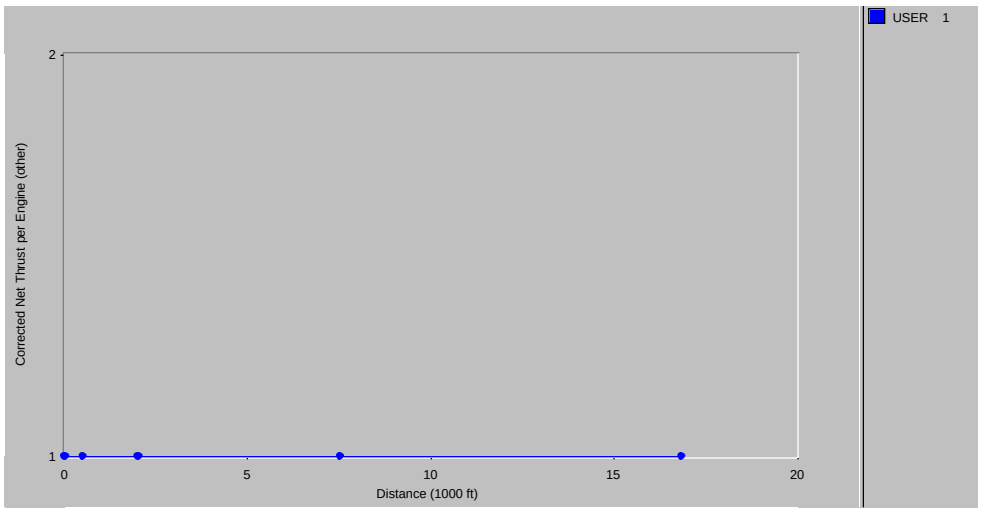
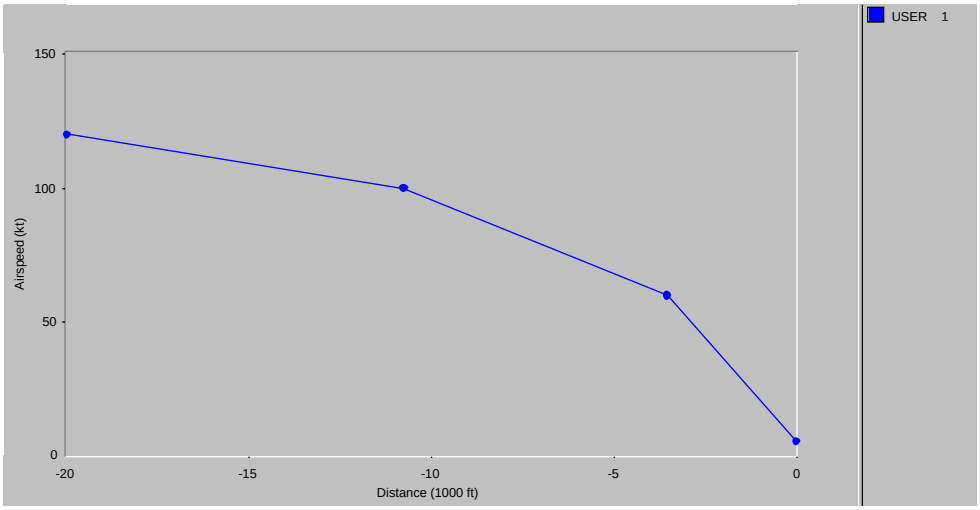
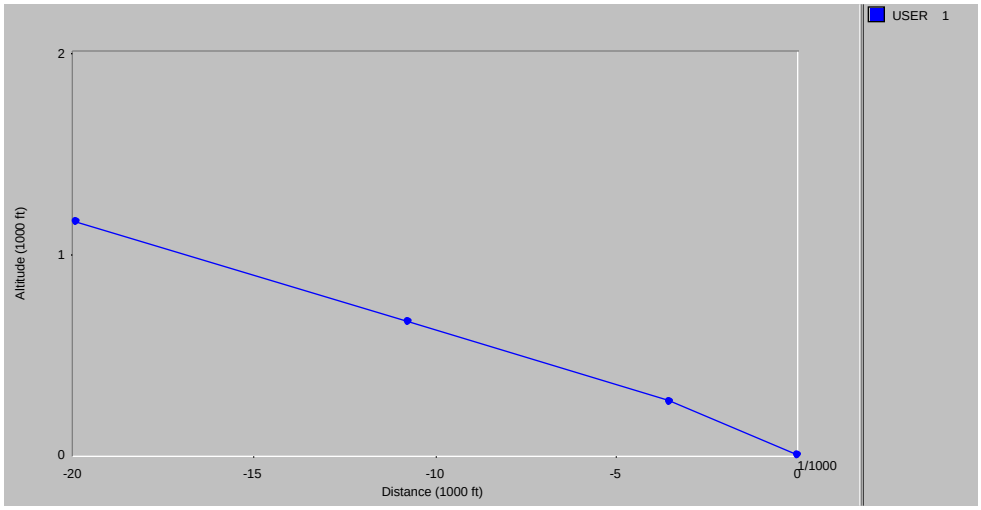


Figure 23
AS350 (SA350D) Arrival Profile Graphs





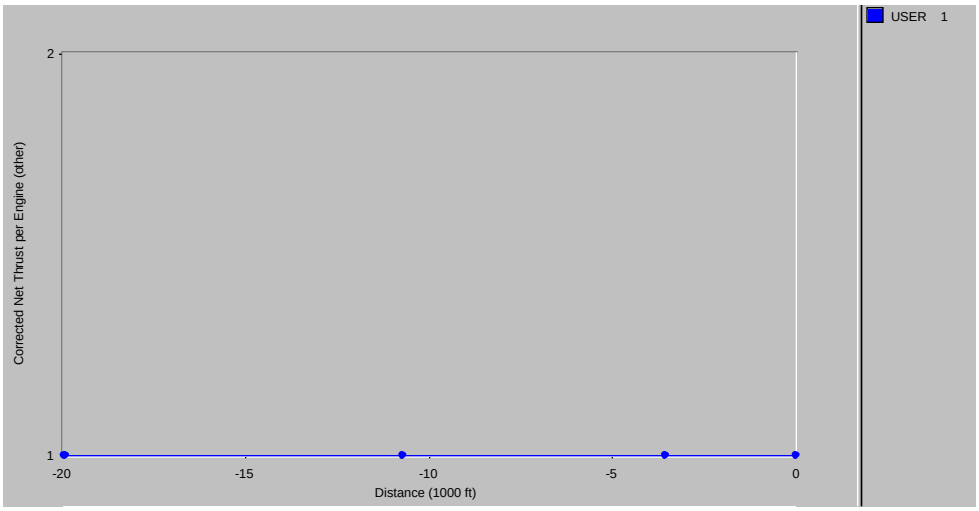


Table 16
AS350 (SA350D) Profile Points

Aircraft ID	Operation Type	Profile ID	Profile Stage*	Point ID	Distance (feet)	Altitude (feet, AFE)	Ground Speed (knots)	Thrust Setting	Operational Mode
SA350D	Departure	USER	1	1	0.0	0.0	5.0	1.00	D
				2	500.0	200.0	15.0	1.00	D
				3	2000.0	469.0	80.0	1.00	D
				4	7539.0	669.0	120.0	1.00	D
				5	16840.0	1669.0	120.0	1.00	D
SA350D	Arrival	USER	1	1	-19960.0	1169.0	120.0	1.00	A
				2	-10754.0	669.0	100.0	1.00	A
				3	-3546.0	269.0	60.0	1.00	A
				4	0.0	0.0	5.0	1.00	A

Source: URS Corporation, 2003

*Stage length for departures; arrival group (glide slope), if applicable.

U.S. Department
of Transportation
**Federal Aviation
Administration**

800 Independence Ave., S.W.
Washington, DC 20591

FEB 12 2004

Mr. Jeffrey D. Fuller
URS Corporation
1615 Murray Canyon Road
San Diego, CA 92108

Dear Mr. Fuller:

The Office of Environment and Energy has reviewed the profiles submitted for our review for use in the 14 CFR Part 150 Update for McClellan-Palomar Airport (CRQ). This submission requests review of profiles for helicopter and some military aircraft. Helicopters aircraft do not have standard profiles and most of this submission serves to document that inputs are consistent and that an appropriate amount of survey work was completed.

Our office approves the use of the modified profiles for use in the 14 CFR Part 150 Update for McClellan-Palomar. This approval is based on assurance that the comments received by URS by email on January 6 concerning the C9A, C2 and C12 profiles have been addressed. Those comments are attached for reference. Also note the inconsistency between Figure 2 and Table 3 for the C2 User-Defined profile. It is also recommended that the Part 150 expand on Section 4 of this submission to explain the data collection for helicopters used to justify the profiles contained in this submittal.

Please understand that this approval for use of the modified departure profiles is limited to this particular 14 CFR Part 150 Update for CRQ. Any additional projects or non-standard INM input for CRQ will require separate approval as will use of these profiles for another site.

Sincerely,

John Gulding
Noise Division
Office of Environment and Energy

Enclosure

URS Part 150 Study Profile Review:

C9A Overflight Profile:

- The initial climb segment of the user-defined C9A Overflight profile does not match the aircraft performance demonstrated by the NOISEMAP departure profile from a force-balance perspective. To maintain consistency with NOISEMAP recommend the following. The user-defined initial climb segment utilizes the same amount of thrust as the initial climb segment of the NOISEMAP profile yet it has a lower climb rate and lower acceleration. The distance value for the acceleration segment endpoint should be reduced by 4300 ft. This will also bring the user-defined segment's climb rate more in line with that of the NOISEMAP segment. The distance values for all subsequent points in the profile should also be reduced by 4300 ft so that they continue to match the NOISEMAP profile.
- The first three points in the user-defined Overflight profile should use the Approach operational mode rather than the Departure operational mode. These three points represent the Approach part of the profile and should have their noise levels calculated using the Approach NPD curves rather than the Departure NPD curves.
- It is not stated why the profile begins its Approach at an altitude of 2310 ft rather than the INM standard 6000 ft and ends its Departure at an altitude of 2818 ft rather than the INM standard 10,000 ft. Depending on the circumstances of the study, noise from aircraft using this profile may be incorrectly unaccounted for because the aircraft appear and disappear from the model at such low altitudes.
- The thrust setting of the first profile point of the user-defined profile should be interpolated from the thrust settings of the two closest standard Approach profile points in the same manner that the speed and altitude values were obtained for that point. The current thrust setting for that point seems too low.

C2 Overflight Profile:

- The operational mode for point number 4 of the user-defined Overflight profile should be changed from Departure to Approach, and the operational mode for step number 5 should be changed from Approach to Departure. This change will make the thrust values, speed changes, and altitude changes for those points consistent with the operational mode even though it will not change the resulting noise contours because the Approach and Departure NPD curves are identical for this aircraft.
- The altitude, speed and thrust values for many of the points in the user-defined Overflight profile have been taken directly form the standard Approach and Departure procedures, but for some reason the thrust values have been rounded off while the altitude and speed values have not. For those points taken directly form the standard profiles it is better to use the exact thrust values to maintain consistency with the standard profiles.

- As with the C9A profile above, the initial approach altitude and the final departure altitude are lower than those normally used in standard INM profiles.

C12 Circuit Profile:

- The operational mode for point number 1 of the user-defined Circuit profile should be changed from Approach to Departure, and the operational modes for points 5, 6 and 7 should be changed from Departure to Approach. It is important to maintain consistency between the nature of the profile step, the thrust value of the profile step, and the operational mode so that the INM references the correct NPD curves when calculating noise.
- It is usually not appropriate for an aircraft to start its takeoff roll at 111 knots as dictated by point number 1 of the user-defined Circuit profile. The speed value for this point should be changed to 0 knots.
- A Circuit profile in the INM is usually defined as a combined takeoff and landing. There is no landing roll defined in the user-defined Circuit profile, and thrust increases when the airplane first touches down. Some explanation should be made as to why the Approach section of the Circuit profile has been defined in this manner.

C12 TGO Profile:

- The operational mode for point number 1, 2, 8, and 9 of the user-defined Touch-and-Go profile should be changed from Departure to Approach. The operational mode for point number 5 should be changed from Approach to Departure.

Response to FAA Comments on

McClellan-Palomar Airport FAR Part 150 Study Update

FAA Profile Review, Revised December 3, 2003

(Original FAA comments recreated verbatim)

1) Comment, Cover letter, 2nd paragraph:
"Also note the inconsistency between Figure 2 and Table 3 for the C2 User-Defined profile."

Response: *C2 user-defined profile has been modified and the figure and table are now consistent. Please see Errata, pages 4 and 5.*

2) Comment, Page 1, C9A Overflight Profile:

a. The initial climb segment of the user-defined C9A Overflight profile does not match the aircraft performance demonstrated by the NOISEMAP departure profile from a force-balance perspective. To maintain consistency with NOISEMAP recommend the following. The user-defined initial climb segment utilizes the same amount of thrust as the initial climb segment of the NOISEMAP profile yet it has a lower climb rate and lower acceleration. The distance value for the acceleration segment endpoint should be reduced by 4300 ft. This will also bring the user-defined segment's climb rate more in line with that of the NOISEMAP segment. The distance values for all subsequent points in the profile should also be reduced by 4300 ft so that they continue to match the NOISEMAP profile.

b. The first three points in the user-defined Overflight profile should use the Approach operational mode rather than the Departure operational mode. These three points represent the Approach part of the profile and should have their noise levels calculated using the Approach NPD curves rather than the Departure NPD curves.

c. It is not stated why the profile begins its Approach at an altitude of 2310 ft rather than the INM standard 6000 ft and ends its Departure at an altitude of 2818 ft rather than the INM standard 10,000 ft. Depending on the circumstances of the study, noise from aircraft using this profile may be incorrectly unaccounted for because the aircraft appear and disappear from the model at such low altitudes.

d. The thrust setting of the first profile point of the user-defined profile should be interpolated from the thrust settings of the two closest standard Approach profile points in the same manner that the speed and altitude

values were obtained for that point. The current thrust setting for that point seems too low.

Response: *Concur on all points. The C9A user-defined flight profile has been amended and is shown in the Errata section.*

3) Comment, page 1, C2 Overflight Profile

a. The operational mode for point number 4 of the user-defined Overflight profile should be changed from Departure to Approach, and the operational mode for step number 5 should be changed from Approach to Departure. This change will make the thrust values, speed changes, and altitude changes for those points consistent with the operational mode even though it will not change the resulting noise contours because the Approach and Departure NPD curves are identical for this aircraft.

b. The altitude, speed and thrust values for many of the points in the user-defined Overflight profile have been taken directly form the standard Approach and Departure procedures, but for some reason the thrust values have been rounded off while the altitude and speed values have not. For those points taken directly form the standard profiles it is better to use the exact thrust values to maintain consistency with the standard profiles.

c. As with the C9A profile above, the initial approach altitude and the final departure altitude are lower than those normally used in standard INM profiles.

Response:

a. Concur

b. Thrust values from INM's standard approach and departure procedures were not rounded in Table 5. The data shown is consistent with what INM accepts.

c. Concur. The C2 user-defined flight profile has been amended and is shown in the Errata section.

4) Comment, page 2, C12 Circuit Profile

a. The operational mode for point number 1 of the user-defined Circuit profile should be changed from Approach to Departure, and the operational modes for points 5, 6 and 7 should be changed from Departure to Approach. It is important to maintain consistency between the nature of the profile step, the thrust value of the profile step, and the operational mode so that the INM references the correct NPD curves when calculating noise.

b. It is usually not appropriate for an aircraft to start its takeoff roll at 111 knots as dictated by point number 1 of the user-defined Circuit profile. The speed value for this point should be changed to 0 knots.

c. A Circuit profile in the INM is usually defined as a combined takeoff and landing. There is no landing roll defined in the user-defined Circuit profile, and thrust increases when the airplane first touches down. Some explanation should be made as to why the Approach section of the Circuit profile has been defined in this manner.

Response: *Concur on all points. A landing roll has been added. The C12 user-defined flight profile has been amended and is shown in the Errata section.*

5) Comment, page 2, C12 TGO Profile: The operational mode for point number 1, 2, 8, and 9 of the user-defined Touch-and-Go profile should be changed from Departure to Approach. The operational mode for point number 5 should be changed from Approach to Departure.

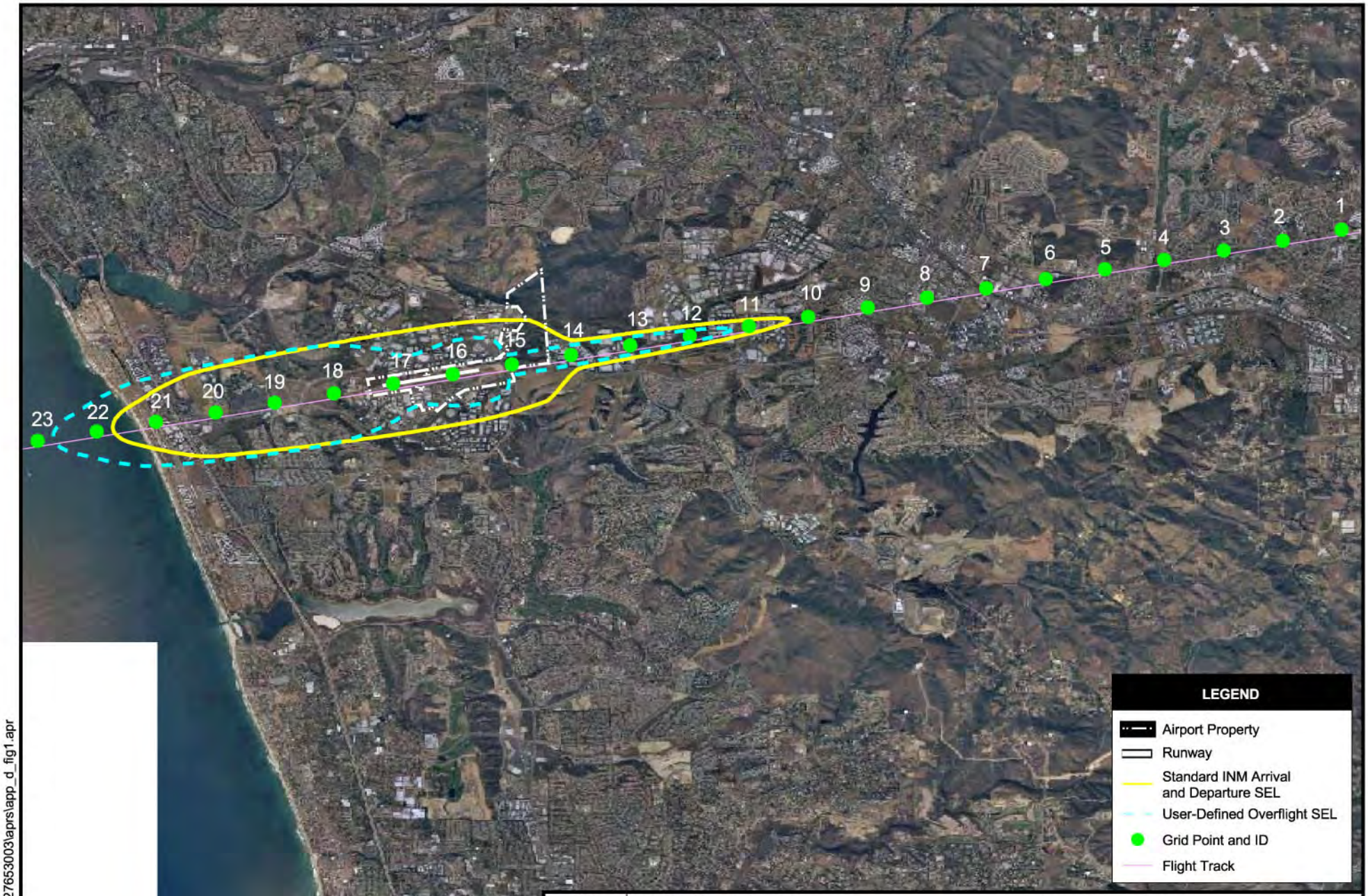
Response: *Concur. The C12 user-defined flight profile has been amended and is shown in the Errata section.*

Errata for McClellan-Palomar Airport FAR Part 150 Study Update

FAA Profile Review, Revised December 3, 2003

1) Table 1, CH-53E, Comment column: Replace “noise map” with “Noisemap”.
2) Table 1, note 2: Replace “…do not conduct touch-and-go.” with “does not typically conduct touch-and-go.”
3) Page 4, 1st paragraph, 3rd line: Replace “…sound-exposure level…” with “…Sound Exposure Level…”
4) Figure 1: Update with corrected user-defined profile. See attached.
5) Table 2: Update with corrected user-defined profile (and difference) data. See attached.
6) Figure 2: Update with corrected user-defined profile. See attached.
7) Table 3: Update with corrected user-defined profile (and difference) data. See attached.
8) Page 9, paragraph 3, 2nd sentence: Insert the following text:
   “For the C-12, H-60 and OH-58, the 140th Aviation Brigade from Los Alamitos Army Airfield, Los Alamitos, CA were queried. For the civilian helicopters, two operators were contacted: Civic Helicopters and Mercy Air. For the CH-53E, the Community Plans and Liaison office representing Marine Corps Air Station Miramar was contacted. These contacts were provided a map(s) of the CRQ vicinity and were requested to sketch their typical flight paths and provide altitude, speed and power setting at points along the flight path where said parameters change.”

9) Figure 3: Update with corrected user-defined profile data. See attached.
10) Table 4: Update with corrected user-defined profile data. See attached.
11) Figure 4: Update with corrected user-defined profile data. See attached.
12) Table 5: Update with corrected user-defined profile data. See attached.
13) Figure 6: Update with corrected user-defined profile data. See attached.
14) Table 6: Update with corrected user-defined profile data. See attached.



SOURCES: AirPhotoUSA (2002 Aerial), SANDAG (NINA Boundary, base features), URS (Flight Path Model, 2004).

N

95 dBA SEL CONTOURS FOR C-9A STANDARD AND USER-DEFINED FLIGHT PROFILES

URS

4000 0 4000 8000 Feet

SCALE: 1" = 8,000' (1:96,000)

CHECKED BY: TM	DATE: 9-9-04	FIG. NO:
PM: JF	PROJ. NO: 27653003.00400	E-1

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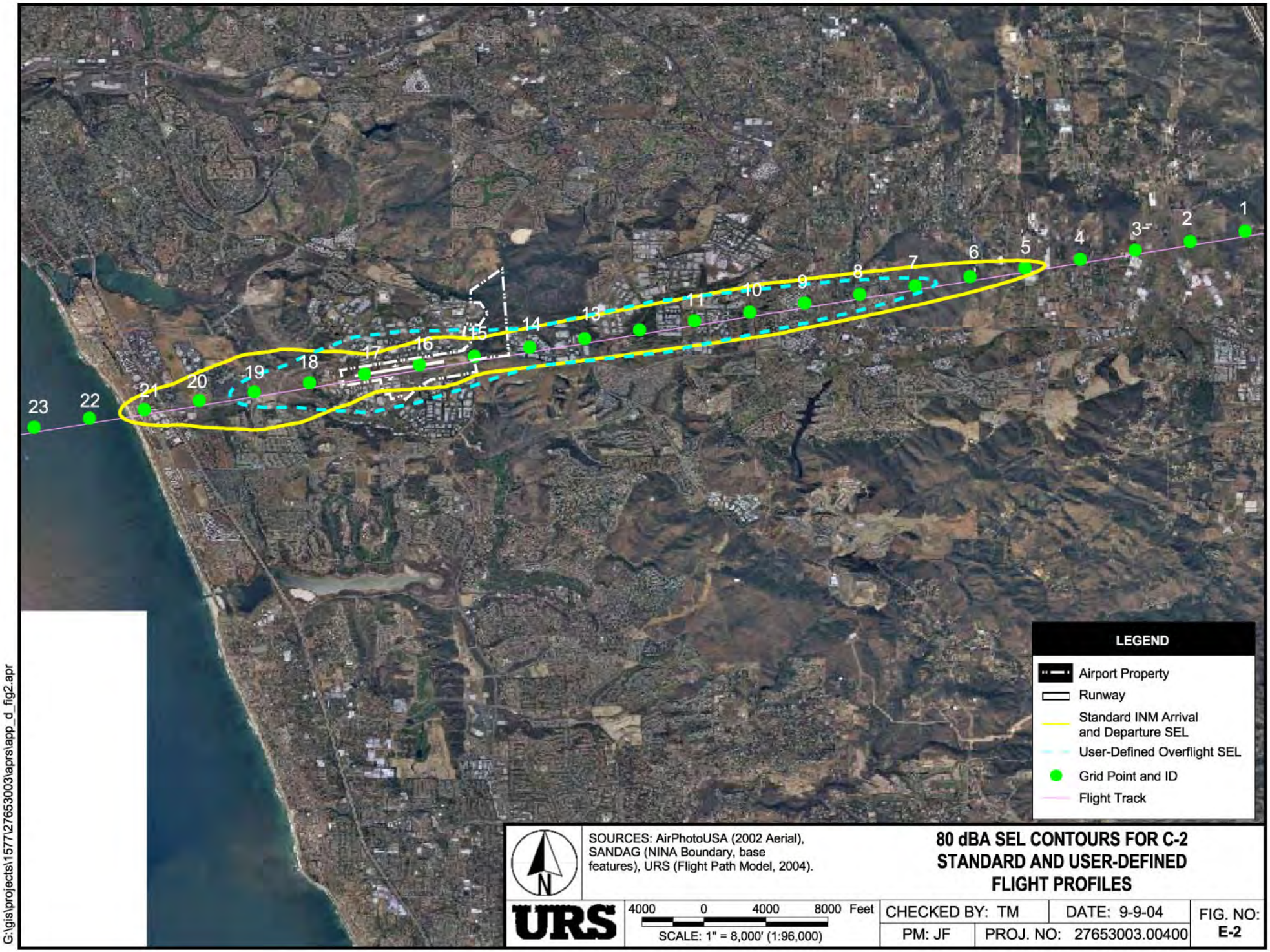
Table 2
C9A Grid Point Comparison

			SEL (dBA)		
GRID POINT	X_COORD	Y_COORD	STANDARD PROFILE	USER-DEFINED PROFILE	DIFFERENCE (Standard minus User-Defined, dBA)
1	7.5406	1.4616	82.6	82.6	0.0
2	7.0528	1.3505	84.0	84.0	0.0
3	6.5618	1.2565	85.5	85.5	0.0
4	6.0707	1.1625	86.5	86.7	-0.2
5	5.5796	1.0684	87.3	87.7	-0.4
6	5.0885	0.9744	88.1	88.8	-0.7
7	4.5975	0.8804	89.0	90.0	-1.0
8	4.1064	0.7864	90.1	91.3	-1.2
9	3.6153	0.6924	91.4	92.8	-1.4
10	3.1243	0.5984	92.8	94.5	-1.7
11	2.6332	0.5043	94.4	96.3	-1.9
12	2.1421	0.4103	96.5	98.5	-2.0
13	1.6510	0.3163	98.9	101.2	-2.3
14	1.1600	0.2223	102.2	105.7	-3.5
15	0.6689	0.1283	106.7	116.7	-10.0
16	0.1778	0.0343	141.4	112.0	29.4
17	-0.3133	-0.0597	122.9	108.7	14.2
18	-0.8043	-0.1538	113.7	106.2	7.5
19	-1.2954	-0.2478	108.6	104.1	4.5
20	-1.7865	-0.3418	105.1	102.1	3.0
21	-2.2775	-0.4358	102.3	98.1	4.2
22	-2.7686	-0.5298	98.1	93.7	4.4
23	-3.2597	-0.6238	93.7	90.8	2.9

Insert Figure 2:
Title:
Figure 2 – 80 dBA SEL Contours for C-2 Standard and User-Defined Flight Profiles

Create it from:

1. SEL80_ud.SHP
    a. Legend: C2 User-defined Overflight (Practice Approach) Flight Profile
    b. Solid Line
2. SEL95_std.SHP
    a. Legend: CVR580 Standard INM Arrival and Departure Flight Profiles
    b. Dashed Line
3. Grid-Points.shp
    a. Legend: Grid Location
    b. Label per ID
4. Airport-Runways.shp
    a. Legend: Runway 06/24
5. Base map = aerial, airport property, streets, north arrow, etc.
6. Scale: Fit all 23 grid points plus a small buffer distance; use same scale as Figure 1
7. Put a dimension alongside two of the grid points showing that each grid point is spaced 0.5 nautical mile apart.



SOURCES: AirPhotoUSA (2002 Aerial), SANDAG (NINA Boundary, base features), URS (Flight Path Model, 2004).

80 dBA SEL CONTOURS FOR C-2 STANDARD AND USER-DEFINED FLIGHT PROFILES

URS

4000 0 4000 8000 Feet

SCALE: 1" = 8,000' (1:96,000)

CHECKED BY: TM	DATE: 9-9-04	FIG. NO:
PM: JF	PROJ. NO: 27653003.00400	E-2

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Table 3
C2 Grid Point Comparison

			SEL (dBA)		
GRID POINT	X_COORD	Y_COORD	STANDARD PROFILE	USER-DEFINED PROFILE	DIFFERENCE (Standard minus User-Defined, dBA)
1	7.5406	1.4616	76.6	75.0	1.6
2	7.0528	1.3505	77.5	75.8	1.7
3	6.5618	1.2565	78.5	76.7	1.8
4	6.0707	1.1625	79.4	77.6	1.8
5	5.5796	1.0684	80.3	78.6	1.7
6	5.0885	0.9744	81.4	79.5	1.9
7	4.5975	0.8804	82.4	80.4	2.0
8	4.1064	0.7864	83.5	81.4	2.1
9	3.6153	0.6924	84.8	82.4	2.4
10	3.1243	0.5984	86.1	83.5	2.6
11	2.6332	0.5043	87.5	84.8	2.7
12	2.1421	0.4103	89.2	86.7	2.5
13	1.6510	0.3163	91.2	89.7	1.5
14	1.1600	0.2223	94.0	94.5	-0.5
15	0.6689	0.1283	98.0	94.3	3.7
16	0.1778	0.0343	121.9	89.4	32.5
17	-0.3133	-0.0597	102.1	86.1	16.0
18	-0.8043	-0.1538	90.1	82.9	7.2
19	-1.2954	-0.2478	86.1	80.8	5.3
20	-1.7865	-0.3418	82.9	79.1	3.8
21	-2.2775	-0.4358	80.8	77.7	3.1
22	-2.7686	-0.5298	79.1	76.5	2.6
23	-3.2597	-0.6238	77.7	75.5	2.2

Figure 3
C9A Profile Graphs

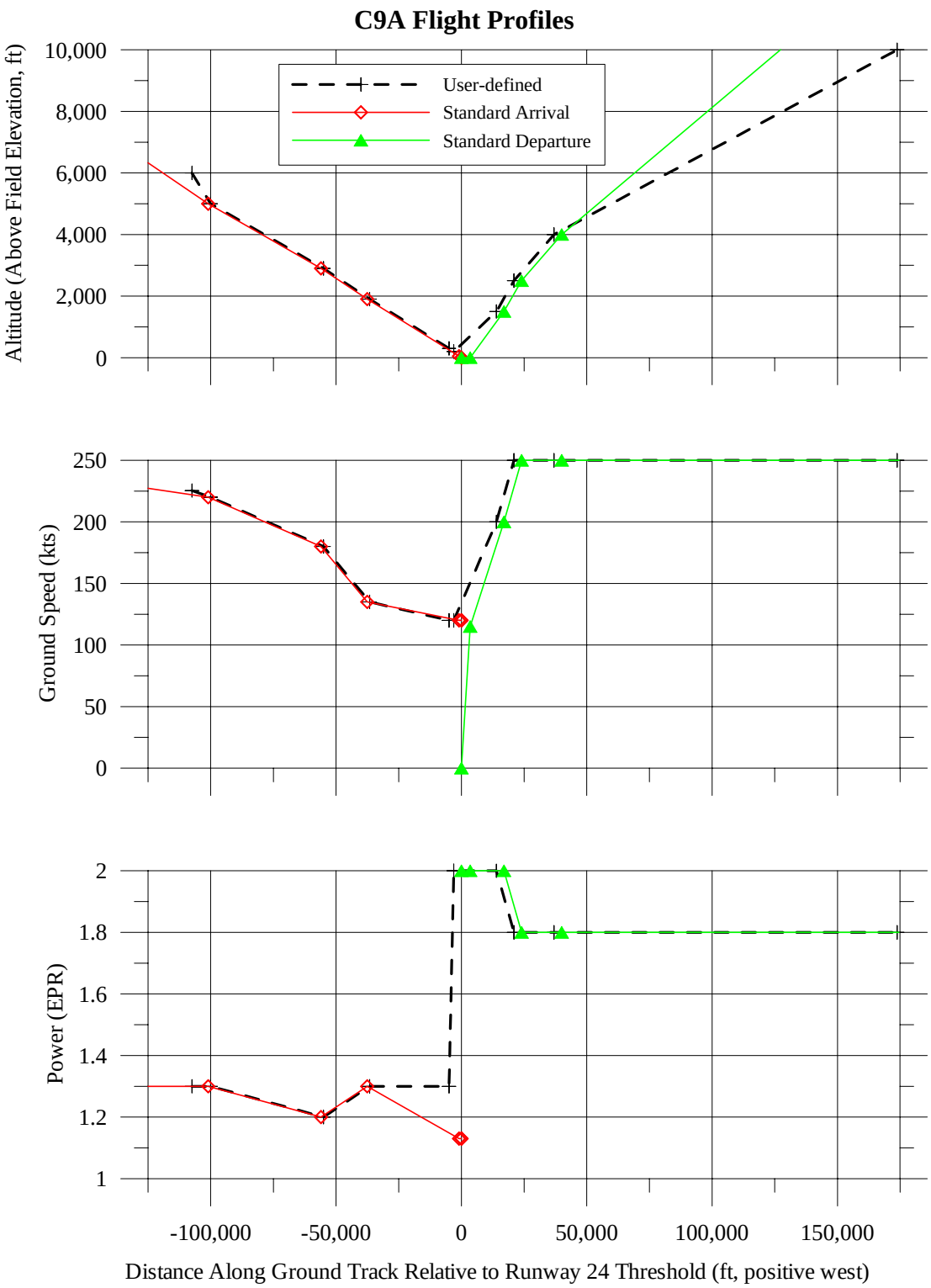


Table 4
C9A Profile Points

Aircraft ID	Operation Type	Profile ID	Profile Stage*	Point ID	Distance (feet)	Altitude (feet, AFE)	Ground Speed (knots)	Corrected Net Thrust per Engine (EPR)	Operational Mode
C9A	Arrival	NOISEMAP	1	1	-200989.2	10532.0	250.0	1.30	A
				2	-100989.2	5000.0	220.0	1.30	A
				3	-55989.2	2900.0	180.0	1.20	A
				4	-37589.2	1900.0	135.0	1.30	A
				5	-989.2	50.0	120.0	1.13	A
				6	0.0	0.0	120.0	1.13	A
				7	10.0	0.0	120.0	1.13	A
C9A	Departure	NOISEMAP	1	1	0.0	0.0	0.0	2.00	D
				2	3500.0	0.0	115.0	2.00	D
				3	17000.0	1500.0	200.0	2.00	D
				4	24000.0	2500.0	250.0	1.80	D
				5	40000.0	4000.0	250.0	1.80	D
				6	200000.0	15000.0	250.0	1.80	D
C9A	Overflight	USER	1	1	0.0	6000.0	225.4	1.30	A
				2	7470.7	5000.0	220.0	1.30	A
				3	52470.7	2900.0	180.0	1.20	A
				4	70870.7	1900.0	135.0	1.30	A
				5	102524.7	300.0	120.0	1.30	A
				6	104432.7	200.0	120.0	2.00	D
				7	121432.7	1500.0	200.0	2.00	D
				8	128432.7	2500.0	250.0	1.80	D
				9	144432.7	4000.0	250.0	1.80	D
				10	281287.2	10000.0	250.0	1.80	D

Source: URS Corporation, 2003

*Stage length for departures; arrival group (glide slope), if applicable.

Figure 4
C2 (CVR580) Profile Graphs

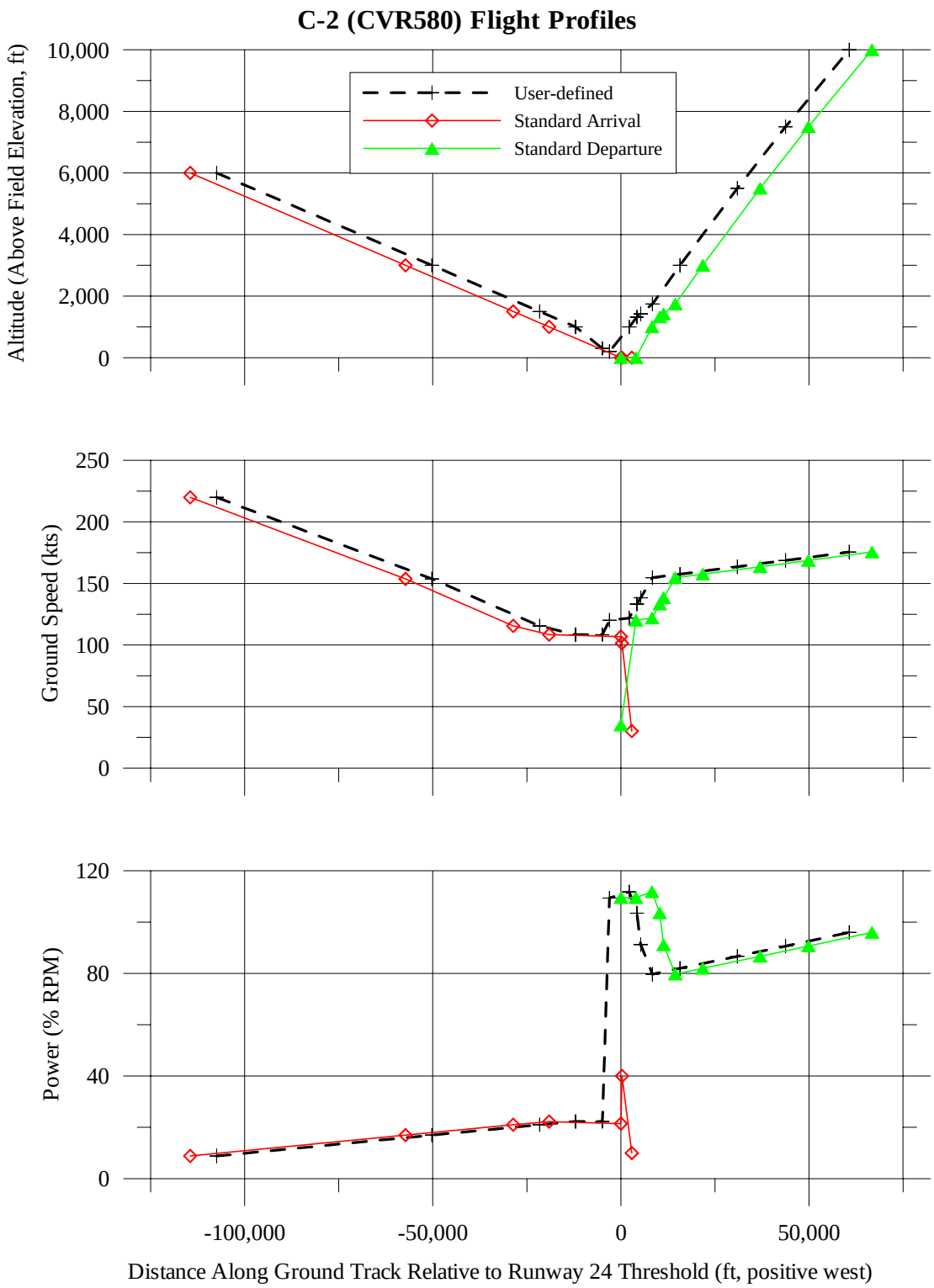


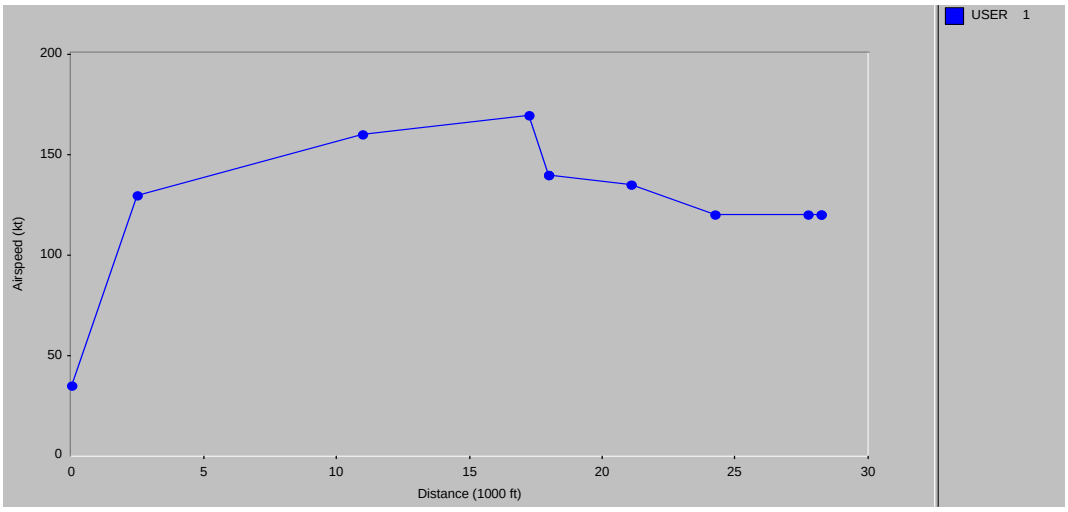
Table 5
C2 (CVR580) Profile Points

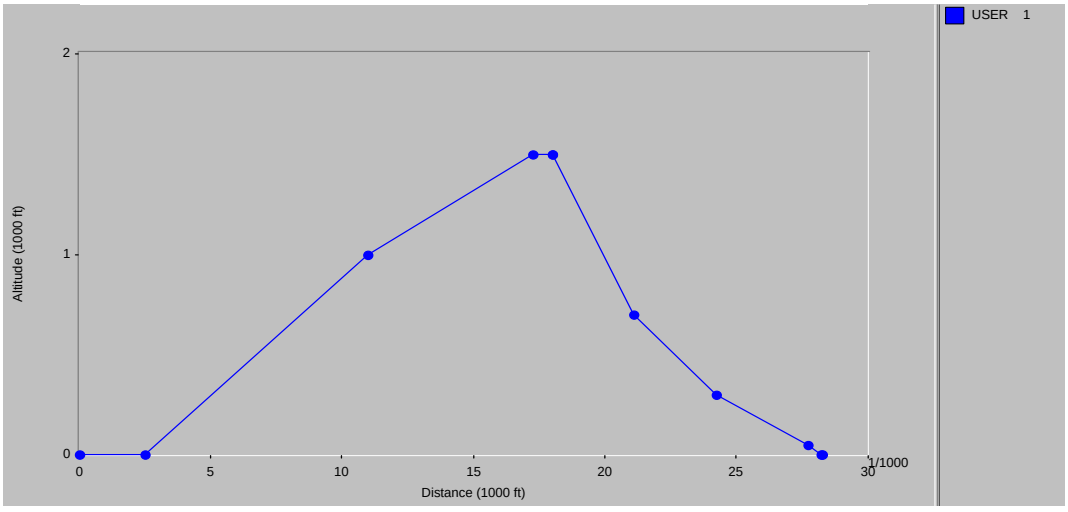
Aircraft ID	Operation Type	Profile ID	Profile Stage*	Point ID	Distance (feet)	Altitude (feet, AFE)	Ground Speed (knots)	Corrected Net Thrust per Engine (% RPM)	Operational Mode
CVR580	Arrival	STANDARD	1	1	-114486.8	6000.0	219.9	8.83	A
				2	-57243.4	3000.0	153.7	16.98	A
				3	-28621.7	1500.0	115.5	21.04	A
				4	-19081.1	1000.0	108.4	22.26	A
				5	0.0	0.0	106.8	21.46	A
				6	287.6	0.0	101.4	40.00	D
				7	2876.0	0.0	30.1	10.00	A
CVR580	Departure	STANDARD	1	1	0.0	0.0	35.0	109.47	D
				2	3975.3	0.0	120.1	109.47	D
				3	8275.3	1000.0	121.9	111.86	D
				4	10323.9	1318.3	133.2	103.59	D
				5	11323.9	1421.6	138.4	91.16	D
				6	14446.1	1744.1	154.7	79.74	D
				7	21777.1	3000.0	157.6	81.97	D
				8	36999.8	5500.0	163.6	86.65	D
				9	49827.8	7500.0	168.7	90.65	D
				10	66746.0	10000.0	175.5	96.00	D
CVR580	Overflight	USER	1	1	0.0	6000.0	219.9	8.83	A
				2	57243.4	3000.0	153.7	16.98	A
				3	85865.1	1500.0	115.5	21.00	A
				4	95405.7	1000.0	108.4	22.30	A
				5	102524.7	300.0	108.4	22.30	A
				6	104432.7	200.0	120.1	109.40	D
				7	109670.0	1000.0	121.9	111.80	D
				8	111718.6	1318.3	133.2	103.50	D
				9	112718.6	1421.6	138.4	91.20	D
				10	115840.8	1744.1	154.7	79.70	D
				11	123171.8	3000.0	157.6	82.00	D
				12	138394.5	5500.0	163.6	86.65	D
				13	151222.5	7500.0	168.7	90.65	D
				14	168140.7	10000.0	175.5	96.00	D

Source: URS Corporation, 2003

*Stage length for departures; arrival group (glide slope), if applicable.

Figure 6
C12 Circuit Profile Graphs





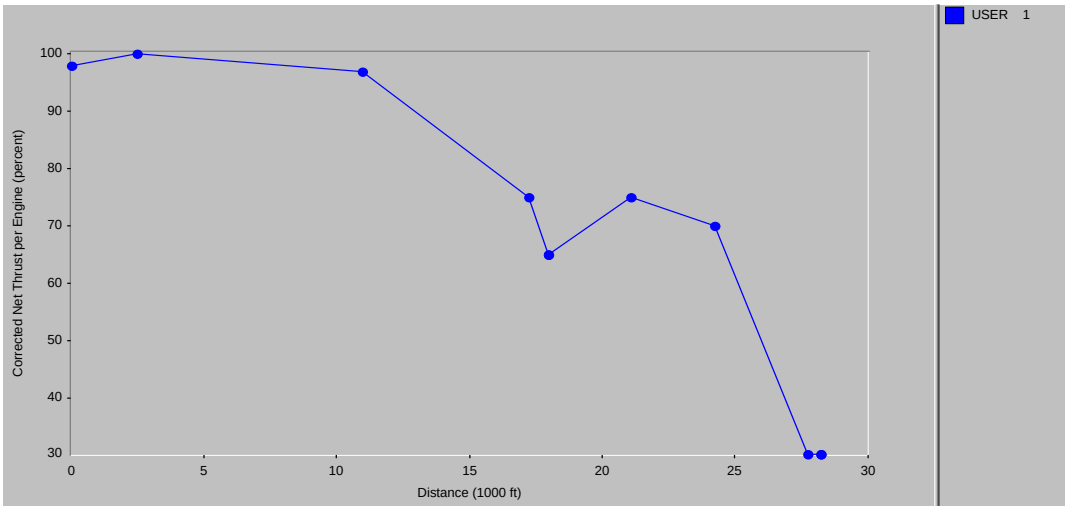


Table 6
C12 Profile Points

Aircraft ID	Operation Type	Profile ID	Profile Stage*	Point ID	Distance (feet)	Altitude (feet, AFE)	Ground Speed (knots)	Corrected Net Thrust per Engine (% RPM)	Operational Mode
C12	Circuit	USER	1	1	0.0	0.0	35.0	98.10	D
				2	2500.0	0.0	130.0	100.00	D
				4	10997.8	1000.0	160.0	97.00	D
				5	17256.2	1500.0	170.0	75.00	D
				6	18000.0	1500.0	140.0	65.00	A
				7	18000.0	1500.0	140.0	65.00	A
				8	21099.0	700.0	135.0	75.00	A
				9	24258.0	300.0	120.0	70.00	A
				10	27754.0	50.0	120.0	30.00	A
				11	28254.0	0.0	120.0	30.00	A
				12	28264.0	0.0	120.0	30.00	A
C12	Touch and Go	USER	1	1	-10754.7	1500.0	140.0	65.00	A
				2	-7655.9	700.0	135.0	75.00	A
				3	-4496.3	300.0	120.0	70.00	A
				4	-1000.0	50.0	120.0	70.00	A
				5	0.0	0.0	111.0	97.00	D
				6	2491.2	0.0	111.0	97.00	D
				7	10997.8	1000.0	160.0	97.00	D
				8	17256.2	1500.0	170.0	75.00	A
				9	18000.0	1500.0	140.0	65.00	A

Source: URS Corporation, 2003

*Stage length for departures; arrival group (glide slope), if applicable.

This appendix provides the document submitted to the FAA regarding the aviation activity forecast developed for the McClellan-Palomar Airport Part 150 Noise Compatibility Study Update. The appendix also contains the URS response to the FAA comments and associated errata pages for the submitted document.

Charters/Hangars/Tiedowns; Commercial Airlines; FBO'S; and Flight Schools Contacted

Jet Source Charter, Inc.	FBO	Shaun Monegan, Frank Milan	Manager	2036 Palomar Airport Rd. Carlsbad, CA 92008	(760) 804-1500 (888) 700-4538
Magellan Aviation	FBO; mostly based a/c	Martha Greenlaw	Manager	2006 Palomar Airport Rd. Carlsbad, CA 92008	(760) 438-7603
Schubach Aviation	charter	Henry Schubach	Manager	2006 Palomar Airport Rd. Carlsbad, CA 92008	(760) 929-0307 (800) 214-8215
Western Flight	FBO	Ginna Reyes	Manager	2210 Palomar Airport Rd. Carlsbad, CA 92008	(760) 438-6800 (800) 523-4038
Elite Jet	fractional	Scott Walker	President	5962 La Place Ct. Carlsbad, CA 92008	(760) 438-7245
America West Express	Airline	Treena Smith	Manager	2198 Palomar Airport Rd. Carlsbad, CA 92008	(760) 438-3517
United Express (Skywest)	Airline	Donald Graham	Station Manager	2198 Palomar Airport Rd. Carlsbad, CA 92008	(760) 438-2329
Flying Samaritan Group	charter	Ken Zirda		5208 Sand Dollar Ct. San Diego, CA 92130	(858) 350-9666
Exclusive Charter Services	charter	Lason Brown	President	3753 John Montgomery Dr. San Diego, CA 92123	(858) 874-6532
Federal Aviation Adminstration Palomar Air Traffic Control Tower	FAA	Sandy Detherage (male)	Manager	2200 Palomar Airport Road Carlsbad, CA 92008	(760) 438-4969 (619) 299-0677 (LF)
Civic Helicopters	School, charter	Chim Tu	President	2192-H Palomar Airport Rd. Carlsbad, CA 92008	(760) 438-8424
Grey Eagle Aviation	school	Mel Holmes	President	2186 Palomar Airport Rd. Carlsbad, CA 92008	(760) 804-8670
Pinnacle Aviation Academy	school	George McJimsey	President	2016 Palomar Airport Rd. Carlsbad, CA 92008	(760) 929-1009
San Diego Flight Services	FAA	Rose Sardisco		4302 Ponderosa Avenue San Diego, CA 92123	(858) 277-0503
Eastridge Group	not flight-related	Misty Pawlowski	Operations Supervisor	5650 El Camino Real, Suite 101 Carlsbad, CA 92008	(760) 438-4202
Aviation	unknown	Jack Williams		6714 Bamboury Place Carlsbad, CA 92009	(760) 603-6323
South Seas	private	Wayne Dauber		P.O. Box 5035 Rancho Santa Fe, CA 92067	(760) 749-6085 (760) 809-6898
Aviation Resource Group	private	Greg Hein		2210 Palomar Airport Rd, Valley Center, CA 92082	(760) 751-2194
Palomar Airport Fuels	also "Palomar Airport Center"; fuel seller	Nelson Carrick		2006 Palomar Airport Rd. Carlsbad, CA 92008	(760) 803-8877
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REPORT

MCCLELLAN-PALOMAR AIRPORT
FAR PART 150 STUDY UPDATE

PRELIMINARY FORECAST OF
AVIATION ACTIVITY

PREPARED FOR

MCCLELLAN-PALOMAR AIRPORT

URS PROJECT NO. 27653003-01301

REVISED NOVEMBER 5, 2003

R E P O R T

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PRELIMINARY FORECAST OF AVIATION ACTIVITY

Prepared for

McClellan-Palomar Airport
2198 Palomar Airport Road
Carlsbad, CA 92008-4814

URS Project No. 27653003.01301

Revised November 5, 2003

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1.1 INTRODUCTION

This section presents forecasts of aviation demand at McClellan-Palomar Airport (CRQ) through the year 2013. These forecasts provide the basis for estimating future aircraft operational levels and their associated noise impacts to the land uses surrounding the airport. The forecasts presented in this section were prepared based on historical annual activity through December.

It should be noted that aviation forecasting consists of educated estimates regarding future activity levels. Although past trends and current industry events provide clues regarding future levels of activity, the actual level of aircraft operations that will occur at CRQ are unknown. Thus, the forecasts presented on the following pages should be reviewed with this fact in mind.

1.2 OVERVIEW OF ECONOMIC AND WORLD EVENTS AND INDUSTRY TRENDS

The challenges currently facing the aviation industry are unprecedented, and most experts agree that the industry is in a crisis. Several major carriers are currently in, or very close to, bankruptcy. Passenger enplanements are significantly lower than recent years in every category of traffic, and prospects for the near-term future are uncertain. Reasons for the dismal state of affairs include the 2001 economic recession, September 11 terrorist attacks, war in Iraq, and a number of other issues. All of these factors could affect future passenger demand and aircraft activity levels at CRQ. A brief summary of these issues is presented in the following paragraphs.

1.2.1 Economic and World Events

1.2.1.1 Economic Recession

The U.S. entered its tenth economic recession since World War II in the first quarter of 2001; the recession lasted through the third quarter of the same year. Economic growth since the recession has been erratic, with growth of Gross Domestic Product (GDP) ranging from a high of 5 percent in the first quarter of 2002 to a low of 1.3 percent in the second quarter of 2002. For the calendar year 2002, GDP growth was 2.4 percent, compared to 0.3 percent in 2001 and 3.8 percent in 2000. The present state of the U.S. economy is uncertain. With reported upturns in certain key economic sectors, the short-term outlook is clouded by national and worldwide political turmoil.

1.2.1.2 September 11 Terrorist Attacks

The aftermath of the September 11, 2001, terrorist attacks with respect to the aviation industry has decreased passenger demand and increased costs to the airlines significantly. Aircraft activity levels have not yet rebounded to the levels experienced prior to the attacks, and the latest Federal Aviation Administration (FAA) projections indicate that aircraft activity levels will not return to pre-September 11 levels until 2004/2005. Security-related costs have imposed significant new costs on airlines, including mandates for the installation of new cockpit doors. These costs, along with higher labor and fuel costs, have resulted in severe financial losses for most major U.S. airlines. Because of the lower passenger levels and higher costs, many airlines have reduced their schedules and in many instances substituted service by their code share regional partners for mainline service.

1.2.1.3 Middle East Hostilities

As of September 2003, U.S. military involvement in Iraq is continuing and has had a broad effect across the aviation industry. Nearly all airlines have experienced decreases in passengers and have cut capacity in response. The Air Transport Association (ATA) described the impact of the war as follows in a March 26, 2003, press release:

> "In the week preceding the war, traffic moderated slightly. Following the March 16 Azores Summit (between U.S. President Bush and British Prime Minister Tony Blair), however, demand dropped at a pace not seen since the aftermath of the September 11 attacks. Traffic for the week ended March 23 fell 10 percent, led by a 25 percent drop in the Atlantic, a 13 percent drop in the Pacific, and an 8 percent drop in Latin markets. Domestic traffic also fell 7 percent.
>
> Advance bookings for the next 60 to 90 days suggest no relief in sight. Domestic bookings are down more than 20 percent, Atlantic down more than 40 percent, Latin off more than 15 percent, and Pacific more than 30 percent. Airlines have reported that on some days cancellations are exceeding bookings."

Obviously, the Middle East military efforts will have an effect on passenger enplanements for calendar year 2003. The duration and intensity of the military involvement will determine the magnitude of effect. However, data for the period following the 1991 Gulf War suggests that passenger levels may rebound to pre-war levels within six months of the end of hostilities.

1.2.2 Industry Trends

Because of and in response to recent world and economic events, the aviation industry is undergoing numerous changes. These changes include the continued growth of low-cost carriers, expanded use of regional jets, continued use of the hub and spoke system, and expansion of security procedures. These issues are explored briefly in the following paragraphs, and their ability to positively or adversely affect future activity levels at CRQ is discussed.

1.2.2.1 Growth of Low-Cost Carriers

Low-cost airlines such as Southwest Airlines, JetBlue Airlines, Air Trans, and American Trans Air have continued to gain market share in recent years as business travelers seek less-expensive alternatives. Low-cost carrier service is available at nearby markets such as Los Angeles, San Diego, Long Beach, and Burbank. The proportion of travelers in the McClellan-Palomar market using low-cost air carriers at these surrounding markets instead of service at CRQ is unknown. However, based on data at similar markets, there is a high potential for significant diversion of air passengers in the McClellan-Palomar market.

This factor would tend to indicate slower growth in future years as low-cost carriers in surrounding markets capture a greater share of the market. However, this may be mitigated somewhat because traditional mainline carriers seek to reduce airfares to stimulate passenger demand.

1.2.2.2 Introduction of Regional Jets

Regional jets are defined as jet aircraft accommodating 35 to 100 passengers. These aircraft have been acquired by commuter airlines to replace their turboprop aircraft, typically providing connecting service to mainline carriers at hub airports. The significance of these aircraft to a market such as McClellan-Palomar is that these aircraft provide a superior level of customer service and convenience in comparison to the turboprop aircraft that they replace. Passengers typically rank regional jet aircraft much higher in terms of comfort because of their low noise and vibration levels in the cabin, as well as the fact that many of these aircraft are boarded via loading bridges, whereas the turboprop aircraft they are replacing are boarded via the ramp. Thus, the passenger is provided with weather protection while boarding the aircraft.

Because of this higher comfort and convenience level, airlines are finding regional jet aircraft are stimulating traffic in markets previously only served by turboprop aircraft. Certain passengers prefer to drive to the connecting hub airport rather than use turboprop aircraft.

1.2.2.3 Continued Use of Hub and Spoke Networks

Nearly all major airlines in the United States use a hub and spoke route network whereby aircraft from various destinations (the spokes) are flown to a single airport (the hub) to transfer passengers with common destinations to an outbound aircraft. Aircraft arrive and depart the hub airport at a similar time to enable passengers to transfer from one aircraft to another. This type of route network enables passengers from a market such as McClellan-Palomar to reach a greater number of destinations at a greater frequency than would be possible without such a network.

Although airlines are currently experiencing severe financial distress, none have indicated, to date, that the prevailing hub and spoke network will be dismantled. Some airlines, such as American, have instituted hub reforms seeking to improve the efficiency of their hubs by spreading out demand, but the basic structure of the hub and spoke network remains unchanged.

This means that future air service patterns at CRQ are likely to continue to consist of commuter airlines providing connections to nearby major hubs such as Phoenix and Los Angeles. Service to independent locations is unlikely to generate sufficient passengers to be viable economically. This factor indicates that there are few opportunities for additional passenger service in the McClellan-Palomar market.

1.2.2.4 Increased Security Procedures

In the aftermath of September 11, the FAA implemented stricter security procedures, thereby increasing the amount of time required for passenger screening. Consequently, passengers needed to allow additional time before scheduled departure time for passing through security. This additional time was a significant factor for short trips because travel by car became an even more viable alternative.

In addition to the time factor, certain parties complained of the “hassle factor” associated with commercial air transportation, especially when secondary gate screening was being conducted. However, many of these complaints have since subsided, and security delays no longer appear to be a significant issue with regard to decreasing travel demand. Although aviation security has been and

continues to be a major issue in the aviation industry, passenger screening does not appear to have a negative effect on passenger levels as in the months following the September 11 terrorist attacks.

1.2.2.5 Changing Role of the Regional Commuter Market

Beyond the effects of low-cost carriers, the regional commuter market is also experiencing dynamic changes to more adequately serve its shifting price-sensitive customer base and to better use its current fleet of aircraft. Such changes and their effects will most likely be more pronounced at CRQ. One current example is the recent reallocation of aircraft by a commuter airline serving CRQ to another larger airport within an expanding market. Changes in the economy, increases in fares, and lack of market leverage present increased pressure on each commuter airline serving CRQ to maintain adequate and viable load factors and profit margins. That said, CRQ may experience unilateral decisions by commuters to limit flight and city-pair offerings, or in the most extreme cases, discontinue service altogether.

1.3 HISTORICAL AVIATION ACTIVITY

A key factor in attempting to predict future trends affecting aircraft operations at CRQ is understanding and analyzing current and past trends at the airport. Therefore, this section examines and documents those trends and provides the basis for the forecasts presented in the following section. Historical data were obtained from airport management records and air traffic control records from the FAA. An assessment of aircraft operations is presented first, followed by an assessment of aircraft fleet mix.

1.3.1 Historical Annual Aircraft Operations

The FAA defines an aircraft operation as either an arrival or a departure. Under this definition, an aircraft "touch and go" is considered two operations because the aircraft conducts a landing and takeoff during the maneuver. This section includes a distribution of the historical operations.

Historical aircraft operations at CRQ have been recorded in the FAA Terminal Area Forecast (TAF), and FAA Air Traffic Activity Data System (ATADS). Both of these data sources reflect the same historical trend for aircraft operations at CRQ. Historical operations documented by the FAA TAF were used for this review for 1980 through 1989, and the FAA ATADS were used for 1990 through 2002. When logging this data, the TAF and the ATADS separate the annual operations into the following six categories:

- Itinerant Air Carrier (none since 1999)
- Itinerant Commuter/Air Taxi
- Itinerant General Aviation
- Itinerant Military
- Local General Aviation
- Local Military

Table 1.1 and Figure 1.1 present historical total aircraft operations for CRQ from 1980 through 2002. Aircraft operations at CRQ have shown a slight negative trend since 1980, decreasing approximately 14 percent since 1980 and almost 30 percent since 1999. Table 1.2 presents annual local and itinerant aircraft operations, by operational categories, for 1980 through 2002.

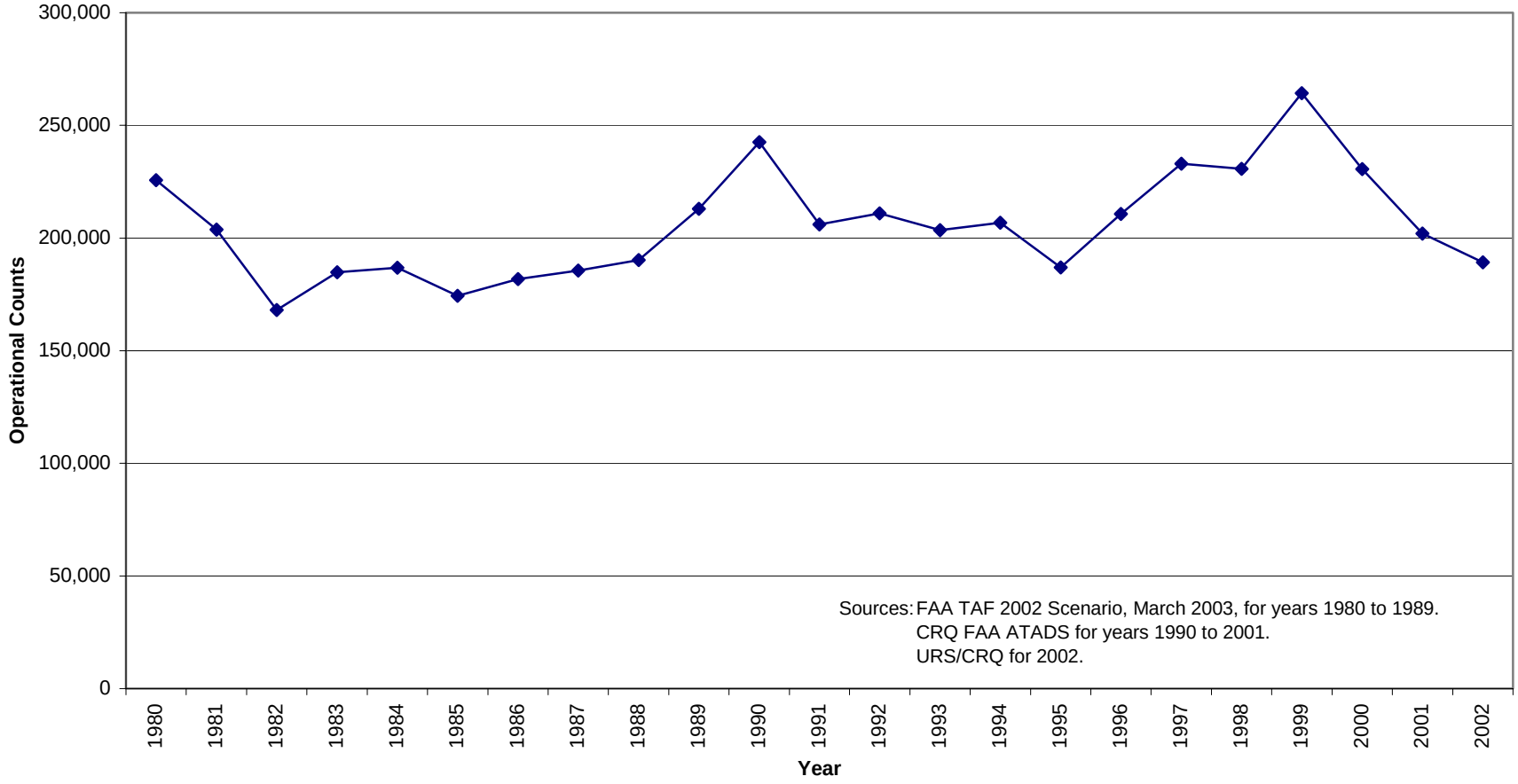
Table 1.1
HISTORICAL TOTAL AIRCRAFT OPERATIONS

Year	Number of Operations	Percent Change
1980	237,390	-
1981	211,829	-11%
1982	175,740	-17%
1983	195,299	11%
1984	195,237	0%
1985	183,513	-6%
1986	190,345	4%
1987	198,411	4%
1988	201,799	2%
1989	222,720	10%
1990	255,369	15%
1991	220,621	-14%
1992	225,041	2%
1993	217,739	-3%
1994	220,570	1%
1995	204,191	-7%
1996	227,764	12%
1997	245,092	8%
1998	244,969	-1%
1999	291,873	19%
2000	255,096	-13%
2001	221,898	-13%
2002	204,155	-8%

SOURCES
FAA TAF 2002 Scenario, March 2003, for 1980 to 1989.
CRQ FAA ATADS, for 1990 to 2001.
URS/CRQ for 2002.

NOTE
TAF data is presented in FAA fiscal years (October through September). Other records are presented in calendar years.

Figure 1.1
HISTORICAL AIRCRAFT OPERATIONS



1.3.2 Air Carrier Operations

For traffic-count purposes, an air carrier aircraft is defined as having a maximum passenger seating capacity of more than 60. Since 2000, all scheduled passenger service at CRQ has been provided by commuter aircraft of fewer than 60 seats.

1.3.3 Commuter Operations

Commuter operations at CRQ consist of service by America West to Phoenix-Sky Harbor International Airport, and United Express to Los Angeles International Airport. Commuter operations have increased approximately 148 percent since 1980, an average annual increase of almost 4.2 percent. The airport experienced its highest level of commuter operations in 2000, with 16,545 commuter operations. Historical commuter operations are presented in Table 1.2 and Figure 1.2.

1.3.4 General Aviation Operations

General aviation includes all segments of the aviation industry except for commercial air service and military operations. Typical general aviation activities include pilot training, corporate, and pleasure flying. Operations at the airport are conducted by single- and multi-engine piston aircraft, turboprop and turbojet aircraft, and helicopters.

General aviation operations are recorded as local or itinerant. Local operations, primarily arrivals or departures performed by aircraft remaining in the airport traffic pattern or local training area, are most often associated with training activity and flight instruction. Itinerant operations are arrivals or departures other than local operations performed by either based or transient aircraft.

Table 1.2 and Figure 1.3 present historical general aviation operations separated into itinerant and local operations. On average, since 1980 itinerant general aviation operations have accounted for 59 percent of general aviation activity at CRQ. General aviation activity generally increased from the early 1980s through 1999. Since then, operations have experienced a downward trend beginning in 2000. The reduction of recent general aviation activity at the airport is a direct reflection of the economic downturn. Based on historical trends, local and itinerant general aviation activity will most likely rebound to previous levels mirroring increased economic activity, leading to increased business-related and personal pleasure flight activity.

1.3.5 Military Operations

Military operations at CRQ have fluctuated since 1980, with a high in 1999 of 12,617 operations and a low in 1997 of 1,364 operations. According to air traffic control personnel, military operations at CRQ consist primarily of aircraft performing training operations. Military aircraft using CRQ consist primarily of transport aircraft, such as the C-2, C-9, and C-12, and rotary-wing aircraft, such as the OH-58, CH-53, and SH-60. Historical military operations are presented in Table 1.2.

Table 1.2
HISTORICAL AIRCRAFT OPERATIONS
BY OPERATIONAL CATEGORY

Year	Itinerant Operations				Local Operations		Total
	Air Carrier*	Commuter	GA	Military	GA	Military	
1980	0	5,305	117,383	1,433	108,250	5,019	237,390
1981	0	3,369	106,700	1,200	97,057	3,503	211,829
1982	0	5,122	85,072	534	82,919	2,093	175,740
1983	31	8,862	93,756	184	91,033	1,433	195,299
1984	0	6,327	103,433	917	83,427	1,133	195,237
1985	0	7,283	109,750	1,740	64,644	96	183,513
1986	0	6,476	116,339	2,015	65,485	30	190,345
1987	3,596	7,380	120,127	1,876	65,387	45	198,411
1988	0	9,416	127,741	2,018	62,472	152	201,799
1989	0	7,402	143,186	2,244	69,812	76	222,720
1990	38	10,457	154,806	2,125	87,779	164	255,369
1991	0	11,646	139,129	2,784	66,893	169	220,621
1992	0	11,525	135,897	2,521	75,061	37	225,041
1993	0	11,435	134,155	2,721	69,338	90	217,739
1994	0	11,133	135,360	2,448	71,473	156	220,570
1995	1	14,152	131,289	2,787	55,619	343	204,191
1996	14	14,414	144,149	2,304	66,512	371	227,764
1997	58	10,625	159,362	1,104	73,683	260	245,092
1998	4	12,067	150,988	2,030	79,726	154	244,969
1999	12	14,951	180,069	12,458	84,224	159	291,873
2000	0	16,545	152,184	7,888	78,405	74	255,096
2001	0	15,176	131,284	4,629	70,671	138	221,898
2002	0	13,140	126,277	1,892	62,774	72	204,155

SOURCES
FAA TAF 2002 Scenario, March 2003, for years 1980 to 1989.
McClellan-Palomar FAA ATADS, for years 1990 to 2001.

NOTES
TAF data is presented in FAA fiscal years. Other records are presented in calendar years.
GA = General Aviation
*CRQ has never had commercial air carrier service (aircraft of 60 seats or more). According to the FAA tower staff, it is likely that nearly all of previous years' counts of air carrier operations were mistakenly classified as air carrier ops and should have been classified as air taxi operations.

Figure 1.2
HISTORICAL COMMERCIAL OPERATIONS

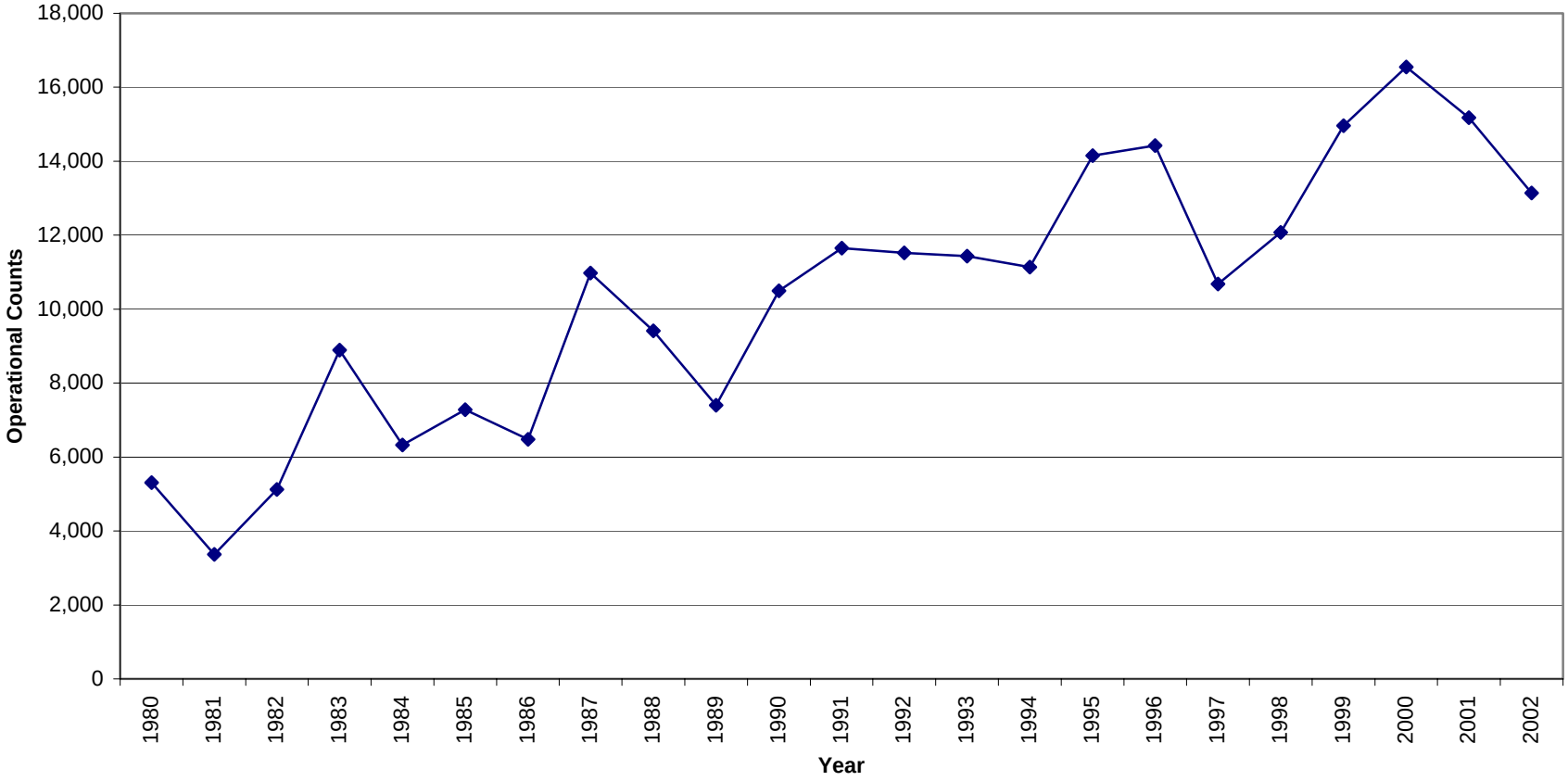
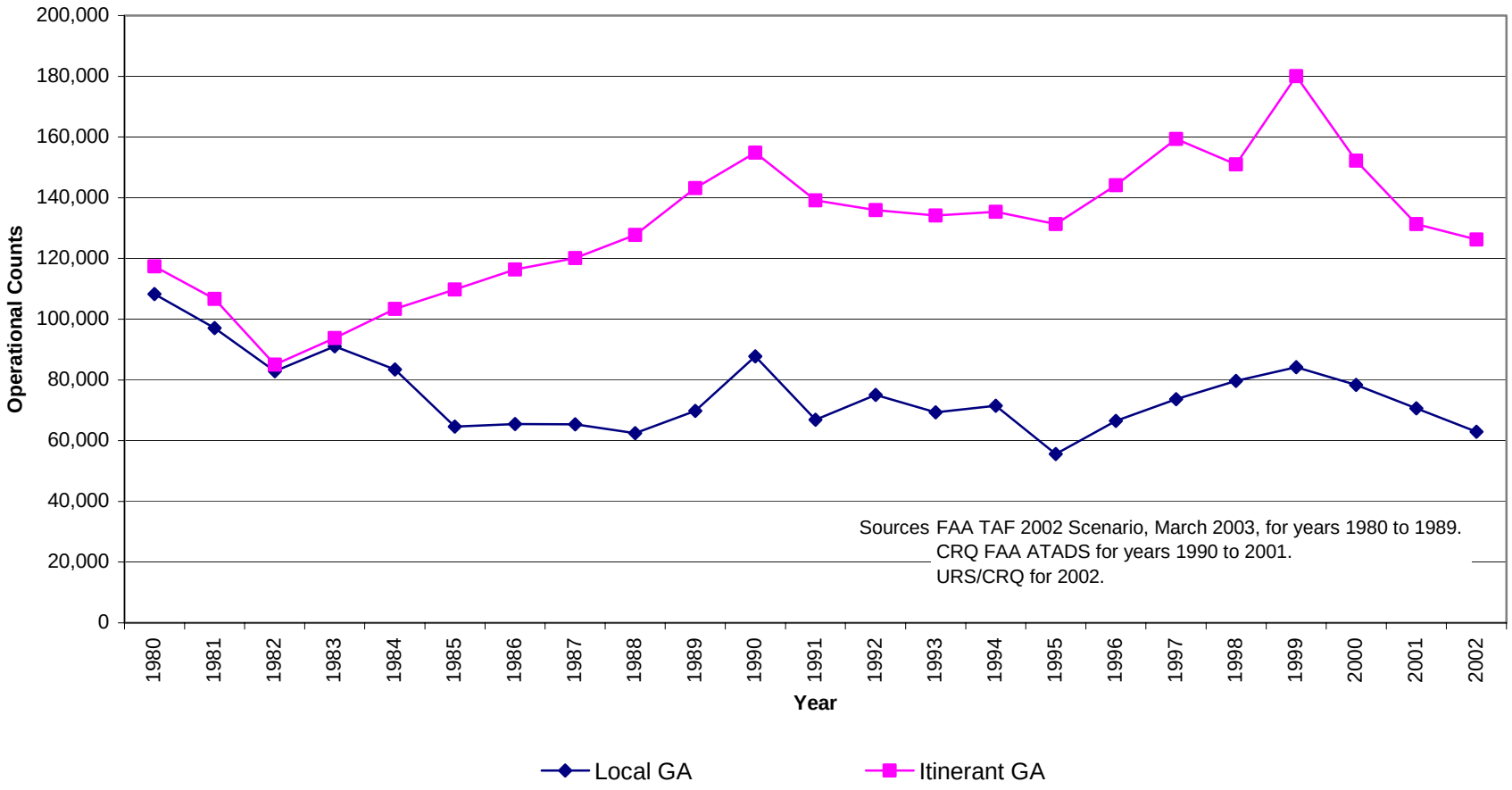


Figure 1.3
HISTORICAL GENERAL AVIATION OPERATIONS



1.3.6 Aviation Forecasts

This section presents forecasts of aircraft operations and aircraft operational fleet mix. Forecasts from other studies and independent sources are also presented to provide a point of reference from which to compare the updated forecasts.

1.3.7 Forecasting Methodologies

Methodologies commonly used for forecasting include trend analysis and market share analysis. All such methodologies are based on the premise that historical trends or relationships can be used to predict future activity levels. A description of each methodology is provided as follows:

- **Trend Analysis.** This type of analysis is one of the simplest forecasting techniques. The method fits growth lines to historical data and extends them into the future. This methodology assumes that the same factors affecting aviation activity in the past will continue to do so in the future.
- **Market Share Analysis.** This analytical tool involves review of historical activity levels at the airport as a percentage share of a larger market. For instance, the number of aircraft operations at the airport is compared to the total number of aircraft operations in the region, state, or nation. This relative share factor is then held as a constant and increased in direct proportion to the projected growth within the region, state, or nation to determine likely future activity levels at the airport.

These two analytical techniques assume that previous relationships will continue to exist in the future. Consequently, these methods do not consider the effects of more-aggressive marketing, increased service levels, or other changes occurring independently of past relationships. To supplement this type of analysis, the complimentary approach of forecasting involves professional judgment. During this phase, decisions about the validity of forecasts resulting from the analytical analyses are made. Intangible factors are then considered when developing a preferred forecast.

1.3.8 Aircraft Operations

This section addresses forecasts of aircraft operations. These forecasts provide the basis for estimating future aircraft operational levels and their associated noise impacts to the land uses surrounding the airport.

1.3.8.1 Previous Forecasts of Aircraft Operations

Independent forecasts of aircraft operations obtained and reviewed are described below:

- **McClellan-Palomar Airport Master Plan (1997).** The forecast of aviation activity as published for the 1997 McClellan-Palomar Airport Master Plan developed by Coffman Associates, Inc., was reviewed and analyzed. The forecast presented projections of aircraft operational levels, passenger enplanements, and based aircraft counts for the forecast years 2000, 2005, 2010, and 2015. The aircraft operational forecast for commercial, air taxi, general aviation, and military operations is shown in Table 1.3.

Table 1.3
1997 MASTER PLAN FORECAST

	2000	2005	2010	2015
Annual Itinerant Operations				
Commercial	6,534	8,182	9,650	10,484
Air Taxi	12,683	14,546	15,745	15,726
General Aviation	150,800	159,800	170,400	182,000
Military	2,800	2,800	2,800	2,800
Annual Local Operations				
General Aviation	74,200	75,200	76,600	78,000
Military	100	100	100	100
Total Annual Operations	247,117	260,628	275,295	289,110

SOURCE
1997 McClellan-Palomar Airport Master Plan, Coffman Associates, Inc.

Over the 15-year forecast period of 2000 through 2015, the average annual compound growth rate of all aircraft operations was reported to be 1.05 percent. Projected average annualized compound growth rates for commercial operations of aircraft having 60 seats or more was 3.20 percent and air taxi operations was reported to be 1.44 percent for the same period. Local general aviation operations were projected to increase at a rate of approximately 1 percent, whereas itinerant general aviation operations were projected to increase at a rate of approximately 1.3 percent annually. In keeping with standard practices of forecasting military operations at civilian airports, local and itinerant military operations were held constant throughout the entire forecast period.

Based on this review, it is apparent that the Master Plan's forecast of commercial operations does not adequately reflect current market conditions, the adverse effects of September 11, or other factors. Likewise, variations in growth characteristics of local and itinerant general aviation and military aircraft operations, as well as the evolving air taxi market, would suggest that a revised and updated forecast of aircraft operations is currently warranted. That said, overall annualized operations levels for all aircraft appear to fall within 5 to 13 percent of current projects as listed in the TAF for the airport.

- **FAA Terminal Area Forecast.** The TAF projects aircraft operations at CRQ to increase to approximately 297,000 in 2020 from their current level of approximately 204,000 operations in 2002. The average annual growth rate associated with this forecast is approximately 2.1 percent.
- **FAA Aerospace Forecasts, FY 2003-2014 (March 2003):** Using the FAA's Aerospace Forecast for Fiscal Years (FY) 2003-2014, average annual compound growth rate projections of commuter/air taxi operations and general aviation operations were developed for the forecast period (2002-2013). These FAA growth rates were applied to the actual respective activity levels for 2002 and have grown outward to 2013.

1.3.8.2 Updated Forecast of Commercial Operations

Commercial operations at CRQ consist of scheduled service performed by commuter aircraft of fewer than 60 seats. Table 1.4 and Figure 1.4 present forecasts of commercial operations developed using typical aviation activity forecasting techniques along with the FAA's TAF. These forecasts consist of a market share of commuter/air taxi operations to national, state, and market-specific state operational levels, a 10-year trend line, and a forecast based on growth rates presented in the *FAA Aerospace Forecasts for Fiscal Years 2003-2014*.

When comparing and analyzing the various forecast extrapolations shown in Table 1.4 and Figure 1.4, it is apparent that use of the market share approach to project future aircraft operations yields a consistent estimate of future commercial operational levels. These forecasts, however, had wide variations when comparing average annual compound growth rates. Because of such variations, the market share forecasting technique was not considered a reliable forecasting tool for this forecasting effort.

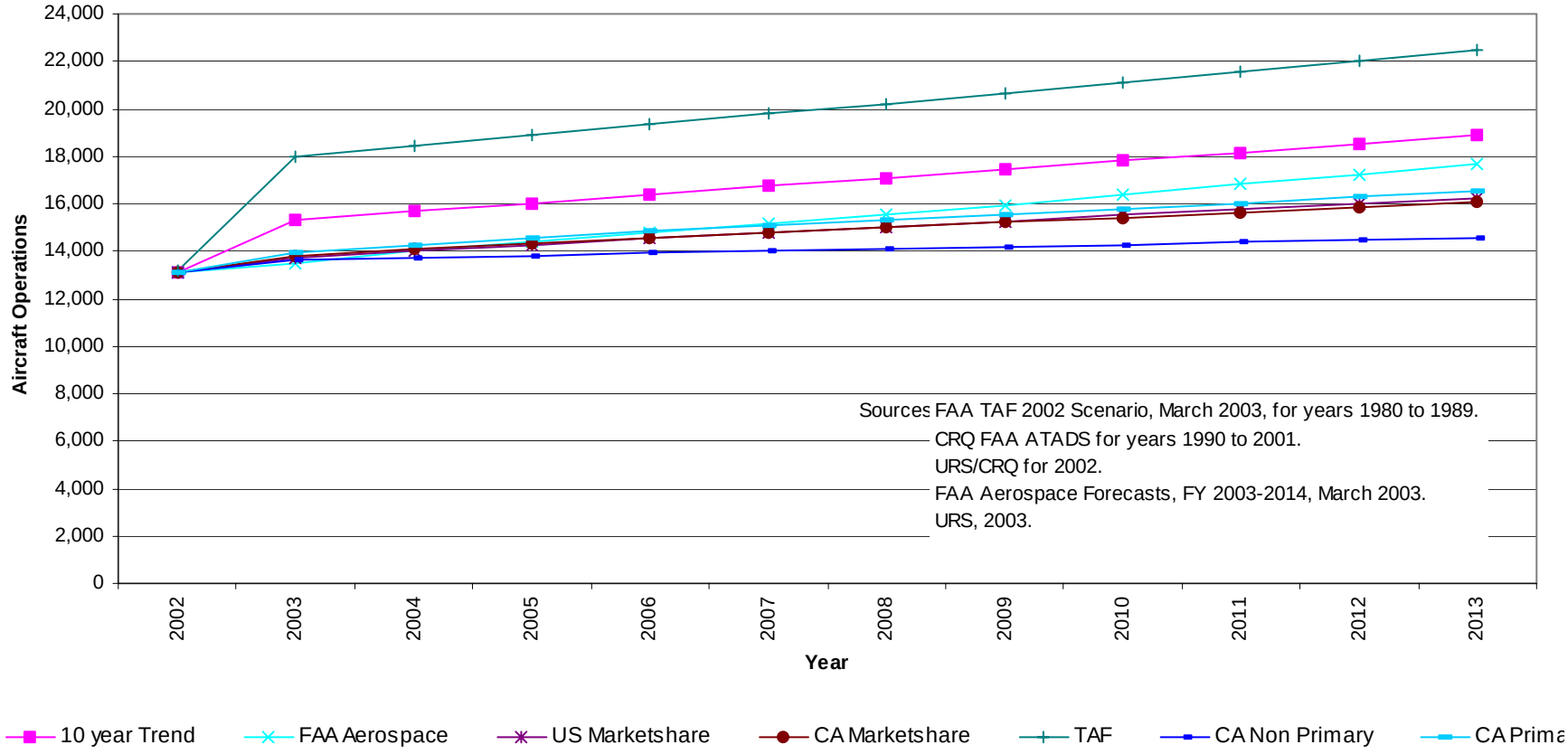
When inspecting the TAF for the airport, the FAA's assumed quick recovery between 2002 and 2003 is most evident. This single event would yield a single-year increase rate of almost 36 percent. As history has shown, perhaps because of the extended economic recession or military operations overseas, the recovery did not occur. Further, the projected 2002 annual total of commercial operations at the airport as listed in the TAF was higher than the actual levels recorded. If, however, this single year-over-year increase is discounted, the average annual compounded projected rate for the 10-year period covering 2003–2013 is reduced to a more conservative 2.3 percent. This estimate is similar to the FAA's National Aerospace forecast of similar commercial operations of 2.78 percent for the same period.

Table 1.4
COMMERCIAL OPERATIONS FORECASTS

Year	CRQ TAF Forecast[1]	TAF Forecast of				CRQ 10-Year Trend Line[2]	FAA Aerospace Forecast 2003[3]
		U.S. Market Share	California Market Share	California Primary Market Share	California Non-Primary Market Share		
2002	13,209	13,140	13,140	13,140	13,140	13,139	13,140
2003	17,964	13,740	13,803	13,921	13,628	15,326	13,469
2008	20,226	15,013	14,995	15,317	14,097	17,101	15,543
2013	22,488	16,258	16,053	16,548	14,566	18,877	17,701
Average Annual Compound Growth Rate							
2002-2013	4.96%	1.95%	1.84%	2.12%	0.94%	3.35%	2.75%

Sources
1. FAA 2002 Scenario TAF, March 2003.
2. McClellan-Palomar FAA ATADS Records.
3. FAA Aerospace Forecasts, FY 2003-2014, March 2003.

Figure 1.4
COMMERCIAL OPERATIONS FORECASTS



Further comparison of the two remaining FAA-TAF and FAA Aerospace forecasts of future commercial activity at the airport for 2003 through 2013 reveals similar average annual growth rates of 2.27 and 2.76 percent, respectively. Examining the extrapolation of future commercial activity levels using the 10-year linear trend line technique yielded a similar average annual compound growth rate of 2.10 percent.

Based on current and near-term economic outlook for the airline industry and the absence of any known plans to expand the existing passenger terminal facility, an average annual growth rate of 3.0 percent was selected as the preferred forecast of commercial operations at the airport for the entire forecasting period of 2003 through 2013. This straight-line forecast, however, does not consider the potential effect of higher rates of commercial operation activity that may be generated by a new airline entrant or the potential for increased service by carriers currently serving the airport.

1.3.8.3 Updated Forecasts of General Aviation

General aviation operations consist of arrivals and departures (and touch-and-go evolutions) by aircraft not classified as commercial or military.

Table 1.5 and Figures 1.5 and 1.6 present itinerant and local general aviation operations forecasts using typical aviation activity forecasting techniques along with the FAA's TAF. These forecasts consist of a market share of general aviation operations to national, state, and market-specific state operational levels, application of FAA Aerospace Forecast predicted growth rates, and a 10-year trend line for both itinerant and local operational levels.

As the table and figures indicate, the various forecast techniques result in widely disparate results that appear to have little correlation. An alternative approach was also used to examine factors currently affecting general aviation activity at CRQ, California, and the U.S. as a whole using professional judgment regarding how these factors may influence future activity levels at CRQ. A review of historical levels of local and itinerant operations revealed two general trends. The first trend is one of declining operations through the early 1990s. The second trend is one of stabilization, then a general growth trend that lasted until 1999. From 2000 through 2002, activity levels again began to decline in concert with issues discussed previously.

When examining the projections of future itinerant and local general aviation activity levels using national, state, primary and non-primary market share methodologies, the annualized growth rates fall in the range of 0.72 to 1.36 percent. This is somewhat validated by the fact that on a national level, the FAA's 2003-2014 Aerospace Forecast anticipates that all general aviation operational activity will increase at an annualized rate of 1.3 percent. Inspection of the FAA's TAF for similar activity at this airport reveals predictions of continued activity growth for 2003 through 2013 in the range of 1.8 percent for itinerant operations and 2.5 percent for local operations. When examining the 10-year linear extrapolated trend line of past operations that have occurred at the airport yields a much higher growth rate of 2.4 percent. This extrapolated trend assumption is more in line with the FAA's anticipated growth rates for this sector on a regional and national level.

Table 1.5
GENERAL AVIATION OPERATIONS FORECASTS

Itinerant General Aviation Operations Forecasts							
Year	CRQ TAF[1]	TAF Forecast of				CRQ 10-Year Trend Line[2]	FAA Aerospace Forecast 2003[3]
		U.S. Market Share	California Market Share	California Primary Market Share	California Non-Primary Market Share		
2002	129,102	126,277	126,277	126,277	126,277	126,266	126,277
2003	131,664	127,520	127,638	128,114	127,518	147,988	125,898
2008	144,356	133,484	134,434	137,312	133,703	151,150	135,358
2013	157,068	139,454	141,231	146,516	139,889	154,311	144,388
Average Annual Compound Growth Rate							
2002-13	1.80%	0.91%	1.02%	1.36%	0.93%	1.84%	1.23%
Local General Aviation Operations Forecasts							
2002	62,816	62,774	62,774	62,774	62,774	62,918	62,774
2003	64,618	63,195	63,283	63,562	63,247	74,914	62,962
2008	73,629	65,570	65,804	67,505	65,581	78,239	67,627
2013	82,640	67,947	68,326	71,448	67,916	81,563	72,138
Average Annual Compound Growth Rate							
2002-13	2.52%	0.72%	0.77%	1.18%	0.72%	2.39%	1.27%

Sources
1. FAA TAF, 2002 Scenario, March 2003, FY.
2. McClellan-Palomar FAA ATADS Records.
3. FAA Aerospace Forecasts, FY 2003-2014, March 2003.

These various forecasts, however, do not consider potential dynamics or paradigm shifts of general aviation activity that may be influenced by but not limited to the following actions or developments:

- Increased levels of based aircraft at the airport.
- Loss of based aircraft to other nearby airports.
- Development of amenities and related services for larger corporate jets.
- Competitive fuel pricing.
- Escalation of the price of aviation fuel.
- Unforeseen changes in the economy.
- Development of one or more locally based corporate jet fleets.
- Increased runway length.

Figure 1.5
ITINERANT GENERAL AVIATION FORECASTS

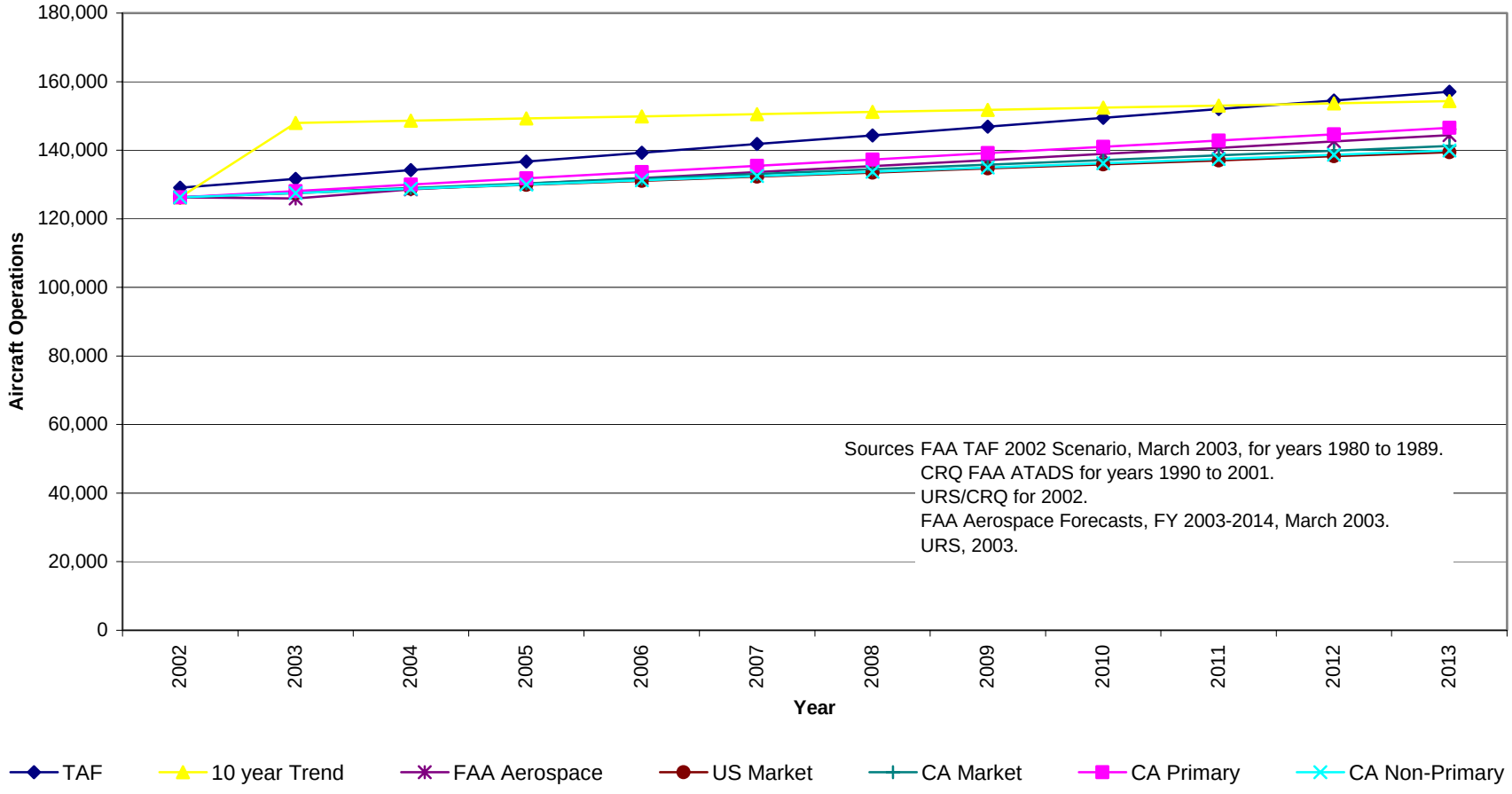
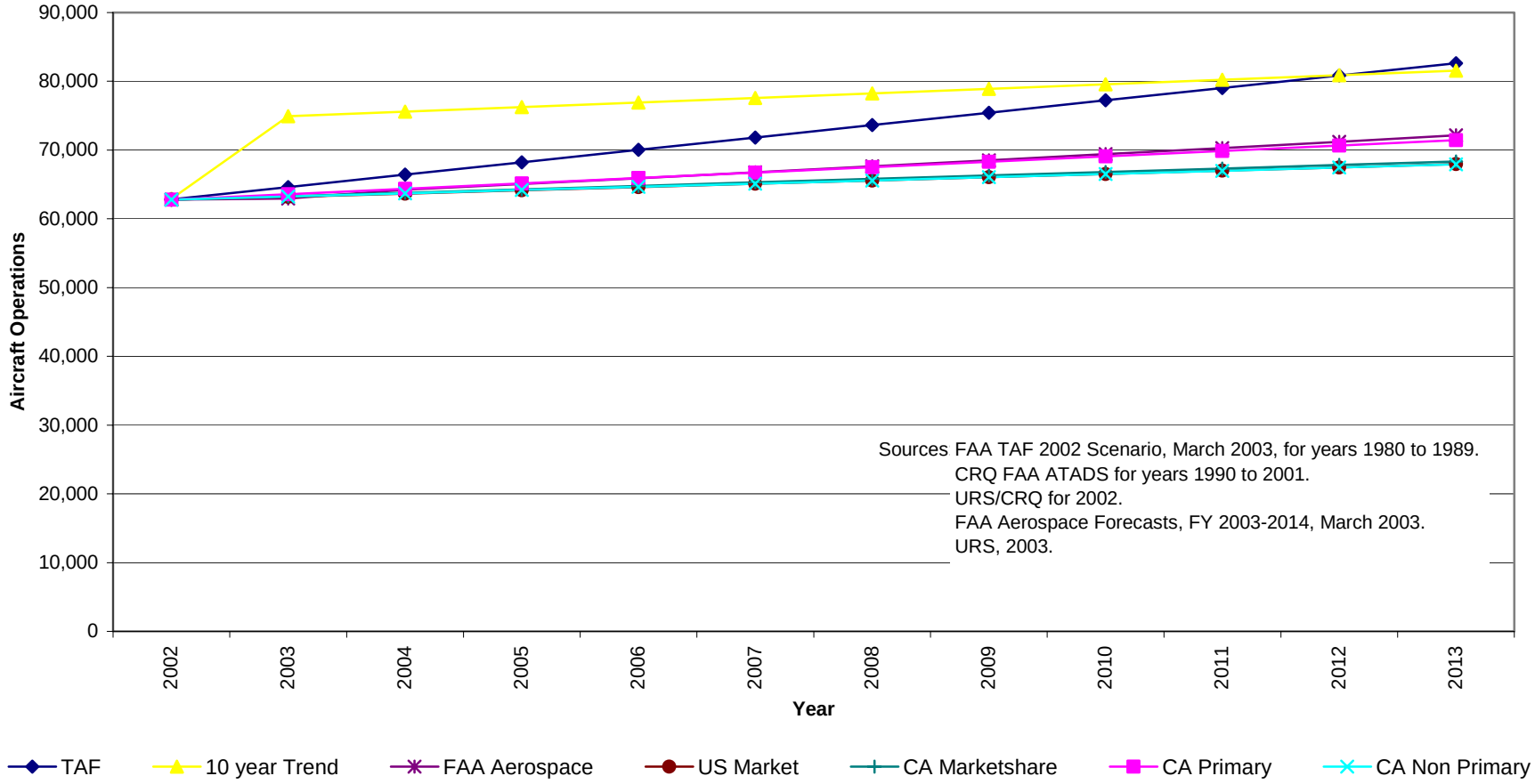


Figure 1.6
LOCAL GENERAL AVIATION OPERATIONS FORECAST



The potential for general aviation operations at CRQ to increase in future years will most likely depend on the operating decisions of specific businesses at the airport, as well as development decisions of the owner/operator of the airport, the County of San Diego.

For the express purposes of this FAR Part 150 aircraft activity forecast, annualized growth rates of 2.0 percent for itinerant general aviation operations and 2.5 percent for local general aviation operations were selected as the preferred forecasts of general aviation operations at CRQ for the entire forecasting period of 2003 through 2013.

1.3.8.4 Updated Forecast of Military Operations

The number of operations conducted by military aircraft usually depends on training requirements of the units using CRQ. Consequently, the level of operations varies from year to year with little predictability. Therefore, the FAA usually projects military operations at an airport to remain flat or near the most recent historical level throughout the forecasting period. This is also the recommended method to project military aircraft operations at CRQ. The recommended forecast of military aircraft operations at CRQ throughout the forecast period is 1,892 itinerant and 72 local operations.

1.3.8.5 Resultant Average Annualized Growth Rates

To develop a complete synopsis of anticipated levels of aircraft operational activity at the airport, a wide variety of aviation activity forecasts previously developed by others was collected, compiled, and reviewed. Such forecasts included projections developed as part of the FAA's national, state, and airport-specific TAFs, the FAA's FY 2003-2014 Aerospace Forecasts, and CRQ's 1997 Master Plan.

As part of reviewing the FAA's TAF projections for California, two sub-categories of the aircraft operations projections for the state were compiled based on the FAA's National Plan of Integrated Airport Systems (NPIAS) airport classifications system of Primary and Non-Primary airports. The latest NPIAS lists CRQ as a Primary Airport. Using the state, Primary, and Non-Primary classifications, separate summations of TAF operational projections for the respective airports were created to examine market-share projections of future aircraft operations at CRQ. A 10-year trend analysis using linear projection techniques was also used for further comparison to all other forecasts.

A comparison of the various projected average annual compounded growth rates for each respective forecast is presented in Table 1.6.

1.3.8.6 Forecast of Total Operations

Applying varying average annualized growth rates to the 2002 aircraft operational totals, a preferred forecast of aviation activity for the CRQ FAR Part 150 Study Update was developed for the 10-year forecast period of 2003 through 2013. For this forecast, itinerant commuter operations through the forecast period were projected to increase at an average annual growth rate of 3.0 percent. Itinerant and local general aviation operations were projected similarly using growth rates of 2.0 and 2.5 percent, respectively.

The preferred FAR Part 150 forecast for total aircraft operations, including scheduled passenger airlines, general aviation, and military, is presented in Table 1.7.

Table 1.6
AVERAGE ANNUAL
COMPOUND GROWTH RATES
2003-2013

Forecasts	Commercial Operations	Itinerant General Aviation Operations	Local General Aviation Operations
URS Preferred	3.00%	2.00%	2.50%
CRQ TAF	2.27%	1.78%	2.49%
10-Year Trend Analysis	2.10%	0.41%	0.85%
FAA Aerospace Forecasts	2.77%	1.37%	1.36%
1997 Master Plan Update	1.44%	1.26%	0.33%
TAF Market Share Forecasts			
All US Airports	1.70%	0.90%	0.73%
All CA Airports	1.52%	1.02%	0.77%
CA Primary Airports	1.74%	1.35%	1.18%
CA Non Primary Airports	0.66%	0.93%	0.71%

SOURCE
URS Corporation, 2003

Table 1.7
AIRCRAFT OPERATIONS PREFERRED FORECAST

Year	Itinerant Aircraft Operations				Local Aircraft Operations			TOTAL
	Commuter	General Aviation	Military	Total	General Aviation	Military	Total	
2002	13,140	126,277	1,892	141,309	62,774	72	62,846	204,155
2003	13,534	128,803	1,892	144,229	64,343	72	64,415	208,644
2008	15,690	142,208	1,892	159,790	72,799	72	72,871	232,661
2013	18,189	157,010	1,892	177,091	82,365	72	82,437	259,528
Average Annual Compound Growth Rate								
2003-13	3.0%	2.0%	0.0%	2.1%	2.5%	0.0%	2.5%	2.2%

SOURCE
URS Corporation, 2003

1.4 COMPARISON OF FORECASTS

When developing a forecast, it is helpful to compare the preferred forecast to the FAA's TAF forecast published specifically for the airport. As presented in Table 1.8 and Figure 1.7, the preferred

forecast is approximately 20 percent below the TAF forecast of commercial operations at CRQ and over 10 percent lower than the TAF forecast of itinerant and local general aviation operations.

1.4.1 Commercial Operations

Inspection of the FAA's TAF for CRQ reveals that the largest projected increase in commercial (commuter) operations was to occur between 2002 and 2003. Referencing the FAA's ATAD data for the first six months of 2003, it is evident that the year-over-year annualized growth rate of 35 percent for commercial operations has not materialized. In fact, commercial operations at CRQ have increased at a moderate rate of only 5 percent. This TAF projection anomaly will have the direct effect of projecting higher operational levels for the 10-year period of 2003 through 2013 and is therefore considered unrealistic for this forecasting effort.

The comparison of the preferred 3.0 percent average annual growth rate of commercial operations growth to that of the CRQ TAF is shown in Table 1.8. As illustrated, the projections of commercial operations throughout the 10-year forecast period vary by as much as 19.0 percent.

1.4.2 General Aviation Operations

Similar to the FAA's TAF for general aviation operations at CRQ, the projected increase in local and itinerant general aviation operations was projected to occur between 2002 and 2003. The FAA's ATAD data for the first six months of 2003 indicate that these general aviation operations decreased by approximately 9.0 percent. Although operations are down approximately 9.0 percent, the preferred annualized forecast yields operational levels are similar to the FAA's TAF general aviation operational forecast for the same period.

The comparison of the preferred 2.5 and 2.0 percent average annual growth rate for local and itinerant general aviation operations at CRQ TAF is shown in Table 1.8 and Figures 1.8 and 1.9. As illustrated, the projections of local and itinerant general aviation operations throughout the 10-year forecast period yield similar results and vary by as little as 0.04 percent.

1.5 FLEET MIX FORECAST

Currently, neither America West nor United Express, CRQ's two scheduled carriers, are operating regional jet flights at CRQ. It is anticipated that both will shift to regional jet aircraft in the future. However, the likelihood of regional jet operations at this airport will be dependent primarily on overcoming existing runway length constraints while satisfying FAA-mandated runway safety area design requirements. At its current length of 4,900 feet, use of larger regional jet aircraft having higher approach speeds and wider wingspans may require modifications of current FAA design standards and/or limiting the operational weight of the aircraft on departure.

Table 1.8
COMPARISON TO FAA TAF AND URS ADJUSTED TAF FORECAST

Year	Itinerant Commercial Operations		URS Forecast Difference Compared to TAF
	URS*	TAF	
2002	13,140	13,209	-0.52 %
2003	13,534	17,964	-24.66 %
2008	15,690	20,226	-22.43 %
2013	18,189	22,488	-19.12 %
Average Annual Compound Growth Rate			
2002-2003	3.00 %	6.34 %	
2003-2008	3.00 %	2.40 %	
2008-2013	3.00 %	0.97 %	
2002-2013	3.00 %	4.96 %	
	Itinerant General Aviation Operations		
2002	126,277	129,102	-2.19 %
2003	128,803	131,644	-2.16 %
2008	142,208	144,356	-1.49 %
2013	157,010	157,068	-0.04 %
Average Annual Compound Growth Rate			
2002-2003	2.00 %	1.97 %	
2003-2008	2.00 %	1.86 %	
2008-2013	2.00 %	1.70 %	
2002-2013	2.00 %	1.80 %	
	Local General Aviation Operations		
2002	62,774	62,816	-0.07 %
2003	64,343	64,618	-0.43 %
2008	72,799	73,629	-1.13 %
2013	82,365	82,640	-0.34 %
Average Annual Compound Growth Rate			
2002-2003	2.50 %	2.90 %	
2003-2008	2.50 %	2.60 %	
2008-2013	2.50 %	2.30 %	
2002-2013	2.50 %	2.50 %	

SOURCE
URS Corporation, 2003
FAA 2002 Scenario TAF, March 2003.
NOTE
*2002 actual commercial operations.

Figure 1.7
PREFERRED COMMERCIAL OPERATIONS FORECASTS

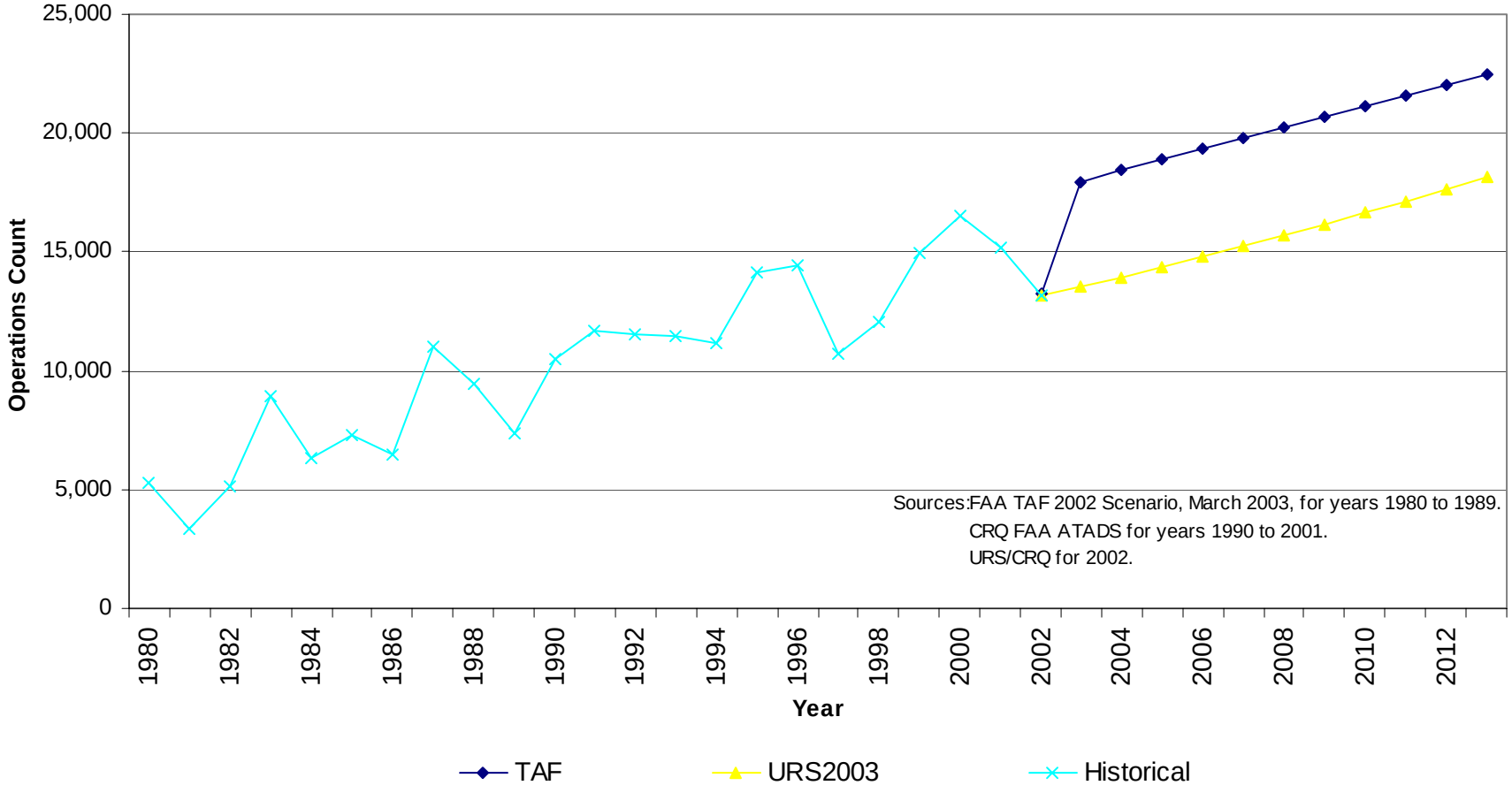


Figure 1.8
PREFERRED ITINERANT GENERAL AVIATION OPERATIONS FORECASTS

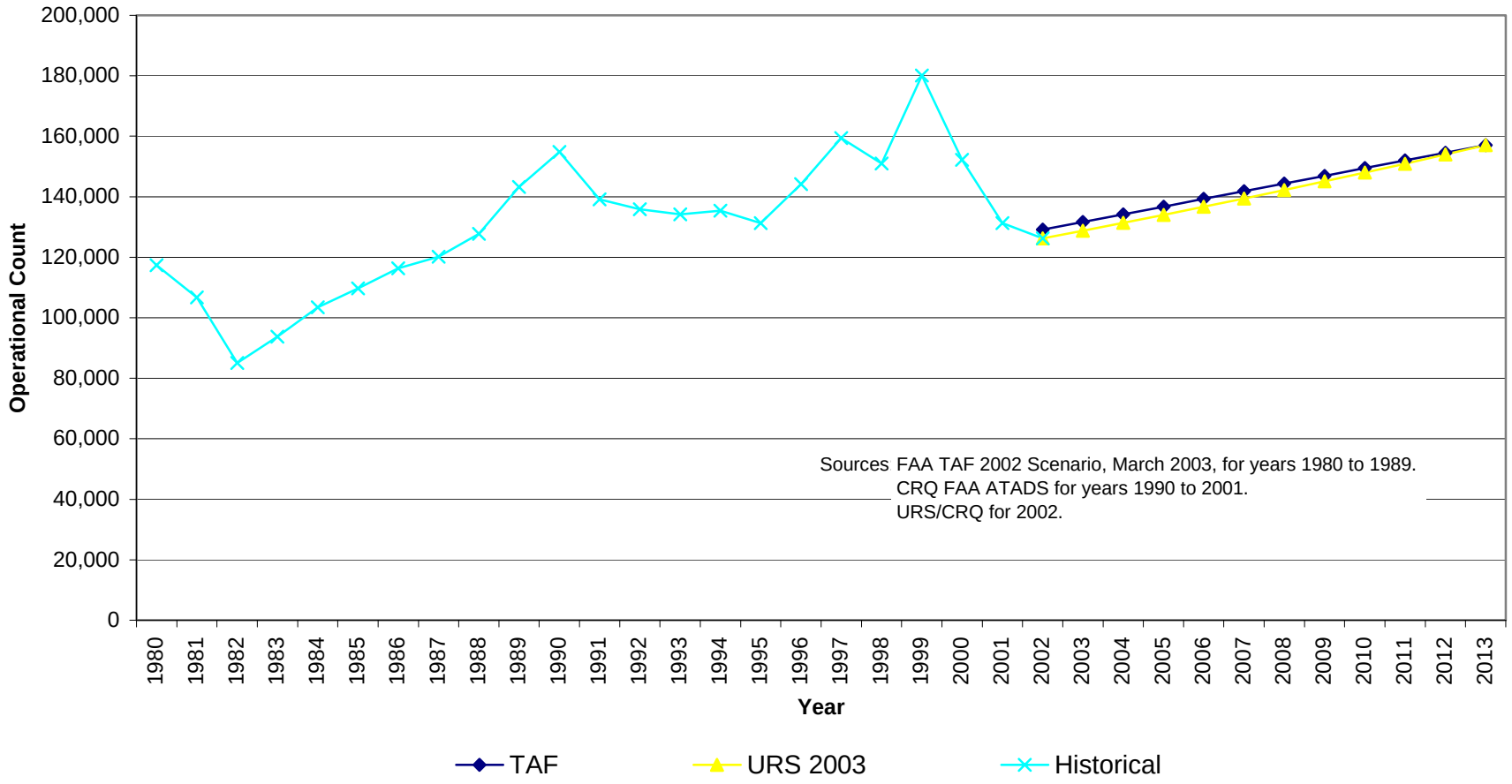
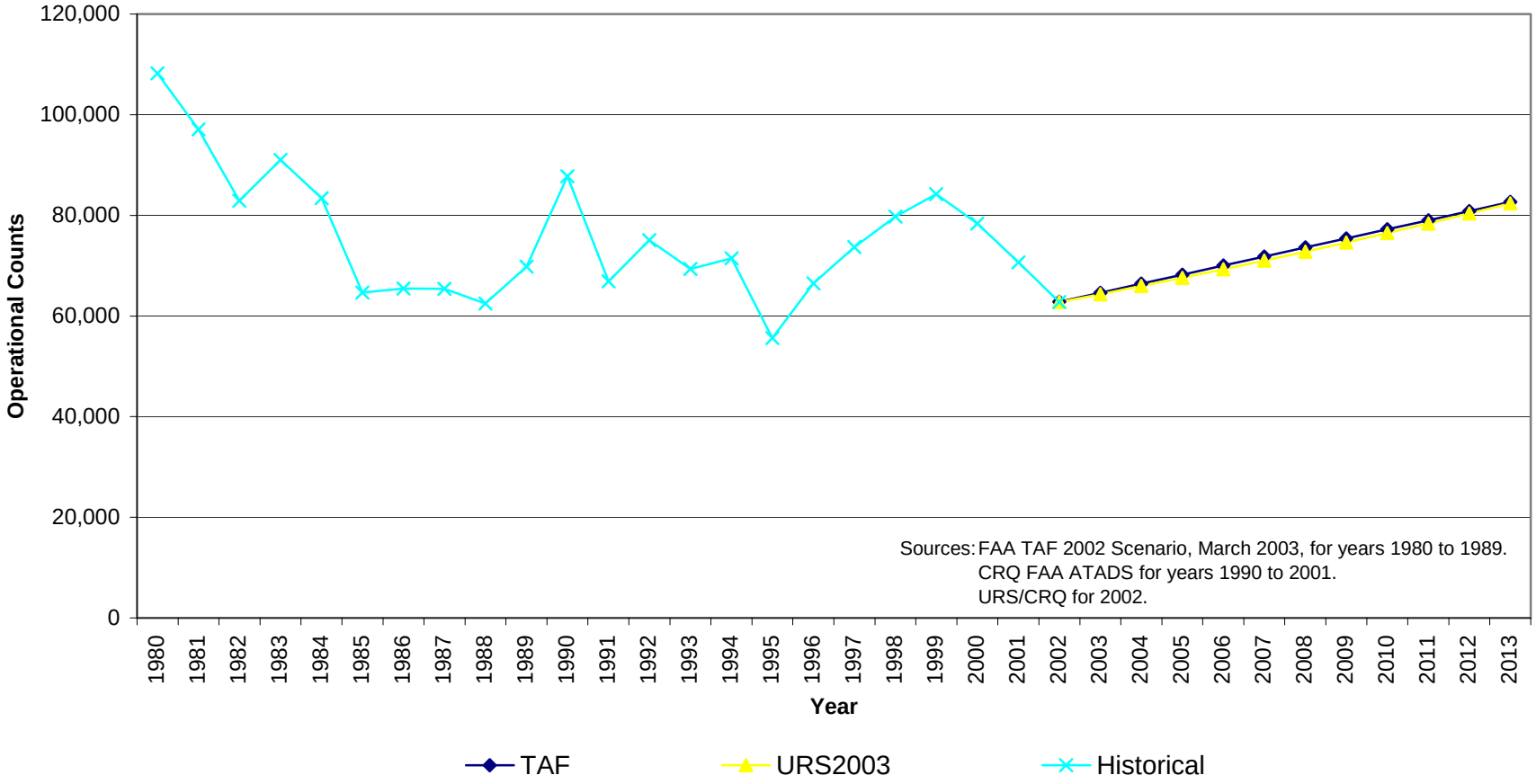


Figure 1.9
PREFERRED LOCAL GENERAL AVIATION OPERATIONS FORECASTS



CRQ has addressed existing non-standard runway safety area issues by using declared distance criteria and applying slight increases in published landing visibility minimums for its only precision instrument approach to the runway.

If the runway was extended to accommodate the full landing and takeoff runway length requirements for today's regional jets (a minimum of 5,500 to 6,000 feet) while satisfying FAA runway safety area requirements, introduction of regional jets at CRQ would then offer additional city-pair opportunities while increasing the level of service to air travelers using CRQ.

Assuming that there are no imminent plans to extend the runway or to modify CRQ's existing geometric design as necessary to accommodate sustained operations by larger aircraft having Airplane Design Group C-II operational requirements, the commercial commuter fleet mix for the two future forecast years was left unchanged. This projected general aviation fleet mix may change, however, if one or more of the following events occurred:

- Increase of based corporate jets.
- Migration of light single- and multi-engine based aircraft to other nearby airports.
- Increase of the airfield geometry (runway centerline-to taxiway centerline separation).
- Provision of fully compliant runway safety areas.

Projections of fleet mix at CRQ are presented in Table 1.9.

Table 1.9
FLEET MIX FORECAST

INM Aircraft Type	Forecast Year								
	2003			2008			2013		
	Itinerant	Local	T&G	Itinerant	Local	T&G	Itinerant	Local	T&G
Commuter/Air Taxi Fleet Mix									
LEAR35	20%			20%			20%		
MU3001	12%			12%			12%		
CNA750	6%			6%			6%		
CL600	5%			5%			5%		
CNA500	2%			2%			2%		
CIT3	2%			2%			2%		
GIV	2%			2%			2%		
GIIB	1%			1%			1%		
CL601	1%			1%			1%		
DHC8*	12%			12%			12%		
EMB120*	31%			31%			31%		
DHC6	1%			1%			1%		
BEC58P	5%			5%			5%		

Table 1.9
FLEET MIX FORECAST
(continued)

INM Aircraft Type	Forecast Year								
	2003			2008			2013		
	Itinerant	Local	T&G	Itinerant	Local	T&G	Itinerant	Local	T&G
General Aviation Fleet Mix									
BEC58P	10%	1%	5%	10%	1%	5%	10%	1%	5%
CL600	4%			4%			4%		
CNA172	16%	51%	45%	16%	51%	45%	16%	51%	45%
CNA206	8%	27%	20%	8%	27%	20%	8%	27%	20%
CNA441	3%			3%			3%		
CNA500	7%			7%			7%		
CNA750	2%			2%			2%		
DHC6	5%	1%		5%	1%		5%	1%	
FAL20	1%			1%			1%		
GASEPF	12%			12%			12%		
GASEPV	8%			8%			8%		
GIIB	1%			1%			1%		
GIV	3%			3%			3%		
GV	1%			1%			1%		
IA1125	1%			1%			1%		
LEAR25	1%			1%			1%		
LEAR35	9%			9%			9%		
MU3001	6%			6%			6%		
Helicopter	2%	20%	30%	2%	20%	30%	2%	20%	30%
R22BII	40%	40%	40%	38%	38%	38%	35%	35%	35%
S300C/H269	54%	54%	54%	55%	55%	55%	58%	58%	58%
MD500D	1%	1%	1%	1%	1%	1%	1%	1%	1%
Bell206	2%	2%	2%	2%	2%	2%	2%	2%	2%
EC120	1%	1%	1%	1%	1%	1%	1%	1%	1%
AS350	0%	0%	0%	1%	1%	1%	1%	1%	1%
Bell222	2%	2%	2%						
MD902	0%	0%	0%	2%	2%	2%	2%	2%	2%

Table 1.9
FLEET MIX FORECAST
(continued)

INM Aircraft Type	Forecast Year								
	2003			2008			2013		
	Itinerant	Local	T&G	Itinerant	Local	T&G	Itinerant	Local	T&G
Military Fleet Mix									
C-9	9%			9%			9%		
C-2	9%			9%			9%		
C-12	45%		100%	45%		100%	45%		100%
CH-53E	19%			19%			19%		
OH-58	9%			9%			9%		
H-60	9%			9%			9%		

SOURCE
URS Corporation, 2003.
NOTE
*Runway and Safety Area improvements may lead to commuter fleet conversion to regional jets.

U.S Department
of Transportation

**Federal Aviation
Administration**

Western-Pacific Region
Airports Division

P.O. Box 92007
Los Angeles, CA 90009

December 5, 2003

Peter Drinkwater
Director, County Airports
1960 Joe Crosson Drive
Gillespie Field Admin Building
El Cajon, CA 92020-1236

Dear Mr. Drinkwater:

McClellan-Palomar Airport
Preliminary Forecast of Aviation Activity

The Federal Aviation Administration (FAA) has reviewed the *McClellan-Palomar Airport FAR Part 150 Study Update Preliminary Forecast of Aviation Activity, Revised November 5 2003*. The Aircraft Operations Preferred Forecast presented in Table 1.7 of the document is acceptable to FAA and is approved for use in the Part 150 Update.

The forecast differs from the FAA Terminal Area Forecasts (TAF) by more than 10% in some respects. However, this difference does not affect the timing or scale of a proposed airport development project and does not affect the National Plan of Integrated Airport Systems (NPIAS) role of the airport. Under these circumstances, the locally developed operations forecast is considered to be consistent with the TAF.

Our specific comments regarding the forecast are enclosed. If you have any questions regarding forecast issues, I can be reached at (310) 725-3613.

Sincerely,

ORIGINAL SIGNED BY
RICHARD P. DYKAS

Richard P. Dykas
Supervisor, Capacity Section

Enclosure

cc: Floyd Best, Airport Manager
URS, Project Consultant

FAA Comments on:
McClellan-Palomar Airport FAR Part 150 Study Update Preliminary Forecast of Aviation Activity, Revised November 5 2003

Page 1-3, Section 1.2.2.3:

It's probably more the presence of San Diego International, rather than the hub and spoke system that limits opportunities for significant air service expansion at CRQ.

Page 1-3, Section 1.3.1:

FYI note. It is our experience that there is no difference between historic aircraft operations as reflected in TAF versus ATADS. ATADS is the source of TAF operations data for FAA towered airports. TAF historic operations numbers are reflected on federal fiscal year basis. ATADS data can be queried on either a fiscal or calendar year basis.

Page 1-7, Section 1.3.3:

It would be helpful to the layperson that might an interest in the Part 150 study (and by extension this forecast) to state the number of daily arrivals/departure currently performed by America West and United and to translate that into a hard number of annual operations, rather than talking in terms of percentages. The text is misleading in regards to the 16,545 commuter operations presented in Table 1.2 and figure 1.2. These operations do not all represent scheduled passenger operations performed by America West and United (Mesa Airlines and Sky West). A significant number (probably the majority) of the 16,545 "commuter" operations were actually performed by Air Taxi operators. The text should explain the difference between the two classes of commercial operators and explain that they are combined in FAA operations counts.

Page 1-8, Table 1.2

We recommend changing the header of the "Commuter" column to more accurately reflect that these operation numbers include the combination of "Commuter and Air Taxi" operations.

Page 1-12, Section 1.3.8.1:

We have not reviewed the 1997 master plan. Is the statement that the master plan projected a 3.2 percent by aircraft with **60 seats or more** correct? We would have anticipated **60 seats or less**.

The reference to FAA Aerospace forecast suggests FAA develops growth rate projections for "commuter/air taxi" operations. We have not reviewed the FAA Aerospace forecasts lately, but our recollection is that the document provides separate projections for commuter and air taxi, but does not reflect any type of combined "commuter/air taxi" growth rate.

Pages 1-22 and 1-27, Section 1.5:

We recommend a clear statement of the forecast assumptions regarding RJ use at CRQ as they relate to current airport sponsor plans for runway development. The statement on page 1-27, which begins, "Assuming that there are no imminent plans to extend the runway...." is ambiguous. The statement gives the impression that the consultant does not know what the airport sponsor's plans are. Does the airport sponsor plan to extend the runway by 2008 or not?

The statement on page 1-22 suggests RJ operations might be accommodated on the 4,900 foot runway by reducing useful aircraft loads, yet page 1-27 indicates a minimum 5,500 to 6,000 foot-long runway is required for RJ operations. It would generally be up to the air carriers to determine whether they wanted to serve the airport despite non-standard safety areas. FAA would not likely prohibit RJ operations if the carriers determined they could physically and economically operate on the existing 4,900-foot runway. Wider wingspans should not be an issue because the operations would still remain within Design Group II.

Establishment of the fleet mix is one of the more important aspects of the Part 150 update. Recommend providing an explanation detailing how the existing fleet mix was established. If there is a rationale for assuming the fleet mix will not change appreciably over the forecast period, recommend stating the assumptions. We doubt changes to either runway-taxiway separation or runway safety areas would have a measurable effect on GA activity levels.

Response to FAA Comments on

McClellan-Palomar Airport FAR Part 150 Study Update

Preliminary Forecast of Aviation Activity, Revised November 5, 2003

(Original FAA comments recreated verbatim)

1) Comment, Page 1-3, Section 1.2.2.3:
It's probably more the presence of San Diego International, rather than the hub and spoke system that limits the opportunities for significant air service expansion at CRQ.

Response: *Non-concur. Although San Diego is closer than Phoenix and Los Angeles, the major point of the discussion was that commuter airlines would most likely continue to offer service to and from those respective hubs when operating from CRQ.*

2) Comment, Page 1-3, Section 1.3.1:
FYI note. It is our experience that there is no difference between historic aircraft operations as reflected in TAF versus ATADS. ATADS is the source of TAF operations data for FAA Towered airports. TAF historic operations numbers are reflected on federal fiscal year basis. ATADS data can be queried on either fiscal or calendar year basis.

Response: *Concur. Comment noted and accepted as provided.*

3) Comment, Page 1-7, Section 1.3.3:
It would be helpful to the layperson that might an interest in the Part 150 study (and by extension this forecast) to state the number of daily arrivals/departures currently performed by America West and United and to translate that into a hard number of annual operations, rather than talking in terms of percentages. The text is misleading in regards to the 16,545 commuter operations presented in Table 1.2 and figure 1.2. These operations do not all represent scheduled passenger operations performed by America West and United (Mesa Airlines and Sky West). A significant number (probably the majority) of the 16,545 "commuter" operations were actually performed by Air Taxi operators. The text should explain the difference between the two classes of commercial operators and explain that they are combined in FAA operations counts.

Response: *Concur. The text will be modified to reflect the assumption that not all operations listed in the column labeled "commuter" represent traditional scheduled commuter operations. New text will be added to reflect the assumption that these annual totals more likely represent a combined count of*

schedule commuter, on-demand air taxi and corporate flight activity having a filed flight plan designation of "Tango". Please see Errata pages attached.

4) Comment, Page 1-8, Table 1.2:
We recommend changing the header of the “Commuter” column to more accurately reflect that these operation numbers include the combination of “Commuter and Air Taxi” operations.

Response: *Concur. The column title will be modified as suggested. Please see Errata pages attached.*

5) Comment, Page 1-12, Section 1.3.8.1[1]:

a) We have not reviewed the 1997 master plan. Is the statement that the master plan projected a 3.2 percent by aircraft with 60 seats or more correct? We would have anticipated 60 seats or less.
b) The reference to FAA Aerospace forecast suggests FAA develops growth rate projections for “commuter/air taxi” operations. We have not reviewed the FAA Aerospace forecasts lately, but our recollection is that the document provides separate projections for commuter and air taxi, but does not reflect and type of combined “commuter/air taxi” growth rate.

Response:

a) Correction. The reference to "60 seats or more" was not cited in the 1997 Master Plan and was simply a misstatement and should read as: "60 seats or less". The text will be modified accordingly. Please see Errata pages attached.
b) Non-concur. The Part 150 forecast text references data found in Table 1-7 of the Executive Summary for the FAA Aerospace Forecasts - Fiscal Year 2003-2014. This table lists projections of "Commuter/Air Taxi" operations. Accordingly, the text in the document is appropriate..

6) Comment, Pages 1-22 and 1-27, Section 1.5[2]:

a) We recommend a clear statement of the forecast assumptions regarding RJ use at CRQ as they relate to current airport sponsor plan for runway development. The statement on page 1-27, which begins, "assuming that there are no imminent plans to extend the runway…." is ambiguous. The statement gives the impression that the consultant does not know what the airport sponsor's plans are. Does the airport sponsor plan to extend the runway by 2008 or not?

   The statement on page 1-22 suggest RJ operations might be accommodated on 4,900 foot runway by reducing useful aircraft loads, yet page 1-27 indicates a maximum 5,500 to 6,000 foot-long runway is required for RJ operations. It would generally be up to the air carriers to

[1] URS divided the comment into parts a and b.
[2] URS divided the comment into parts a through d.

determine whether they wanted to serve the airport despite non-standard safety areas. FAA would not likely prohibit RJ operations if the carriers determined they could physically and economically operate on the existing 4,900-foot runway. Wider wingspans should not be an issue because the operations would still remain within Design Group II.

b) Establishment of the fleet mix is one of the more important aspects of the Part 150 update. Recommend providing an explanation detailing how the existing fleet mix was established.
c) If there is a rationale for assuming the fleet mix will not change appreciably over the forecast period, recommend stating the assumptions. We doubt changes to either runway-taxiway separation on runway safety areas would have a measurable effect on GA activity levels.

Response:
The section will be revised to:

a) Clarify airport sponsor plans and assumptions regarding future RJ operations,
b) Refer the reader to the appropriate sections of the document describing the development of the existing fleet mix,
c) State rationale and assumptions for the future fleet mix.

Please see Errata pages attached.

Errata for McClellan-Palomar Airport FAR Part 150 Study Update

Preliminary Forecast of Aviation Activity, Revised November 5, 2003

1) Table of Contents re Section 1.5: See item #7 and attached replacement page.
2) Page 1-7, section 1.3.3: Replace with:
   "Historical commuter operations are presented in Table 1.2 and Figure 1.2. Commuter operations at CRQ primarily consist of service by America West to Phoenix-Sky Harbor International Airport, and United Express to Los Angeles International Airport. For the purposes of this Part 150 forecast, it was assumed that these recorded annual total more operations of "commuter" activity most likely represent a combined count of schedule commuter, on-demand air taxi and corporate flight activity having a filed flight plan designation of "Tango". Commuter operations have increased approximately 148 percent since 1980, an average annual increase of almost 4.2 percent. The airport experienced its highest level of commuter operations in 2000, with 16,545 commuter operations."
3) Table 1.2 (page 1-8): Clarify column heading of "Commuter". See attached.
4) Page 1-12, 1st paragraph, 3rd line: Replace "…60 seats or more…" with "…60 seats or less…". See attached.
5) Figure 1.4 (page 1-14): Modify legend to avoid truncation of line label. See attached.
6) Page 1-22: Move Section 1.5 to a new page. See attached.
7) Section 1.5: Replace to reflect the response to FAA comment #6 and provide conclusions regarding future general aviation and military fleet mixes. See attached.
8) Table 1.9 (pages 1-27 through 1-29):
   a. Clarify presentation of overall helicopter percentages and specific helicopter fleet percentages
   b. Fix page breaks.

   See attached.

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1.3.2 Air Carrier Operations

For traffic-count purposes, an air carrier aircraft is defined as having a maximum passenger seating capacity of more than 60. Since 2000, all scheduled passenger service at CRQ has been provided by commuter aircraft of fewer than 60 seats.

1.3.3 Commuter Operations

Historical commuter operations are presented in Table 1.2 and Figure 1.2. Commuter operations at CRQ primarily consist of service by America West to Phoenix-Sky Harbor International Airport, and United Express to Los Angeles International Airport. For the purposes of this Part 150 forecast, it was assumed that these recorded annual total more operations of "commuter" activity most likely represent a combined count of schedule commuter, on-demand air taxi and corporate flight activity having a filed flight plan designation of "Tango". Commuter operations have increased approximately 148 percent since 1980, an average annual increase of almost 4.2 percent. The airport experienced its highest level of commuter operations in 2000, with 16,545 commuter operations.

1.3.4 General Aviation Operations

General aviation includes all segments of the aviation industry except for commercial air service and military operations. Typical general aviation activities include pilot training, corporate, and pleasure flying. Operations at the airport are conducted by single- and multi-engine piston aircraft, turboprop and turbojet aircraft, and helicopters.

General aviation operations are recorded as local or itinerant. Local operations, primarily arrivals or departures performed by aircraft remaining in the airport traffic pattern or local training area, are most often associated with training activity and flight instruction. Itinerant operations are arrivals or departures other than local operations performed by either based or transient aircraft.

Table 1.2 and Figure 1.3 present historical general aviation operations separated into itinerant and local operations. On average, since 1980 itinerant general aviation operations have accounted for 59 percent of general aviation activity at CRQ. General aviation activity generally increased from the early 1980s through 1999. Since then, operations have experienced a downward trend beginning in 2000. The reduction of recent general aviation activity at the airport is a direct reflection of the economic downturn. Based on historical trends, local and itinerant general aviation activity will most likely rebound to previous levels mirroring increased economic activity, leading to increased business-related and personal pleasure flight activity.

1.3.5 Military Operations

Military operations at CRQ have fluctuated since 1980, with a high in 1999 of 12,617 operations and a low in 1997 of 1,364 operations. According to air traffic control personnel, military operations at CRQ consist primarily of aircraft performing training operations. Military aircraft using CRQ consist primarily of transport aircraft, such as the C-2, C-9, and C-12, and rotary-wing aircraft, such as the OH-58, CH-53, and SH-60. Historical military operations are presented in Table 1.2.

Table 1.2
HISTORICAL AIRCRAFT OPERATIONS
BY OPERATIONAL CATEGORY

Year	Itinerant Operations				Local Operations		Total
	Air Carrier*	Commuter**	GA	Military	GA	Military	
1980	0	5,305	117,383	1,433	108,250	5,019	237,390
1981	0	3,369	106,700	1,200	97,057	3,503	211,829
1982	0	5,122	85,072	534	82,919	2,093	175,740
1983	31	8,862	93,756	184	91,033	1,433	195,299
1984	0	6,327	103,433	917	83,427	1,133	195,237
1985	0	7,283	109,750	1,740	64,644	96	183,513
1986	0	6,476	116,339	2,015	65,485	30	190,345
1987	3,596	7,380	120,127	1,876	65,387	45	198,411
1988	0	9,416	127,741	2,018	62,472	152	201,799
1989	0	7,402	143,186	2,244	69,812	76	222,720
1990	38	10,457	154,806	2,125	87,779	164	255,369
1991	0	11,646	139,129	2,784	66,893	169	220,621
1992	0	11,525	135,897	2,521	75,061	37	225,041
1993	0	11,435	134,155	2,721	69,338	90	217,739
1994	0	11,133	135,360	2,448	71,473	156	220,570
1995	1	14,152	131,289	2,787	55,619	343	204,191
1996	14	14,414	144,149	2,304	66,512	371	227,764
1997	58	10,625	159,362	1,104	73,683	260	245,092
1998	4	12,067	150,988	2,030	79,726	154	244,969
1999	12	14,951	180,069	12,458	84,224	159	291,873
2000	0	16,545	152,184	7,888	78,405	74	255,096
2001	0	15,176	131,284	4,629	70,671	138	221,898
2002	0	13,140	126,277	1,892	62,774	72	204,155

SOURCES
FAA TAF 2002 Scenario, March 2003, for years 1980 to 1989; McClellan-Palomar FAA ATADS, for years 1990 to 2001.

NOTES
TAF data is presented in FAA fiscal years. Other records are presented in calendar years.
GA = General Aviation
*CRQ has never had commercial air carrier service (aircraft of 60 seats or more). According to the FAA tower staff, it is likely that nearly all of previous years' counts of air carrier operations were mistakenly classified as air carrier ops and should have been classified as air taxi (commuter) operations.
** includes scheduled commuter operators as well as on-demand air taxi and corporate flight activity having filed a flight plan designation of “Tango”.

Table 1.3
1997 MASTER PLAN FORECAST

	2000	2005	2010	2015
Annual Itinerant Operations				
Commercial	6,534	8,182	9,650	10,484
Air Taxi	12,683	14,546	15,745	15,726
General Aviation	150,800	159,800	170,400	182,000
Military	2,800	2,800	2,800	2,800
Annual Local Operations				
General Aviation	74,200	75,200	76,600	78,000
Military	100	100	100	100
Total Annual Operations	247,117	260,628	275,295	289,110

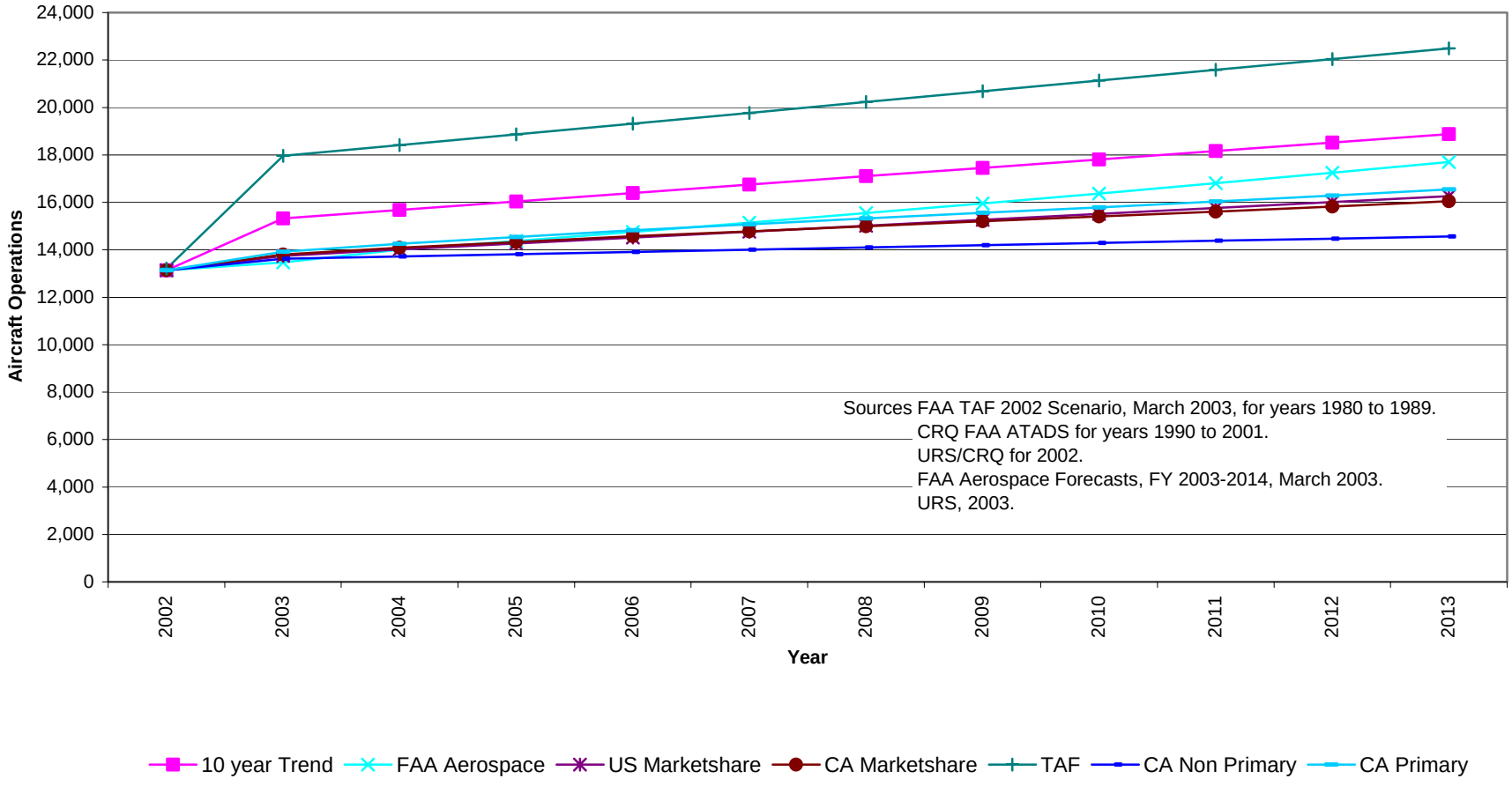
SOURCE
1997 McClellan-Palomar Airport Master Plan, Coffman Associates, Inc.

Over the 15-year forecast period of 2000 through 2015, the average annual compound growth rate of all aircraft operations was reported to be 1.05 percent. Projected average annualized compound growth rates for commercial operations of aircraft having 60 seats or less was 3.20 percent and air taxi operations was reported to be 1.44 percent for the same period. Local general aviation operations were projected to increase at a rate of approximately 1 percent, whereas itinerant general aviation operations were projected to increase at a rate of approximately 1.3 percent annually. In keeping with standard practices of forecasting military operations at civilian airports, local and itinerant military operations were held constant throughout the entire forecast period.

Based on this review, it is apparent that the Master Plan's forecast of commercial operations does not adequately reflect current market conditions, the adverse effects of September 11, or other factors. Likewise, variations in growth characteristics of local and itinerant general aviation and military aircraft operations, as well as the evolving air taxi market, would suggest that a revised and updated forecast of aircraft operations is currently warranted. That said, overall annualized operations levels for all aircraft appear to fall within 5 to 13 percent of current projects as listed in the TAF for the airport.

- **FAA Terminal Area Forecast.** The TAF projects aircraft operations at CRQ to increase to approximately 297,000 in 2020 from their current level of approximately 204,000 operations in 2002. The average annual growth rate associated with this forecast is approximately 2.1 percent.
- **FAA Aerospace Forecasts, FY 2003-2014 (March 2003):** Using the FAA's Aerospace Forecast for Fiscal Years (FY) 2003-2014, average annual compound growth rate projections of commuter/air taxi operations and general aviation operations were developed for the forecast period (2002-2013). These FAA growth rates were applied to the actual respective activity levels for 2002 and have grown outward to 2013.

Figure 1.4
COMMERCIAL OPERATIONS FORECASTS



forecast is approximately 20 percent below the TAF forecast of commercial operations at CRQ and over 10 percent lower than the TAF forecast of itinerant and local general aviation operations.

1.4.1 Commercial Operations

Inspection of the FAA's TAF for CRQ reveals that the largest projected increase in commercial (commuter) operations was to occur between 2002 and 2003. Referencing the FAA's ATAD data for the first six months of 2003, it is evident that the year-over-year annualized growth rate of 35 percent for commercial operations has not materialized. In fact, commercial operations at CRQ have increased at a moderate rate of only 5 percent. This TAF projection anomaly will have the direct effect of projecting higher operational levels for the 10-year period of 2003 through 2013 and is therefore considered unrealistic for this forecasting effort.

The comparison of the preferred 3.0 percent average annual growth rate of commercial operations growth to that of the CRQ TAF is shown in Table 1.8. As illustrated, the projections of commercial operations throughout the 10-year forecast period vary by as much as 19.0 percent.

1.4.2 General Aviation Operations

Similar to the FAA's TAF for general aviation operations at CRQ, the projected increase in local and itinerant general aviation operations was projected to occur between 2002 and 2003. The FAA's ATAD data for the first six months of 2003 indicate that these general aviation operations decreased by approximately 9.0 percent. Although operations are down approximately 9.0 percent, the preferred annualized forecast yields operational levels are similar to the FAA's TAF general aviation operational forecast for the same period.

The comparison of the preferred 2.5 and 2.0 percent average annual growth rate for local and itinerant general aviation operations at CRQ TAF is shown in Table 1.8 and Figures 1.8 and 1.9. As illustrated, the projections of local and itinerant general aviation operations throughout the 10-year forecast period yield similar results and vary by as little as 0.04 percent.

1.5 FLEET MIX – EXISTING AND FORECAST

The existing and projected future fleet mixes at CRQ are presented in Table 1.9 and discussed in the following two subsections. Table 1.9 shows the fleet mixes by representative Integrated Noise Model (INM) aircraft type. The INM is the FAA's computer program for modeling noise exposure around airports. Representative INM types are described in Appendix D of the Noise Exposure Map document.

1.5.1 Existing Fleet Mix

The derivation of the existing fleet mix is described in detail in Section 5 of the Noise Exposure Map document. In summary, the existing fleet mix was based on data from multiple sources including interviews of America West and United Express, analysis of FlightVue data provided by a CRQ fixed-base operator, interviews of CRQ management and Air Traffic Control Tower personnel and analysis of FAA Flight Progress Strips.

1.5.2 Future Fleet Mix

Airport representatives indicated that a runway extension within the 5-year and 10-year forecast periods of the Part 150 study is unlikely. Furthermore, CRQ does not anticipate any other changes to the airport that may induce or allow changes to the current fleet mix.

Currently, neither America West nor United Express, CRQ's two scheduled carriers, are operating regional jet (RJ) flights at CRQ. On a national scale, it is anticipated that both will shift to RJ aircraft in the future. Introduction of RJs at CRQ would offer additional city-pair opportunities while increasing the level of service to air travelers using CRQ. However, the likelihood of RJ operations specifically at CRQ will be dependent primarily on the carriers' determination of operational and economic feasibility to operate RJ aircraft. Feasibility considerations include:

- sufficient runway length to accommodate higher approach speeds and
- sufficient runway length to accommodate increased departure weights or sufficient runway/taxiway strengths to accommodate increased departure weights (or limits to departure weights – less fuel and/or passengers and/or less range).

Wider wingspans of current RJs should not be an issue because their operations would still remain with the aircraft group to which the airport was designed (Design Group II).

CRQ has addressed existing non-standard runway safety area issues by using declared distance criteria and applying slight increases in published landing visibility minimums for its only precision instrument approach to the runway.

As of the date of this forecast, CRQ has not received any documented intentions by the scheduled operators to shift to RJ aircraft. This coupled with CRQ not having any documented plans of extending the runway or making any other changes to the airport to induce or allow changes to the current fleet mix in the next 10 years, the commercial commuter fleet mix for the two future forecast years was left unchanged. In other words, RJ growth, or its forecasted lack of growth, was

predicated on CRQ maintaining the existing 4,900-foot runway and the associated operational/economic ramifications of the existing runway to non-stop haul length, runway takeoff and landing length minimums.

This projected general aviation fleet mix may change, however, if one or more of the following events occurred:

- Increase of based corporate jets.
- Migration of light single- and multi-engine based aircraft to other nearby airports.
- Increase of the airfield geometry (runway centerline-to taxiway centerline separation).
- Provision of fully compliant runway safety areas.

These events would be influenced by:

- Changes in the local and national economy,
- Perceptions of personal wealth and
- Unforeseen changes to airfield geometry that would allow operation of larger more demanding aircraft such as business-class jets.

As these events and their influencing factors are difficult, if not impossible, to predict the general aviation fleet mix was left unchanged for the two forecast periods except for the civilian helicopter fleet. Civic Helicopters and Mercy Flite, via interview, provided planned changes to their fleets as shown in Table 1.9

The Military fleet mix was left unchanged for the two forecast periods.

Table 1.9
FLEET MIX FORECAST

Representative INM Aircraft Type	Forecast Year								
	2003			2008			2013		
	Itinerant	Local	Touch and Go	Itinerant	Local	Touch and Go	Itinerant	Local	Touch and Go
Commuter/Air Taxi Fleet Mix									
LEAR35	20%			20%			20%		
MU3001	12%			12%			12%		
CNA750	6%			6%			6%		
CL600	5%			5%			5%		
CNA500	2%			2%			2%		
CIT3	2%			2%			2%		
GIV	2%			2%			2%		
GIIB	1%			1%			1%		
CL601	1%			1%			1%		
DHC8*	12%			12%			12%		
EMB120*	31%			31%			31%		
DHC6	1%			1%			1%		
BEC58P	5%			5%			5%		

Table 1.9
FLEET MIX FORECAST
(continued)

Representative INM Aircraft Type	Forecast Year								
	2003			2008			2013		
	Itinerant	Local	Touch and Go	Itinerant	Local	Touch and Go	Itinerant	Local	Touch and Go
General Aviation Fleet Mix									
BEC58P	10%	1%	5%	10%	1%	5%	10%	1%	5%
CL600	4%			4%			4%		
CNA172	16%	51%	45%	16%	51%	45%	16%	51%	45%
CNA206	8%	27%	20%	8%	27%	20%	8%	27%	20%
CNA441	3%			3%			3%		
CNA500	7%			7%			7%		
CNA750	2%			2%			2%		
DHC6	5%	1%		5%	1%		5%	1%	
FAL20	1%			1%			1%		
GASEPF	12%			12%			12%		
GASEPV	8%			8%			8%		
GIIB	1%			1%			1%		
GIV	3%			3%			3%		
GV	1%			1%			1%		
IA1125	1%			1%			1%		
LEAR25	1%			1%			1%		
LEAR35	9%			9%			9%		
MU3001	6%			6%			6%		
Helicopter (overall)	2%	20%	30%	2%	20%	30%	2%	20%	30%
General Aviation Helicopter Fleet Mix									
R22BII	40%	40%	40%	38%	38%	38%	35%	35%	35%
S300C/H269	54%	54%	54%	55%	55%	55%	58%	58%	58%
MD500D	1%	1%	1%	1%	1%	1%	1%	1%	1%
Bell206	2%	2%	2%	2%	2%	2%	2%	2%	2%
EC120	1%	1%	1%	1%	1%	1%	1%	1%	1%
AS350	0%	0%	0%	1%	1%	1%	1%	1%	1%
Bell222	2%	2%	2%						
MD902	0%	0%	0%	2%	2%	2%	2%	2%	2%

Table 1.9
FLEET MIX FORECAST
(continued)

Representative INM Aircraft Type	Forecast Year								
	2003			2008			2013		
	Itinerant	Local	Touch and Go	Itinerant	Local	Touch and Go	Itinerant	Local	Touch and Go
Military Fleet Mix									
C-9	9%			9%			9%		
C-2	9%			9%			9%		
C-12	45%		100%	45%		100%	45%		100%
CH-53E	19%			19%			19%		
OH-58	9%			9%			9%		
H-60	9%			9%			9%		

SOURCE
URS Corporation, 2003.
Note
*Increases in available runway length and improvements to existing nonstandard Runway Safety Areas may facilitate operations by larger, more demanding jet aircraft (i.e., Regional Jets) at CRQ.

PALOMAR AIRPORT ADVISORY COMMITTEE (PAAC) MEMBERS

NAME	Seat
John Christensen	City of Oceanside
Chuck Collins	General Public District 5
Council Member Ramona Finnila (Chairperson)	General Public District 5
Robert Fuselier	General Public District 5
Tim Hutter (Co-Chairperson)	General Public District 5
Bob Gates	General Public District 5
Hugh Lyttleton	General Public District 5
Ginna Reyes	City of Carlsbad
Tom Ricotta	City of Vista
Howard Williams	General Public District 5
Open Seat	City of San Marcos

Source: CRQ, 2004

Aircraft Activity Forecast Presentation
October 16, 2003

McClellan-Palomar Airport Part 150 Noise Compatibility Study Update

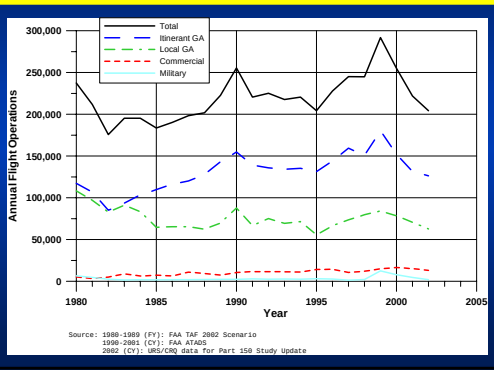
Palomar Airport Advisory Committee Meeting
October 16, 2003

URS

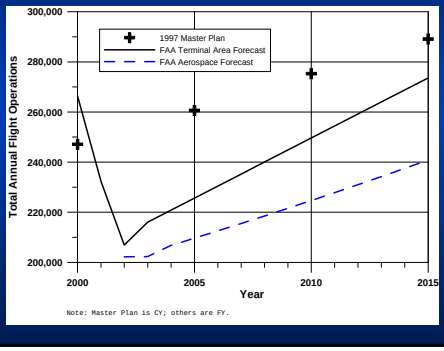
Agenda

- Summary of Preliminary Forecast
  - Past Activity
  - Existing Forecasts
  - Recent Events
  - URS methods and 'preferred' forecast
  - Fleet Mix Considerations
- Next Steps

Past Activity



Existing Forecasts



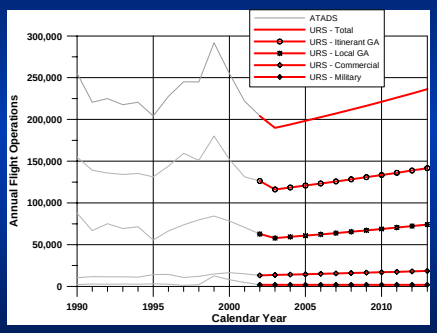
Recent Events

- Economic recession
- September 11th
- Middle East hostilities
- Industry trends

URS Forecast Methods

- Trend
- Market Share
- Professional Judgment
- Separate Commercial and General Aviation

Preferred Forecast



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Fleet Mix Forecast

- Commercial
  - No changes documented
  - Runway length constraint or FAA design standards modification needed
- General Aviation
  - No changes for fixed-wing fleet
  - Minor changes in helicopter fleet
- Military
  - No changes

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Next Steps

- FAA is reviewing the forecast
- Flight Profiles Submittal to FAA
- Generate NEM for Existing Operations
- Generate NEMs for Forecasts

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Noise Exposure Map Presentation
March 18, 2004

McClellan-Palomar Airport Part 150 Noise Compatibility Study Update

Palomar Airport Advisory Committee Meeting - March 18, 2004

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Public Meeting Format

- Open House (6-6:30)
- Introductions and Opening Remarks (6:30-6:35)
- Presentation (6:35-7:20)
- Break and Boards (7:20-8)
- Your Comments on NEMs and Input on NCP (8-9)

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Presentation Outline

- Study Definition, Goals, Impetus and Requirements
- Process and Progress
- Analysis and Noise Exposure Maps
- Schedule for Remainder of Study Update

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Process and Progress

- Conducted Kick-off Meeting (March 2003)
- Airport website and monthly PAAC meetings
- Data Collection and Analysis (ongoing)
- Forecast Approval (November 2003)
- Develop Noise Exposure Maps (NEM)
- NEM Review and Approval
- Develop Noise Compatibility Program
- Prepare Draft Study
- Study Review and Approval

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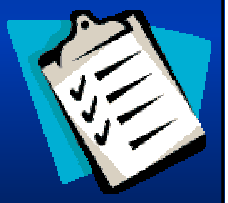
Next Milestone

- Comments on NEMs due 14April



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Representative Flight Operations (CY2002)

- Contacted Operators/Tenants
- Analyzed Tower counts & GEMS data

Category	Total	Percentage
Air Carrier	-	0%
Air Taxi	13,140	6%
GA IFR	45,410	22%
GA VFR	143,641	71%
Military	1,964	1%
Total	204,155	100%

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Modeled Average Daily Flight Operations for CY2004

Operation Type	Period	Modeled Average Daily Flight Operations for 2004				
		Jet	Turboprop	Piston	Helicopter	Total
Departure	Daytime	29.3	11.7	118.9	23.1	183.0
	Evening	1.3	2.2	5.1	1.0	9.6
	Nighttime	0.9	0.7	3.8	0.7	6.1
Arrival	Daytime	28.3	11.6	115.1	22.4	177.4
	Evening	2.3	1.9	9.0	1.7	14.9
	Nighttime	1.0	1.1	3.8	0.7	6.6
Missed Approach (Military only)	Daytime	0.4	0.4	0.0	1.4	2.2
	Evening	0.2	0.2	0.0	0.6	1.0
	Nighttime	0.0	0.0	0.0	0.0	0.0
Training (Touch and Go)	Daytime	0.0	0.8	100.3	43.0	144.1
	Evening	0.0	0.4	7.7	3.3	11.4
	Nighttime	0.0	0.0	2.2	0.9	3.1
SUMMARY						
Departure		31.5	14.6	127.8	24.8	198.7
Arrival		31.6	14.6	127.9	24.8	198.9
Missed Approach		0.6	0.6	0.0	2.0	3.2
Training (Touch and Go)		0.0	1.2	110.2	47.2	158.6
Grand Total		63.7	31.0	365.9	98.8	559.4

Notes:
1) Daytime = 7am - 7pm; Evening = 7pm - 10pm; Nighttime = 10pm - 7am
2) Each Missed Approach counted as two operations
3) Each Touch and Go counted as two operations

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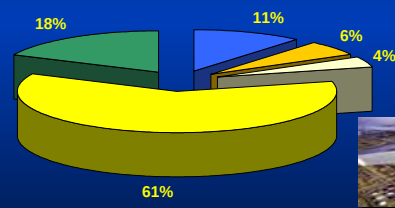
Fleet Mix for CY2004



Jet Twin Turboprop Twin Piston Single Helicopter

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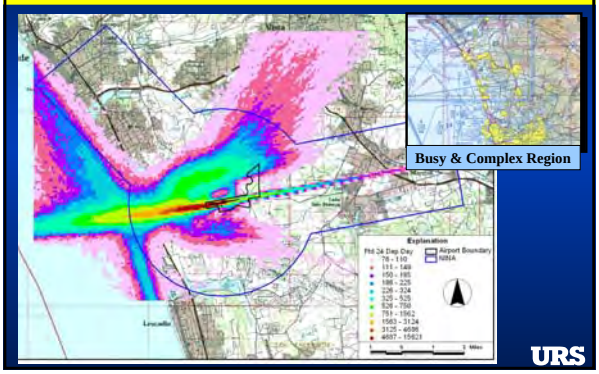
Flight Track Development & Utilization



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Nominal Departure Flight Tracks

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Nominal Arrival & Missed Approach Flight Tracks

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Nominal Training Flight Tracks

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Other Factors

- FAA-approved flight profiles
- Run-ups
  - Hold Short areas
  - Props
- Weather
  - 61° Fahrenheit
  - 71% RH
  - Wind: 212 deg at 4 kts
- Terrain

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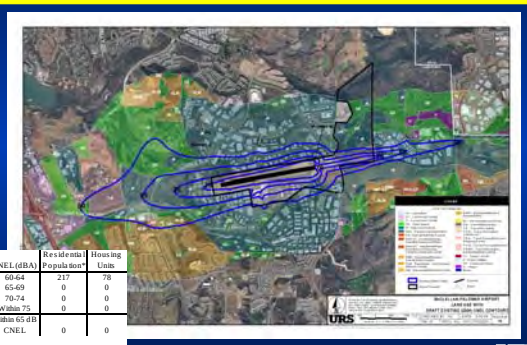
Community Noise Equivalent Level (CNEL)

- Expressed in A-weighted decibels
- Accounts for noise from single specific aircraft type events
- Penalizes evening and nighttime events
- Utilizes annual average daily operations
- Contours of overall aircraft sound exposure
- Specified by CCR Title 21

URS

Draft Noise Exposure Map for 2004

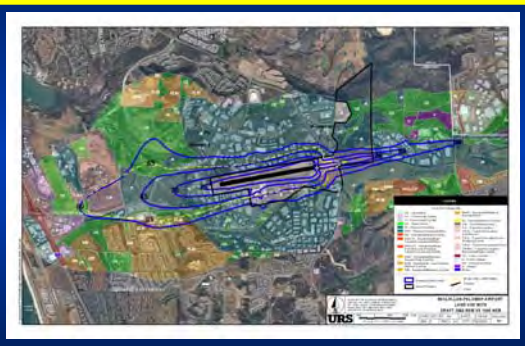


CNEL (dBA)	Residential Population*	Housing Units
60-64	217	78
65-69	0	0
70-74	0	0
Within 75	0	0
Within 65 dB CNEL	0	0

*based on SANDAG data for 2005

URS

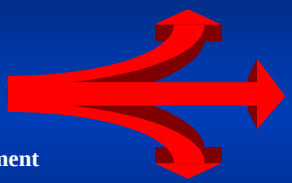
Comparison with 1995



URS

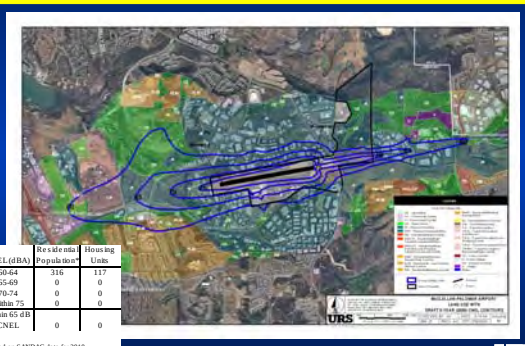
Forecasting Flight Operations

- Recent Events
- Forecast Methods
  - Trend
  - Market Share
  - Professional Judgment
  - Separate Commercial and General Aviation
- FAA Approval



URS

Draft Noise Exposure Map for 2009

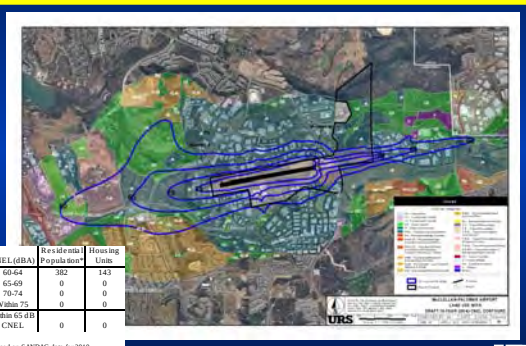


CNEL (dBA)	Residential Population*	Housing Units
60-64	316	117
65-69	0	0
70-74	0	0
Within 75	0	0
Within 65 dB CNEL	0	0

*based on SANDAG data for 2010

URS

Draft Noise Exposure Map for 2014



CNEL(dBA)	Residential Population*	Housing Units
60-64	382	143
65-69	0	0
70-74	0	0
Within 75	0	0
Within 65 dB CNEL	0	0

*based on SANDAG data for 2010

URS

PALOMAR AIRPORT ADVISORY COMMITTEE
2198 Palomar Airport Road
Carlsbad, California 92008
Phone: (760) 431-4646

MINUTES

THURSDAY, NOVEMBER 21, 2002

Chairperson Ramona Finnila called the meeting to order at 7:05 p.m. on November 21, 2002, in the Carlsbad City Council Chambers, 1200 Carlsbad Village Drive, Carlsbad, California.

MEMBERS PRESENT	**MEMBERS ABSENT**
Ramona Finnila, Chairperson	Warren Deem
Thomas Ricotta, Vice Chairperson	Brad Lunn
Bill Bradford	Carol McCauley
Robert Gates	
Tim Hutter	
Hugh Lyttleton	
Ginna Reyes	
Howard Williams	

Members present did represent a quorum.

COUNTY STAFF PRESENT

Chandra Wallar
Rick Jenkins
Roger Griffiths
Russ Couchman
Dee Dee Phillips
Darlene Haslett-Kitchen
Larry Simon
John Christensen

ROLL CALL AND INTRODUCTIONS

Ms. Finnila will speak with the City of Oceanside to find out if Carol McCauley will be replaced. She hopes to have the answer by the next meeting.

Ms. Finnila introduced Mr. Roger Griffiths as McClellan-Palomar Airports new Assistant Manager. Ms. Finnila also introduced Ms.Chandra Wallar DPW's Assistant Director.

APPROVAL OF MINUTES

Minutes for the months of September and October were approved.
Ms. Finnila, Mr. Ricotta, Mr. Bradford, and Mr. Williams abstained from voting on the October minutes.

PUBLIC COMMENT ON ITEMS NOT ON THE AGENDA

Martha Greenlaw of Magellan Aviation invited all to attend their annual Christmas Party. It will be held Wednesday December 18, 2002 from 4-8pm at Magellan.

Ms. Greenlaw serving as a member of the Carlsbad Airport Task Force, stated that along with the Carlsbad Chamber of Commerce an e-mail survey of all Chamber members was conducted. The survey asked how McClellan-Palomar Airport could better serve North County. Ms. Greenlaw requested that the results of the survey be put on the next PAAC agenda.

CITY COUNCIL REPORTS

No report given.

RECCOMENDATION FOR PALOMAR AIRPORT CENTER LLC NEW LEASES

Ms. Wallar addressed the PAAC members, she stated that the PAC, LLC lease is wonderful for the airport. It is a great opportunity to take the current leasehold and turn it into something more functional. County staff, Palomar Airport Center and the Palomar Airport Pilot's Association worked together cooperatively on this lease agreement. The FAA is happy with this project as well and agree that it will enhance the airports functionality.

Mr. Jenkins spoke of the impact this proposed lease plan would have on the airport and how it fits in with the master plan. Mr. Jenkins stated that the existing east/west and north/south taxiway are located on the PAC, LLC lease. The taxiways create an island effect making security very difficult. This issue was specifically addressed in this lease proposal. Mr. Jenkins stated that the goal was to provide public taxiway access to Jetsource hangar 1, improve taxiway access to the proposed new commuter terminal, and to increase security. This lease proposal allows access to businesses without having to go onto the airside of the airport.

Mr. Hutter questioned Mr. Jenkins in regards to the proposed terminal. Mr. Jenkins responded by stating that this is only a proposal and the feasibility studies have yet to be conducted. The County will not move forward with the proposed terminal until the Transportation Security Administration has completed their regulations in regards to terminal security and safety.

Mr. Lyttelton asked if the proposal for new public parking facilities is considered airport expansion, and if so would it have to be voted for by the residents of Carlsbad?
Ms. Finnila responded by stating that the interpretation of airport expansion differs, and the final decision would go before the County Board of Supervisors.

Ms. Reyes asked when the master plan would reflect these proposals. Mr. Jenkins responded by stating that the process takes roughly five years, and a new master plan has yet to be considered.

Ms. Haslett-Kitchen presented the Palomar Airport Center LLC amended lease proposal.

History:

+ Approval of lease with Burrows Southcoast, Inc. November 6, 1990
+ Boundary issues resulted in settlement agreement in December 20, 1993
  - Amended from Burrows to Palomar Airport Center, LLC April 21, 1998
  - Includes provision for right of first refusal
+ Negotiations ongoing for past three years

Project Goals:

+ Redevelop center of Palomar Airport
+ Provide for operational needs of airport
+ Address safety and security issues
+ Provide long term home for portable hangars

Many Challenges:

+ Maximize development on non-landfill impacted area
+ Define landfill area, existing utilities, easements
+ Completion of landfill remediation project
+ Build in flexibility for future landfill remediation project
+ Address recent security issues
+ Satisfy conditions of settlement agreement
+ Accommodate portable hangars
+ Plan for future utilization of airport
+ Expand taxiway/maneuver area around terminal
+ Provide maximum flexibility for parking

Solutions:

+ 5 Separate leases
  - Address landfill vs. non-landfill areas
  - Provide flexibility for parking, tie downs
  - Provide relocation area for portable hangars in future landfill remediation
  - Allow maximum development
+ Restaurant MOU
  - Short term solution-temporary location
  - Long term solution-first right of refusal
+ Redefine leasehold boundaries
  - Returns 1+ acre to County control
  - Provides 150’ taxiway area to satisfy terminal needs

- Adds landfill impacted area to satisfy parking requirements, accommodate portable hangars, and provide space for future landfill remediation needs

Description of Lease 1

+ Lease 1 Fuel island only
  - Lessee-Palomar Airport Fuel, LLC
  - .48 acres of non-landfill impacted area
  - Lease commences June, 2003
  - Rent commences June, 2003 @$1,450 per acre
  - Improvements completed

Lease 1

+ Fuel island
+ .48 acres
+ Capital improvements complete
+ Non-landfill area

Description of Lease 2

+ Lease 2 non-landfill impacted area
  - Lessee-Palomar Airport Center, LLC (PAC)
  - 6.06 acres of non-landfill impacted area
  - Lease commences June, 2003
  - Rent commences June, 2006 @ new appraised rate-deferred in recognition of boundary adjustment to return 1+ acre to County
  - Redevelopment complete in 36 months
  - If redevelopment complete in 24 months, 2 year- extension added to leases

Lease 2

+ 6.06 acres
+ Complete redevelopment
+ Non-landfill area
+ Boundary may be adjusted if extent of landfill changes

Description of Lease 3

+ Lease 3 Landfill impacted area
  - Lessee-Pac, LLC
  - 3.09 acres will provide staging area for redevelopment of Lease 2, then tie downs
  - Rent begins June, 2006 @ new appraised rate
  - Lessee may decide to remediate landfill in future on this area providing room for more redevelopment-will require additional negotiations

Lease 3

+ 3.09 acres
+ Landfill area
+ Possible remediation in future
+ Boundary may require adjustment in future

Description of Lease 4

+ Lease 4 landfill area reserved for home of existing portable hangars
  - Lessee-PAC, LLC

- Lease commences January, 2003
- Rent commences January, 2003 @ $1,100 per acre
- 3.37 acres subleased to PAPA, the Palomar Airport Pilots Association, owners of portable hangars, for 30 years, with built in rent cap

Lease 4

+ 3.37 acres
+ Landfill area
+ Location of portable hangars
+ Sublease w/PAPA
+ May need remediation in future

Description of Lease 5

Lease 5 landfill flex area currently used for parking

- Lessee-PAC, LLC
- Lease commences June, 2003
- Rent commences June, 2003 on part of area needed for parking for lessee @ $1,100 per acre
- 1.82 acre area reserved for public parking
- Airports Director has discretion for use
  *Parking, tie downs or landfill remediation

Lease 5

+ 1.82 acres
+ Flexible area
+ Currently used for parking
+ Can be aviation tie down area or location for landfill remediation moves

Resources available

+ The following firms, in association with PAC, have been working closely with County staff to arrive at the proposal before you:
  - Foley and Lardner-legal
  - Reeves Associates, Inc-architects
  - URS-soils and landfill
  - Project Design Consultants- civil
  - Butsco Utility Design, Inc.-utilities

Ms. Haslett-Kitchen stated that questions concerning the proposal can be directed to the appropriate firm, most of which are present here tonight. Ms. Haslett-Kitchen asked that PAAC move to approve the County recommendation for presentation to the County Board of Supervisors on December 11.

Mr. Ricotta asked if the adjustment to the taxiway increased or decreased the amount of land leased. Ms. Haslett-Kitchen responded by stating that yes the amount of land increased by 3 to 4 additional acres, most of which is landfill impacted. Ms. Haslett-Kitchen stated that the proposal called for temporary relocation of a modular restaurant to the grassy knoll adjacent to Western Flight. A relocation would be very costly, and all fees would be paid by PAC, LLC.

Ms. Finnila asked for the location of the utilities that go into the airport. Ms. Haslett-Kitchen stated that the utilities are left of the terminal and follow the taxilane on the east/west area between PAC, LLC and Jetsource hangar 1, which is on the PAC, LLC leasehold.

Mr. Ricotta asked if there was an actual blue print for the proposal. Ms. Haslett-Kitchen responded that there will be five large hangars, an administration area, and pilot's quarters. Mr. Ricotta asked where the location of the tie downs will be. Ms. Haslett-Kitchen responded by stating that the area adjacent to the north/south taxiway will remain available for tie downs. The Airport Director will also have the discretion to ensure the availability of tie down space.

Mr. Sax, a principal to the lease agreement, stated that there will be 80,800' of hangar space and 17,000' of office space.

Mr. Hutter asked what actions were taken during the six years between negotiations and the actual settlement. Ms. Haslett-Kitchen responded by stating that the landfill and solid waste remediation caused a considerable delay.

Mr. Gates asked how this proposal relates to the master plan. Ms. Haslett-Kitchen stated that acquiring the additional 150' of taxiway is the only item that does appear in the master plan and that this project is within the current master plan confine.

Mr. Lyttleton asked if parking and anticipated growth of the airport has been considered. Mr. Jenkins responded that it is suggested that lots 29, 30, and 31 be used for public parking.

Mr. Hutter asked about access to the west-end businesses during the project should the access road become blocked. Mr. Jenkins stated that accommodations will be made, so that access will always be available to the west-end businesses.

Mr. Gates asked if the proposal in relation to the master plan is a move to accommodate larger planes as opposed to smaller general aviation planes. Mr. Jenkins responded that the leaseholder decides what types of planes and businesses they choose to accommodate. The master plan in no way dictates what accommodations are to be made on any leasehold.

Mr. Sax stated that this proposal would replace old dilapidated hangar and office space with new larger hangars to accommodate all sizes of aircraft and many more businesses. Behind the five larger G-5 capable hangars, there will be smaller hangars ranging from 70 x 70 to 50 x 50. These small hangars will accommodate multiple small general aviation planes or turbo prop small planes. These smaller hangars will be located on lease 3. Work on lease 3 cannot be considered until there is landfill remediation and delineation. Many businesses will be displaced during this phase of the project so it would be inadvisable to start this phase prior to the completion of the

landfill remediation. The 150' concession PAC, LLC is making to the County will serve as a temporary home for smaller general aviation planes during lease 3 construction. The 150' concession will probably not be utilized by the County for a new terminal for anywhere from five to ten years. During this time PAC, LLC can proceed with their lease 3 project.

Mr. Sax stated that completion of phase 1(five hangars) would meet the County's three year minimum requirement for redevelopment completion. This dollar amount exceeds the bond requirement of $1.3 million; the first phase of the project alone is estimated to exceed $15 million. Mr. Sax also stated that current tenants on the PAC, LLC leasehold will be accommodated.

Mr. Ricotta asked what number of general aviation aircraft would be housed on the leasehold once the project is completed, and exactly how many hangars there would be. Mr. Sax responded by stating that roughly 35 larger hangars will be constructed. The number of general aviation aircraft housed could vary depending on the demand of jet hangar space. PAC, LLC negotiated to sublease landfill impacted land to PAPA for thirty years, this would guarantee that all 53 hangars presently would exist for that same time period. When remediation is necessary cost incurred would fall on PAC, LLC and any accommodations possible would be made for those tie downs displaced during this time. Mr. Sax stated that the number of tie downs estimated for roughly the next ten years will be very close to what exists now. But, upon completion of the entire project there will be less tie down space available on the PAC, LLC leasehold.

Ms. Haslett-Kitchen stated that when plans are ready for phase two they will be presented to PAAC as well.

Ms. Wallar presented PAAC with a letter from PAPA endorsing the PAC, LLC leasehold proposal.

Matt Petersen with the Law Firm of Petersen and Price representing Jetsource addressed the committee. He stated that development plans are not available for viewing. The leasehold has been an item of litigation for several years, and has been a source of contention with the County. Mr. Petersen also stated that Burrows was in breech of contract, and for over nine years nothing was done on the leasehold. Mr. Petersen asked if a request for proposal was prepared, and if so why was it not published. Burrows failed to comply with guidelines set after litigation.
Mr. Petersen stated that there is not an incentive for PAC, LLC to complete this project and asked what if PAC, LLC failed to comply once again? Mr. Petersen asked if an environmental review has been completed. Mr. Petersen stated that the PAC, LLC project is problematic to Jetsources plans on their leasehold. Mr. Petersen questioned the accessibility of the east/west taxiway, if PAC, LLC has control over it and does not allow access, Jetsource customers will lose direct access from hangar 1 to the runway. Mr. Petersen stated that Jetsource is currently in litigation in regards to hangar 3, no response has been made by the County as of yet. Mr. Petersen stated concern and

questioned if this project is consistent with the master plan. Mr. Petersen stated that a development proposal has not been presented, how is it known that the project is consistent or not? Mr. Petersen stated that a master plan amendment is needed. He stated that these are just some of the concerns Jetsource has, and it is premature for this project to proceed. Mr. Petersen requests that Jetsource be allowed to review the plan before it goes to the Board of Supervisors. Mr. Petersen stated that Jetsource recommends that PAAC not recommend this project. Mr. Petersen requested that if this project does go forward, the east/west taxiway be carved out of the leasehold.

Mr. Williams questioned Mr. Petersen in regards to viewing of the proposal plan. Mr. Petersen stated that several attempts have been made by Jetsource to obtain access to this proposal, but the County stated that they are not required to give public notice.

Mr. Hutter questioned access to hangar 1 in regards to Jetsource having access to the east/west taxiway and the north/south taxiway. But it is unclear if the two will remain accessible.

Mr. Ricotta asked Mr. Petersen the types of aircraft that will be housed in hangar 1. Mr. Petersen responded that jets up to the size of a Citation X with the maximum wingspan of roughly 61'.

Ms. Finnila asked why a request for proposal was not published. Ms. Wallar responded that County Council worked extensively with the proposal as well, and County Council feels that all legal requirements of the settlement were met and the proceedings have been very prudent and compliant. Ms. Finnila asked if there was a requirement in the lease for PAC, LLC to complete remediation of landfill impacted areas on their leasehold. Ms. Wallar responded that there is no requirement from the County for remediation, this idea was actually proposed by PAC, LLC. Though it is a very technical and expensive proposition the County is interested because it would bring more land to the airport allowing for more development at a higher level. Landfill remediation is not required of any leaseholder, but it would be in the best interest of the County and airport users.

Ms. Finnila asked if a decision was made concerning an environmental impact report requirement. Ms. Wallar responded that County Council and the FAA both indicated that it is in compliance with the master plan. The master plan includes an EIR, and therefore there is no need for any additional environmental study for this project.

Ms. Wallar stated that an RFP was not issued because the project was planned in conjunction with PAC, LLC, PAPA, County staff, and the FAA. The County believed that there was no need to put an RFP forward because everyone involved agreed that that the proposal was best for the County. Mr. Gates stated that there was not a competitive proposal, a decision was made to negotiate with PAC, LLC.

Ms. Wallar stated that the east/west taxiway is completely within the existing leasehold, as is the north/south taxiway. Mr. Jenkins indicated earlier this was a concern for the County and have proactively addressed the situation. The County by obtaining 150' from the PAC, LLC leasehold, makes the north/south taxiway under County control. Ms. Wallar stated that access to the north/south taxiway as it is now will continue to remain at least that much. There is no intent to put additional tie downs or aircraft on the north/south taxiway, at some point in the future it will be lined to accommodate even larger jets.

Mr. Ricotta asked if the County addressed the sinking problems with Jetsource hangar 3? Ms. Wallar confirmed that it is in fact in litigation and she must refrain from commenting.

Mr. Jenkins stated that relocation of the hangar 3 as proposed by Jetsource would not be possible because their planned relocation is on the PAC, LLC leasehold.

Mr. Lyttleton stated that access to the north/south taxiway was unclear to him. A Jetsource attorney stated that the north/south taxiway is accessed quite often by Jetsource customers, traveling between hangar 1 and the main Jetsource hangar. The attorney stated concerns should the main taxiway become the only means of travel.

Mr. Lyttleton asked if the proposed new taxiway with the additional 150' would be used by the commuters, and become a secured area, blocking access to regional jets. Mr. Jenkins stated that the north/south taxiway addition would be on the airside. The current dilemma is the island of businesses that exist. At this time pedestrians only access is crossing the north/south taxiway. Mr. Lyttleton questioned the possible future impact of regional jet traffic on Jetsource hangar 1 traffic. Mr. Jenkins stated that there should not be a problem, neither PAC, LLC nor the airport has any intention of denying Jetsource access to hangar 1.

The attorney for Jetsource stated that access via the main taxiway would require checking in with the tower, should the tower be closed safety issues would arise. Jetsource traffic between hangar 1 and the main hangar is very high. It would be very inefficient for Jetsource and take more time and man power, it is not an appropriate way to deal with the issue.

Mr. Sax stated that the east/west taxiway is currently and for many years on the Burrows/PAC, LLC leasehold. Pac, LLC has never blocked this taxiway and prevented Jetsource from accessing this hangar. PAC, LLC plans to make some of that area general aviation and a large percentage of it parking. Mr. Sax stated that the taxiway would not be blocked. Ultimately the corner radius would be larger than it is now accommodating aircraft with a wingspan larger than the hangar could house. Jetsource will not be denied access now or in the future. Mr. Sax stated that unless and until there is a large enough access for any aircraft that which is to come in, which right now is in existence there will not be a blocking of the east/west taxiway. Large aircraft could not come through here, there will be a 150' taxiway with a 120' radius at

the corner. This is far more than any FAA safety requirement would dictate for access into this hangar.

Mr. Sax spoke of the settlement between Ken Burrows and Burrows Southcoast with the County of San Diego. Burrows agreed to hold off on a thirty-year development plan until the County was able to reconfigure plans in regards to the airport and properties. Once this was accomplished, Burrows was able to move forward and implement their existing thirty-year plan. The time lapsed was due to the County having to figure out exactly what accommodations would be needed for growth. A letter resembling an RFP which included the development criteria for the property was signed. The only understanding was that if this offer were declined it would then go to the public as an RFP. This project has not ever by contract or implication required remediation. Mr. Sax stated that Jetsource via Mr. Petersen was invited to join Burrows in the remediation of the landfill impacted land. That invitation was declined. Once again the offer is reiterated to join Burrows in the remediation.

Mr. Ricotta asked if a clause existed stating that the lease would increase or stay static. Mr. Sax responded that the lease would increase, and involve a considerable risk. Mr. Ricotta stated that it appeared to be a sweetheart deal. Mr. Sax stated that the rate being paid is the standard rate for all leaseholders on the airport. Mr. Ricotta questioned Mr. Sax as to remediation liability, which Mr. Sax declined to comment on. Mr. Sax stated the PAC, LLC has offered to remediate the landfill impacted area of their leasehold in order to use the land.

Mr. Hutter stated that the lease has to address liability issues, in regards to pollution on the landfill. He questioned who assumed liability. Ms. Wallar stated that she would not address liability, but the County is responsible for ground water from the landfill, and County owned property, County managed property remediation, as needed. The County will work with leaseholders to remediate. Mr. Hutter asked if the only legal obligation PAC, LLC has is to develop the five corporate hangars. Ms. Haslett-Kitchen stated the only capitol investment requirement PAC, LLC has is on leases one and two, because they are the only non-landfill impacted areas. Leases three, four and five are all landfill- impacted areas, and there is not a minimum capitol investment requirement for landfill-impacted areas. The capitol investment requirement for lease 1, the fuel island has been met. The proposal PAC, LLC has for lease 2 far exceeds the County's minimum capitol investment requirement. The County wide minimum capitol investment requirement for airport development is $5,000.00 per acre per year of lease.
The rent PAC, LLC pays has not been implemented by anyone else, this is because it is only implemented when an amendment is added or during negotiations.
Ms. Haslett-Kitchen stated that because lease 2 and 3 would have rent deferred during development, in 2006 the new lease rate would be negotiated. This would be to recoup fees lost for those two years.

Mr. Lyttleton asked if PAC, LLC is required to build the five hangars, or just meet the required dollar redevelopment obligation. Ms. Haslett-Kitchen stated that the County does not dictate specific development to any leaseholder. She also stated that

development plans are costly, and are usually not prepared until the County Board of Supervisors approves the lease. Once these development plans are available they would be presented to PAAC.

Mr. Williams asked if the settlement agreement was a public document. Mr. Sax stated that it was a sealed document but it has become a quasi- public document.
Mr. WIlliams stated that the only real objection is by Jetsource. Mr. Williams asked why the two could not amicably settle the problem.

Ms. Finnila closed public hearing. Ms. Finnila requested that lease 1 be voted on separately from leases 2, 3, 4, and 5 due to a PAAC member having monetary interest. Mr. Ricotta disagreed. Ms. Finnila called for a bifurcation of the leases to be voted on. There is one to oppose and six to approve. There will be a bifurcation.

Mr. Sax stated that there are two tanks on the fuel island. One tank is 15,000 gallons for jet fuel and the other 12,500 for avgas. There is not an increase requested.

Mr. Ricotta asked if more fuel tanks could be placed on the fuel island. Mr. Sax stated that more fuel tanks could be placed, but that would be if the County favors more fuel on the airport and there is a demand. There are no current plans to do so as of yet, there is sufficient capacity currently.

The vote for approval of lease 1 was one to oppose and six to approve.

Mr. Ricotta stated that this is premature and should have gone to the public as an RFP. Jetsource would be landlocked, and there should be some negotiation in regards to their hangar being settled, possibly with relocation. This proposal would interfere with any other production should the landfill be remediated or not. Mr. Bradford agrees that Jetsource should be settled prior to approval of the PAC, LLC lease. Mr. Ricotta stated that the east/west taxiway was public domain in 1959 when the airport was built.
This proposal would give PAC, LLC more land and incur revenue from property the County is liable for. The compensation would not be an adequate return on the land.
Mr. Ricotta feels that the proposal should go back for renegotiation.

Mr. Bradford agrees. Mr. Lyttleton asked if the motion could be tabled, there are a lot of issues on both sides. There are redeeming qualities in the project, but concerns have been expressed. Mr. Ricotta suggested that a study committee be established to allow for an opportunity to look at the proposal to get additional information to satisfy those with concerns.

Ms. Reyes stated that this lease has been in negotiation for several years by the County and other people involved in culminating the lease. Ms. Reyes feels that it would do no good to table the motion, and that the County is remiss by not having a master plan in place in conjunction with this lease. There has been a lot of work involved in the proposal and does not feel that it would be fair to the leaseholder.
Mr. Williams stated that this proposal needs to move forward and there is no reason to

table the motion.

Mr. Hutter stated he has serious reservations about several aspects of the proposal. There would be a lot of business displacement, and sees no place for the current tenants in this plan. There is also a lack of integration with the plans for a terminal. Mr. Hutter stated that there would be to many items left open ended.

Mr. Gates stated that he has some of the same concerns as well as noise impact on the community. This proposal favors the larger noisier aircraft. Mr. Gates stated that he has problems with several aspects of the proposal.

Ms. Wallar stated that this leasehold has gone through more scrutiny than any leasehold in the history of the airport. Ms. Wallar stated that a lot work was involved and a lot of information was shared because the County wanted the support of PAAC. Most leaseholds come forward with minimal information in regards to the plans for a leasehold. This proposal was scheduled to go before the County Board of Supervisors November 13, 2002, but postponed in order for PAAC to have an opportunity to hear the proposal again when a quorum was present. County staff delayed presentation to the Board because the recommendation and input of PAAC is important to the County. Ms. Wallar stated that County staff will go forward with its presentation to the Board on December 11, 2002. Ms. Wallar stated that she wanted to have feedback from PAAC in order to incorporate it into the letter to the Board.

Mr. Ricotta asked if PAAC had to vote before the proposal could go to the Board of Supervisors. Ms. Wallar stated that this is an advisory counsel, and the PAAC vote will be included in the letter as an advisory statement to the Board, but a vote from PAAC is not required in order to move forward to the Board of Supervisors. Mr. Ricotta asked if any airport personnel were privy to this leasehold proposal, which makes no consideration to general aviation. Mr. Ricotta stated that this proposal is totally impractical and only maximizes the revenue of the lessee, not the good of the people, the County, or general aviation.

Ms. Finnila stated that the letter from Mr. Gibbs will be entered into the record. A motion to move forward was made by Mr. Williams, seconded by Mr. Hutter.
Mr. Lyttleton asked Mr. Sax if another thirty days to consider the proposal would be too much. Mr. Sax stated that it would be very problematic.

Ms. Reyes asked if in phase 2 the hangars would displace the restaurant and the pilot shop. Mr. Sax said that the restaurant, the pilot shop, fixed base operators and barnstormers would not be displaced. Ms. Reyes asked if PAC, LLC will continue to work closely with the County in order to produce an effective master plan.

Ms. Wallar stated that far more information has been provided. Development plans are not being approved. Ms. Wallar stated that she has aviators that have been a part of this discussion since day one. People like Floyd Best, Rick Jenkins, and others that

have a lot of aviation knowledge have guided the County. The County recognized that PAPA was another consideration, general aviation is a big part of our airport. Ms. Wallar feels strongly she can guarantee that all parties involved will continue to cooperate and continue to try to do what is best for the airport. Ms. Reyes asked if both the County and PAC, LLC agree to cooperate. Ms. Wallar stated that she agrees, but cannot speak for Pac, LLC. Mr. Sax stated that PAC, LLC has worked with Ms. Wallar, Ms. Haslett-Kitchen, Mr. Jenkins and Mr. Best for many years. Ms. Reyes asked if PAC, LLC would be amenable to working with the County should the terminal not be effective in the proposed area, and be willing to change the course of the direction with the master plan. Mr. Sax stated that PAC, LLC always has been and always will be in the future.

Mr. Ricotta asked if there is no guarantee in the proposed lease that PAC, LLC will not build another wall of G-5 hangars on lease 3 if possible after landfill remediation and also if there was anything in the proposed lease that guarantees general aviation on the airport. Mr. Sax stated that for the record, which is being recorded, that everything outside of the front row is going to be in the 50x50, 60x60, or 70x70 class, going to basic customer general aviation, or someone with a larger twin. Mr. Sax states he will make a guarantee right now, that you can hold him to. PAC, LLC has no plans for any other large box hangars, and also guarantees that if it takes the use of the box hangars to accommodate their tenants they will put them in there until they can relocate them. Mr. Ricotta asked if there was any possibility of PAC, LLC and Jetsource getting together and doing a boundary adjustment and letting them have the land to redevelop their project. Mr. Sax stated that for sometime PAC, LLC has been inviting Jetsource to talk to PAC, LLC.

Ms. Finnila called for a vote to move forward in order to vote on the lease. The vote to move forward was six to approve. The motion to vote was made by Ms. Reyes, and seconded by Mr. Williams. The vote for leases 2, 3, 4, and 5 was four oppose and four approve, a tie.

McCLELLAN-PALOMAR AIRPORT REAL PROPERTY ISSUES

Ms. Haslett-Kitchen defers her report in the interest of time.

AIRPORT COMMUNITY RELATIONS ISSUES/PAR 2000 UPDATE

Mr. Couchman stated the annual operations so far are 172,401. This number is down 15,479(9%) compared to 2001. Mr. Couchman reported that there was 4,900 revenue passenger enplanements reported by the air carriers for October 2002, this number is down compared to 2001. Throughput for the month of October was 9,606, total throughput for 2002 so far is 95,088.

There were 45 community concerns for the month of October, which brings the total for the year to 587. Operations went down for the month, but concerns went up.

DIRECTORS' REPORT

Mr. Jenkins stated that the County is waiting to receive notice to proceed with the Part 150 study from the FAA next week. URS will be present for PAAC's December meeting. The issue of the contract to reconstruct taxiway ALPHA will be made shortly. Bid opening was today and a contractor was chosen, but the formal announcement has not been made. Actual work will not start until January. Mr. Jenkins stated that he wrote an article for the future issue of PLANENEWS, the article will be about construction projects. Mr. Jenkins encourages all fixed base operators and those interested in flying communicate to the airport manager to make sure that your needs are accommodated. Mr. Jenkins stated that Mr. Best and all County staff will do their best to ensure that there is the least amount of impact on airport users as possible.

REGIONAL AIRPORT AUTHORITY

No report given.

TRAFFIC LIGHT TURN POCKET

A report from the Carlsbad City engineer was given by Ms. Finnila. The situation was studied and the staff does not recommend any modification of the traffic signal.

STAFF REPORT

Mr. Griffiths stated that the commuter terminal reconfiguration to accommodate the TSA staff and screening equipment, in concert with the airlines is now complete.

SET AGENDA FOR MEETING ON DECEMBER 19, 2002

The Carlsbad Chamber of Commerce Taskforce requested their report to be put on the December agenda. The Fallbrook Airport Advisory Committee also requests to be put on the agenda so that PAAC can decide whether to take action or not on an item.

ADJOURN

Meeting was adjourned at 9:40 p.m.

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Ramona Finnila, Chairperson

PALOMAR AIRPORT ADVISORY COMMITTEE
2198 Palomar Airport Road
Carlsbad, California 92008
Phone: (760) 431-4646

MINUTES

THURSDAY, DECEMBER 19, 2002

Chairperson Ramona Finnila called the meeting to order at 7:05 p.m. on December 19, 2002, in the Carlsbad City Council Chambers, 1200 Carlsbad Village Drive, Carlsbad, California.

MEMBERS PRESENT	**MEMBERS ABSENT**
Ramona Finnila, Chairperson	Warren Deem
Thomas Ricotta, Vice Chairperson	Robert Gates
Bill Bradford	Brad Lunn
Tim Hutter	
Hugh Lyttelton	
Ginna Reyes	
Howard Williams	

Members present did represent a quorum.

COUNTY STAFF PRESENT

Sherry Miller
Floyd Best
Roger Griffiths
Russ Couchman
Dee Dee Phillips
Tim Caulder
John Christensen

ROLL CALL AND INTRODUCTIONS

Ms. Finnila inquired about Mr. Deem. Ms. Finnila requested that Mr. Best contact Mr. Deem. Mr. Best stated that he would be in contact with Mr. Deem during the holidays.

APPROVAL OF MINUTES

The November 2002 Minutes were approved with one correction. Page eleven, fifth line, Mr. Ricotta was substituted for Mr. Bradford, secretaries error.

PUBLIC COMMENT ON ITEMS NOT ON THE AGENDA

There were no public comments.

AIRPORT COMMUNITY RELATIONS ISSUES

Russ Couchman, Airport Environmental Noise Specialist, reported there were 16,279 operations in November. Total operations for the year to date is 204,289.
Mr. Couchman reported there were 4,712 revenue passenger enplanements reported by the air carriers for November 2002. Throughput for the month of November was 9,213, total throughput for 2002 so far is 104,301. VFR operations were 12,338 in November while IFR operations totaled 3,941 in November. There were 83 community concerns for the month of November, which brings the total for the year to 616.

Mr. Best stated that Russ Couchman has resigned to accept a position in Wisconsin at General Mitchell International Airport. It is a great loss for the airport. Mr. Couchman thanked all members present. Mr. Wayne Thomas will handle noise concerns until the Environmental Noise Specialist position is filled.

CITY COUNCIL REPORT

No report given.

CARLSBAD CHAMBER OF COMMERCE TASKFORCE REPORT

Mr. Larry Galarza 2210 Palomar Airport Road /member of the Airport Taskforce presented results from an electronic mail survey of Carlsbad Chamber members in regards to McClellan-Palomar Airport usage. 350 members responded to the survey, results obtained will be used by airport service providers to assist in marketing efforts. The survey has potential to assist the County of San Diego as well in planning future improvements and services.

PART 150 PRESENTATION BY URS

Mr. Best introduced members of the URS team working on the Part 150 study.
Mr. Jeff Fuller is the project manager and Joe Czech is the project engineer. Mr. Fuller stated that the authorization to proceed was received from the FAA. Mr. Fuller introduced the project team for the Part 150 study. He stated that URS is the prime consultant on the project; it is their responsibility to produce an entire detailed study. The study will include quality core control, noise exposure maps, and the noise

compatibility plan. Mr. Fuller stated that Deborah Murphy will be the project director, and will be attending the future PAAC meetings. A detailed public out reach program for the study update will be coordinated by Katz and Associates. Patricia Tennyson will be the project manager for Katz and Associates.

Mr. Fuller stated that the two major components of the Part 150 study are the Noise exposure maps and the noise compatibility program, as well as substantial public involvement. Once the components are developed they are then presented to the FAA for review and approval. The goal of the study will be to facilitate the best possible relationship between the airport and the surrounding communities, by reducing the impact from aviation noise and achieving a land use compatibility through corrective and preventive mitigation measures.

Mr. Czech stated a functional list of tasks not listed in a scheduled chronological order. They are: to identify and notify the interested parties; develop noise exposure maps; and the noise compatibility program. During these tasks the public will be involved, as well as the preparation of the Part 150 documents. Some of the interested parties will include: the FAA; PAAC; CA. Dept. of Aeronautics; F.B.O.'s; residential and business community representatives. Letters will be sent out in January to all of the interested parties involved.

The development of the noise exposure maps is the most technical component of the study. This includes compiling existing flight and run up operations data from the airport, types of operations-departure/arrival patterns, flight tracks, time of day, and runway utilization. Five and ten year forecasts will be developed for the project. Possibilities of increased night operations and/or fleet mix changes could be considered if they are in the forecast. The non-flat terrain around the airport will be incorporated into the noise model. The community noise equivalent level(cnel) contours will be computed with the FAA's integrated noise model(INM). Contours for both the existing conditions and the abated/unabated cases will be developed.

The noise compatibility program per the Part 150 regulations and the Advisory Circular 150/5020 will be developed. Operational noise abatement measures will be reviewed, as well as existing procedures in hopes of identifying possible alternatives. Land use mitigation measures, both corrective/preventive, will be utilized. Program management measures in regards to the noise monitoring systems, staffing requirements and public involvement will be considered as well. The goal of the Part 150 study will be to demonstrate the noise benefit of the measures, hopefully numerically. The PAR 2000 will be extremely useful to the study.

Mr. Fuller spoke of public involvement in regards to the study. Three public meetings are planned. Monthly status updates will be prepared for PAAC. Information materials will be available for the public and public comment will be welcomed.

Five drafts will be generated. Version one will be submitted to PAAC for review. Version two will be a preliminary FAA review with PAAC recommendations considered.

Version three will be the public/County draft with recommendations from both PAAC and the FAA considered. Version four will once again be submitted to the FAA for formal review(180 day comment period). The fifth version will be the final version of the Part 150 study.

Mr. Williams inquired as to the type of materials distributed to the public. Mr. Fuller responded that public materials will include information on the process, and regulatory environment information as it pertains to both the Part 150 process and airport noise issues. Definitions and maps explaining the noise compatibility program will also be included.

Mr. Fuller clarified that the five versions of the Part 150 study will be progressive. Each incorporating recommendations from the prior version.

Mr. Hutter asked as to whom specifically would be involved in the noise compatibility process. Mr. Fuller responded that general public meetings would be announced for the public to attend, and everyone on the airport will be encouraged to participate.

Mr. Fuller stated that the schedule presented is strictly an example; the timeline is basically a one-year period with a six-month review by the FAA.

Mr. Fuller stated that both the Regional Airport Authority and the City of Carlsbad city planner as well as several others would be invited to participate in the study.

Mr. Tu of Civic Helicopters 2192 Palomar Airport Road, questioned Mr. Fuller as to the type of reactions and comments expected from the public. Mr. Fuller stated that several reactions are expected and their input will be taken into consideration in regards to the study. Mr. Fuller stated that flight restrictions cannot be arbitrary, the FAA rules and regulations will be strictly adhered to, but if adjustments can be made to flight tracks that would accommodate the community, an effort would be made to do so.

Mr. Best stated that the noise compatibility programs purpose is to find ways the airport and the community can coexist. The FAA oversees the study and funds it as well. A representative is present, Jennifer Middleton. Ms. Middleton stated that this is a voluntary program and the FAA will be available to provide technical information throughout the process and assure adherence to FAA guidelines.

Mr. Best stated that the FAA would put into perspective what actions will be feasible for the airport to put into use. Different departments of the FAA will advise as to the options and other possible solutions to problems.

Mr. Lyttleton asked about land use recommendations. Mr. Best responded that the airport land use commission is the deciding factor for recommendations. The FAA can suggest feasible options, the commission can decide against it, but liability issues will then fall on the land use authority.

Mr. Best stated that the types of aircraft that will utilize the airport and with what frequency will determine the noise contours. The contours can change over time. Several factors can contribute to the change of noise contours, and must be considered.

McCLELLAN-PALOMAR AIRPORT REAL PROPERTY ISSUES/ CIVIC HELICOPTERS LEASE AMENDMENT

Mr. Tim Caulder stated that this item would be heard by the County Board of Supervisors on January 29th. This is the sixth amendment for Mr. Chin Tu of Civic Helicopters. It will encompass the new rent formula as well as add the storm water clause. This amendment is mandated by the original lease from 1981.

Mr. Hutter asked what exactly is entailed in the storm water clause. Mr. Caulder stated that it reflects the intent of the clean water act, other municipalities and state agencies in the sphere of influence over Palomar Airport. Mr. Best stated that the County handles the storm water issues on the airport. This clause ensures that the tenants comply with the program. If they fail to comply each lessee would have to individually become permitted and pay for all incurred fees.

Ms. Finnila stated that this new federal law is mandatory for residential, commercial and industrial entities. It states that individuals must take responsibility for storm water run off on their own property. It is imposing and can incur fees of a $1,000 per incident. Mr. Best stated that this is mandated by the National Environmental Protection Act (NEPA), and the California Environmental Quality Act(CEQA).

Ms. Reyes asked if the language correlates with the storm water clause that work that Mr. Rosenbaum is currently utilizing. Mr. Caulder stated that this is the same language incorporated in the PAC, LLC lease previously presented to the committee.
Mr. Lyttelton asked if there is an anticipated fiscal impact on the lessee. Mr. Best stated that yes; there will be if they are noncompliant with water run off on their lease.

Mr. Ricotta motioned for a vote, and Ms. Reyes seconded. All approve.

ASSEMBLY BILL 2776 AVIATION NOISE

Mr. Fedorchak stated that AB2776, chapter 496 is set to be implemented in January of 2004. Mr. Fedorchak stated that the County Board of Supervisors has the power to implement the law prior to its set implementation date. This law states that a potential property buyer must be made aware of an airport in the vicinity, when the property is within the airport influence area.This disclosure statement is to be presented before contracts are signed.

Ms. Finnila stated that the City of Carlsbad requires this notification already, and has for years, unfortunately some sister cities do not. Mr. Best stated that AB 2776 pertains to the development of new property. This law is complimentary to what is stated in the Palomar Comprehensive Land Use Plan and Noise Impact Notification Area.

Mr. Fedorchak is requesting a letter of endorsement from PAAC encouraging the County Board of Supervisors to implement this law immediately.

Mr. Ricotta made a motion to vote on the issue. Mr. Lyttelton seconded. All approve.

DIRECTOR REPORT

Ms. Sherry Miller stated that the Ramona Air Traffic Control Tower bids open on January 19th. The sewer line has been installed and the County is waiting on an agreement with the Ramona Water District to connect the sewer line. The Gillespie Field ALP narrative is expected to be complete in February. Fallbrook Airpark now has a fuel tank installed. A phone line will be installed so that fuel can be purchased via credit card.

REGIONAL AIRPORT AUTHORITY DISCUSSION

Ms. Miller stated that she attended the first board meeting. The permanent members were seated and sworn in. There was a short agenda. The MOA between the Port Authority and the Regional Airport Authority was voted on. A lengthy closed session was held to discuss four or five legal issues, the closed sessions occur during the middle of the meetings. The meeting schedule was discussed, they will be held the first Thursday of every month at 10AM in the commuter terminal.

STAFF REPORT

Mr. Best stated that the contractor for the Taxiway Alpha Project has been selected. The project will not start until the beginning of February, due mostly to the Superbowl and high volume of traffic anticipated. The TSA is fully staffed; modifications have been completed on the screening area for both the passenger and carry on baggage. Equipment for checked baggage screening has been installed. McClellan-Palomar will meet the federal mandate to have the ability to screen passengers, carry on baggage, and checked baggage as well by December 31st.

Mr. Best stated that as air travel increases McClellan-Palomar will be able to accommodate. This will be made possible over time by several different upgrades, to include the PAC, LLC lease, ramp/taxiway improvements, a new and much larger commercial airline terminal, and parking expansion on the lower airport lots.

SET AGENDA FOR MEETING ON JANUARY 16, 2003

ADJOURN

Meeting was adjourned at 8:50 p.m.

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Ramona Finnila, Chairperson

PALOMAR AIRPORT ADVISORY COMMITTEE
2198 Palomar Airport Road
Carlsbad, California 92008
Phone: (760) 431-4646

MINUTES

THURSDAY, JANUARY 20, 2003

Chairperson Ramona Finnila called the meeting to order at 7:05 p.m. on January 20, 2003, in the Carlsbad City Council Chambers, 1200 Carlsbad Village Drive, Carlsbad, California.

MEMBERS PRESENT	MEMBERS ABSENT
Ramona Finnila, Chairperson	Warren Deem
Thomas Ricotta, Vice Chairperson	Brad Lunn
Bill Bradford	
Robert Gates	
Tim Hutter	
Hugh Lyttelton	
Ginna Reyes	
Howard Williams	

Members present did represent a quorum.

COUNTY STAFF PRESENT

Rick Jenkins
Floyd Best
Roger Griffiths
Wayne Thomas
Dee Dee Phillips
John Christensen

ROLL CALL AND INTRODUCTIONS

There were no introductions.

APPROVAL OF MINUTES

The December 2003 Minutes were approved with no corrections, Mr.Williams seconded the motion, and all concurred, with one abstention. Minutes carried.

PUBLIC COMMENT ON ITEMS NOT ON THE AGENDA

There were no public comments.

CITY COUNCIL REPORT

Ms. Finnila stated that the City of Oceanside has not responded with a replacement for Ms. McCauleys' seat on the PAAC. Ms. Finnila requested that if anyone knows of someone interested in applying that they please contact the Mayor of the City of Oceanside.

Ms. Finnila stated that the Carlsbad water reclamation plant will be located next to the Encina Power Plant. Ms. Finnila stated that funding for the reclamation plant came from several different sources, including the federal government, the state government through the Water Resources Board and local contributions as well.

Ms. Finnila stated that Agua Hedionda Lagoons' caulerpa report has been reviewed. The biologist's reported that the lagoon has been cleaned out and the entire lagoon is free of the caulerpa algae. The lagoon will continue to be monitored.

Ms. Finnila stated that the City of Carlsbad is proceeding with the continuing construction of five roads.

Ms. Finnila stated that plans for the Farmers Insurance Building on El Camino Real are being considered. The City of Carlsbad would like a new Civic Center but there are several different possibilities. A conference scheduled for March will be held to discuss all proposed ideas.

Ms. Finnila stated that "Alga Norte Park", has been approved. The City of Carlsbad hopes to someday transition the park into an aquatic complex.

Ms. Finnila stated that the budget cuts will hurt many cities. The City of Carlsbad will not be immediately affected by this, but some projects may be phased out until a later date.

AIRPORT COMMUNITY RELATIONS REPORT

Mr. Best stated that Russ Couchman arrived in Wisconsin safely. Wayne Thomas will temporarily assume the Environmental Noise Specialist position. Mr. Thomas reported there were 15,609 operations in December. There were 204,289 operations for the year 2002, which is slightly less than last year. Local operations in December totaled 4,853. VFR operations were 11,613 in December while IFR operations totaled 3,996 in December. There were 29 Noise complaints for December and a total of 645 for the year 2002.

Mr. Thomas reported there were 4,520 revenue passenger enplanements reported by the air carriers for December. Total passenger enplanements for the year 2002 were 55,864.

Mr. Lyttleton asked why callers with multiple noise concerns couldn't be identified. Mr. Best responded that with recommendation by the Palomar Airport Roundtable 2000(PAR 2000) the County of San Diego instructed airport administration to log all callers but not identify them. PAR 2000 concluded that reporting multiple call individuals by name was discriminatory.

Mr. Lyttleton asked if the noise concerns were verifiable. Mr. Thomas replied that all concerns are verifiable through research of the noise monitoring system. Staffing shortages have not allowed for this, once the Environmental Noise Officer position is replaced, that data will be readily available.

PART 150 PRESENTATION BY URS

Mr. Fuller stated that the information was a status report. The study is still in its planning stage. A detailed schedule of the proceedings will be completed shortly. The PART 150 study is airport specific, therefore must be tailored to McClellan-Palomar Airport. Mr. Fuller expects to have the kick-off letter mailed to all participants within the next week. Several operational lists are necessary in the configuration of the study and will be reviewed. The first public meeting is tentatively set for the week of February 24th at the City of Carlsbad Faraday Offices.

Mr. Fuller stated that flight data from McClellan-Palomar Airport will be the basis of the study, but flight data from both the Federal Aviation Administration and Lindbergh Field will be utilized. A preliminary review of this data has been initiated. Mr. Fuller stated that information materials would also be readily available for participants in the study.

MCCLELLAN-PALOMAR AIRPORT REAL PROPERTY REPORT

No Report.

DIRECTOR'S REPORT

Mr. Jenkins discussed the budget report. He stated that the Airport Enterprise Fund does not contribute to salaries. The generated revenue of the airports directly supports the staffing and airport costs. The grant funds for capital projects received are federal and state grants. The federal government through the (Federal Aviation Administration) FAA supplies individual airports with funds based on a five-year projection. The focus at this time is security. The FAA funds 90% of Capital Improvement Projects (the state provides 4.5% to non-commercial airports) and the Airport Enterprise Fund undertake the balance. This year the County Board of Supervisors directed that individual Airport Managers complete their proposed budget. The County hopes that this may help citizens understand why their individual airport needs are not met.

Several projects have been completed. Palomar has undergone a lot in the past months, landfill rehabilitation was completed, the Best Management Practices (BMP's) program implemented is one of the best, the Taxiway Alpha –Rehabilitation project will be getting under way shortly as will the PART 150 study. Upgrades required in the terminal by the Transportation Security Administration were completed on schedule, both passenger and baggage screening has been implemented.

Borrego Valley Airport will soon have a larger apron and run-up area; a design consultant has been selected. Fallbrook Air Park has two potential Fixed Based Operators. The state provided funding to install water lines and things are improving.

An AWOS system has been installed at Gillespie Field and Fleet Week went well. Mr. Jenkins stated that Gillespie Field would soon be finishing up an ALP narrative update. Which is basically a mini-master plan but does not include an Environmental Impact Report. Mr. Jenkins stated that in working with the stakeholders on Gillespie Field, the County was able to accommodate both the general aviation community and industrial renters on the field. The Runway 27 left design is in the finalizing stages, construction will start in the spring, and the Runway 27 right design will be started at the end of January. Ramona runway/taxiway extension clean up is complete. The Control tower construction will be started in February, now that the sewer lines are complete.

The AEF revenues compare the budget with revenue. Federal funding is expected but not yet received. State grants are received only after Federal Grant money. All projects are completed first by the airports, and then reimbursed by the federal government through the FAA. Miscellaneous revenues are received by minor lessees and other small deposit refunds. The AEF is an accounting formula to balance the budget, spending vs. revenue out. Mr. Jenkins briefly discussed expenses and revenue listed in the budget. Comparison of the 2002-2003 Budget to the 2003-2004 Draft Budget is only a preliminary review; the figures will be closer to finalization by March.

Mr. Hutter questioned the estimated amounts for building. Mr. Jenkins and Mr. Best replied that several more considerations must be made concerning items such as the new terminal. Noise, security and storm water issues must all figure into planning, hence increasing design costs. Mr. Hutter also questioned purchase of Lots 29, 30, and 31. Mr. Jenkins explained that all basic business principals must be followed even though the County of San Diego owns both entities.

Mr. Hutter asked if the federal government has any say over the use of the proposed parking structure on Lots 29, 30, and 31. Mr. Best responded that yes they do have a say in the proposed use. The County must finance the actual structure in order to retain the revenue from the parking structure. Mr. Jenkins stated that the status of Lots 29, 30, and 31 is pending the City of Carlsbad's decision in regards to parking structure categorization.

Mr. Hutter commented on personnel issues and staffing. Mr. Jenkins responded that several factors figure in to staffing changes, and every employer shares them.

REGIONAL AIRPORT AUTHORITY REPORT

Mr. Jenkins stated that a permanent board has been chosen. Mr. Jenkins also stated that there are still twenty-one sites being considered for a new airport.

STAFF REPORT

Mr. Griffiths stated interviews for the Environmental Noise Officer position will be held at the end of the month. He also stated that the City of Carlsbad inspected the airport last week and was very happy with the BMP's in place at McClellan-Palomar. Mr. Griffiths stated that the first week of February Taxiway-Alpha Rehabilitation should be underway.

Mr. Best stated General Aguilar hoped to attend this PAAC meeting but was rescheduled due to Super Bowl preparations. Mr. Best stated that all security mandates at McClellan-Palomar were met, and the TSA is actively preparing for Super Bowl flight traffic.

SET AGENDA FOR MEETING ON FEBRUARY 20, 2003

MEMBER ANNOUNCEMENTS

Mr. Lyttleton questioned the status of Jetsource Hanger 3; Mr. Best responded that it was still a pending issue.

Ms. Reyes requested that the Carlsbad Chamber of Commerce Airport Taskforce Survey be placed on February's agenda. Ms. Reyes stated that Mr. Larry Galarza will be invited back as well for questions.

Mr. Hutter requested an update from the City of Carlsbad in regards to Lots 29, 30, and 31.

Mr. Ricotta inquired as to Mr. Deem. Mr. Best stated that Mr. Deem is still very interested in airport activity.

Ms. Finnila stated that in November she submitted a letter to the Governor on behalf of PAAC in regards to obtaining an operating branch of the U.S. Customs/Customs on Request here on McClellan-Palomar. She has not received a response and will submit the letter again.

Ms. Finnila stated that Sunday January 19, 2003 at 1pm Tom Harnish will be holding a free demonstration at the Barnstorming Hangar. It will be an educational presentation of flight, the planet and the universe.

ADJOURN

Meeting was adjourned at 8:15 p.m.

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Ramona Finnila, Chairperson

PALOMAR AIRPORT ADVISORY COMMITTEE
2198 Palomar Airport Road
Carlsbad, California 92008
Phone: (760) 431-4646

MINUTES

THURSDAY, FEBRUARY 20, 2003

Chairperson Ramona Finnila called the meeting to order at 7:02 p.m. on February 20, 2003, in the Carlsbad City Council Chambers, 1200 Carlsbad Village Drive, Carlsbad, California.

MEMBERS PRESENT	MEMBERS ABSENT
Ramona Finnila, Chairperson	Warren Deem
Thomas Ricotta, Vice Chairperson	Brad Lunn
Bill Bradford	
Robert Gates	
Tim Hutter	
Hugh Lyttelton	
Ginna Reyes	
Howard Williams	

Members present did represent a quorum.

COUNTY STAFF PRESENT

Rick Jenkins
Floyd Best
Roger Griffiths
Wayne Thomas
Dee Dee Phillips
Sherry Miller
John Christensen

ROLL CALL AND INTRODUCTIONS

There were no introductions.

PUBLIC COMMENT ON ITEMS NOT ON THE AGENDA

There were no public comments.

CITY COUNCIL REPORT

Ms. Finnila stated that the ground braking for the Bressi Ranch Project took place earlier in the day. The project is located on the South/East corner of El Camino Real and Palomar Airport road. The project is to include planned industrial, residential and commercial space, as well as a church, and hopefully a school.

Ms. Finnila stated that Mr. Simon the Palomar Airport volunteer Tour Director has taken ill. He is currently staying at the Sunrise Retirement Center. Visits are welcome.

AIRPORT COMMUNITY RELATIONS REPORT

Mr. Thomas reported there were 17,066 operations in January. The annual count is the same due to the start of the new year. Local operations in January totaled 5,991. VFR operations were 13,012 in January while IFR operations totaled 4,054 in January. There were 29 Noise complaints for January and a total of 29 for the year.

Mr. Thomas reported there were 3,621 revenue passenger enplanements reported by the air carriers for January. This number is slightly down from 2002, and is the third year in a row numbers has fallen. Total passenger enplanements for the year 2003 are the same.

Ms. Reyes asked if the multiple caller complaints received regarding noise are all for the same incident, or for several different incidents. Mr. Thomas stated that most callers call and complain about the same type of noise problems, be it helicopters or jets.

Mr. Hutter asked why there has not been an increase of passenger enplanements since 09/11/02. Mr. Best stated that several factors contribute to the number of passenger enplanements. Some passengers still harbor a fear of flying, some are hesitant to have to deal with the increased security measures because of time and convenience, and the airlines themselves are going through a reorganization.

APPROVAL OF MINUTES

The January 2003 Minutes were approved with no corrections, Mr. Ricotta seconded the motion, and all concurred. Minutes carried.

PART 150 PRESENTATION BY URS

Mr. Fuller stated that the first public meeting has been scheduled for Thursday, March 27, 2003. It will be held at the City of Carlsbad Faraday offices. Mr. Fuller stated that the project schedule has been completed. It will be a twenty-one month process starting in January, through completion. There will be fifteen months of analysis and six months of required review time designated to the FAA. The Part 150 study consists of noise exposure maps and a noise compatibility plan. At this time the project is in the data collection phase, and base maps are being generated, this phase should be completed by the second week in May. Forecasts will then be sent to the FAA for a thirty-day review. The forecasts are of aircraft operations in both the five and ten year

periods. Mr. Fuller hopes that the FAA review should be complete by the second week in June, and then the noise exposure maps can be developed. The analysis of potential noise impacts should be completed by the third week in July. The noise exposure maps will then be sent to the FAA for review. The second public meeting is tentatively scheduled for August 28th, 2003. The purpose of the second meeting will be to present to the public the noise exposure maps and get their input. The noise compatibility plan is developed throughout the entire process. The first draft of the Part 150 study is set to be presented to the PAAC for review the second week in September. The third public hearing will not take place until the third draft of the document is ready for public review, which will be sometime in February 2004. The fourth draft of the document is scheduled to go to the FAA for the six-month review sometime in March 2004. When the document is reviewed, any necessary revisions recommended by the FAA will be addressed, and then the final document will be submitted to the FAA.

Mr. Fuller stated that there would be three noise exposure maps generated, the current one, one for the five-year projection and one for the ten-year projection. Mr. Best stated that the previous Part 150 Study did include both the five and ten year projection maps as well. They were both extremely close to the projections.

Ms. Finnila asked if the PAAC meeting should be included with the Part 150 study public meeting. Mr. Hutter suggested combining the two meetings and having a start time of 6PM or 6:30PM. Mr. Ricotta and Ms. Reyes both agreed that it would not be a good idea to combine both meetings. Ms. Finnila stated that she agreed and that the meetings will be held separately and that the Part 150 Study meeting should start at 7PM.

Mr. Fuller stated that public notifications would be sent out starting next week. This meeting will be more of a workshop defining the Part 150 Study and informing the public of the projected schedule.

MCCLELLAN-PALOMAR AIRPORT REAL PROPERTY REPORT

Mr. Jenkins stated that the Civic Helicopter Lease Amendment presented last month to the PAAC members is set to go before the Board of Supervisors next week. Next month a lease amendment for SCIF and a potential restaurant lease with PAC, LLC. will be presented to the PAAC for consideration prior to going to the Board of Supervisors.

Mr. Jenkins stated that a resolution has been reached in regards to the storm water clauses in all lease holder contracts.

Mr. Lyttelton asked Mr. Jenkins if there was an update available on the County of San Diego and Jetsource issue. Mr. Jenkins responded that some progress has been made, but little information is available to release because of legal issues.

CITY OF CARLSBAD CHAMBER OF COMMERCE AIRPORT SURVEY TASK FORCE

Mr. Hutter stated that he was willing to address questions in regards to the Survey. If there were not any questions, he would hope to get the Survey and the letter from Larry Galarza regarding AB2776 forwarded to the County Board of Supervisors. Ms. Reyes asked Mr. Hutter if the Chamber would consider e-mailing notification of the Part 150 Study to its members. Mr. Hutter stated that he would look into that option.

Ms. Finnila stated that she was not able to get a representative from the City of Carlsbad to speak in regards to Lots 29, 30, and 31, but she will keep trying.

Mr. Gates stated that question number eight was bias, lead one to an answer, and was not a factual statement. Mr. Gates feels that it is not accurate to state that every homeowner buying a used home is notified of airport presence. Mr. Best stated that a notification is required by the five cities surrounding the airport established through the Comprehensive Land Use Plan. Notification is required of every homeowner buying a new home after April 04, 1994. This notification is recorded to deed to run in perpetuity with the property. A used home initially sold after April 04, 1994 does require that a homeowner selling that home must notify a potential buyer of the notification. Mr. Gates stated that there may be a requirement, but it does not always happen. Mr. Best stated that the agreement may have been incorporated into CC and R's, and therefore the form would have been signed.

Mr. Hutter responded that the Survey was put together by a committee, and there was some discussion in regards to the question, but a majority of the committee felt that it should be included in the survey. Mr. Hutter stated that this is only one question out of the whole Survey. The Survey as a whole generated valuable results for all involved.

Mr. Hutter would like to have the Survey and cover letter submitted to the Board of Supervisors. Ms. Finnila stated that there are two ways to address this, one, it can be simply forwarded as a citizen initiative, or it can be forwarded with the PAAC endorsement. Mr. Hutter would like the input endorsed by PAAC, to demonstrate that there is tremendous community interest in the airport and that facility enhancement would be greatly beneficial.

Ms. Finnila requested that the item be placed on the March Agenda as a Motion.

DIRECTOR'S REPORT

Mr. Jenkins stated that the budget would be done differently this year. Each airport manager will have their own budget, and have its' own brake down. Sunny Barrett will make a brief presentation at the March PAAC meeting. Last week Mr. Jenkins, Mr. Best, Ms. Miller, and the airport capital project manager met with the FAA. The meeting was fruitful, and more work may be able to be done with the Taxiway Alpha project. The finances were worked out enabling more that can be done, and the FAA reaffirmed their commitment to fund the purchase of Lots 29, 30, and 31.

Mr. Jenkins stated that he appreciated all of the support given to him and the airport by the PAAC. Ms. Miller will be the acting Director until the position is filled.

Ms. Finnila thanked Mr. Jenkins on behalf of the PAAC for his work and style of management. He will be missed.

REGIONAL AIRPORT AUTHORITY REPORT

Ms. Miller stated that the last site meeting was held at Warner Springs last month. The focus right now is with the internal organization and the creation of policy and procedure. The next meeting has yet to be set, usually held on the second Tuesday of the month. The next meeting will probably be in April. Mr. Ricotta asked if there is any indication that Palomar Airport will be cut from the list of possible Regional Airports. Ms. Miller stated that there is no indication as of yet. Mr. Best stated that Palomar Airport is not anywhere near the size necessary to be considered.

TRANSPORTATION SECURITY ADMINISTRATION

Ms. Dores apologized for Gen. Aguilars inability to be at the meeting due to a conflicting commitment. Effective March 1st, the TSA will be under the jurisdiction of Homeland Security. Homeland Security has retained Admiral Loy as the head of the TSA. The new Under Secretary for the Border and Transportation Security is Asa Hutchinson. Immigration and Naturalization Service, Border Patrol, U.S. Customs, and Animal and Plant Health will now all be under Homeland Security. A Bureau of Customs and Border Protection will also be established. The TSA has been active locally at both McClellan-Palomar and Lindbergh Field. Ms. Dores stated that an increased presence is expected, and inspection and security control of both cargo and general aviation is imminent. Roughly eighteen TSA members are active at McClellan-Palomar.

Ms. Dores briefly spoke of the heightened measures taken during the National Security Period of Code Orange. There is no longer a blanket approach taken with all airports, security will be implemented airport specific.

STAFF REPORT

Mr. Best stated that the solar light poles have been completed, and are up and running along the access road. The Taxi Way Alpha Project is set to start March 11. A pre-construction meeting will take place in order to keep all stake holders abreast of what is going on, and what temporary changes will be in affect in order to keep the airport running smoothly.

Mr. Best stated that Inactive Landfill is also on the airport installing gas monitoring wells. We are working with them closely in order to minimize any disruption.

SET AGENDA FOR MEETING ON MARCH 20, 2003

MEMBER ANNOUNCEMENTS

Mr. Bradford stated that he will not be attending the March PAAC meeting.

Ms. Reyes asked if there was confirmation of dates for the B-17 and B-24 Bomber appearance. Mr. Best stated that it would be in the middle of April. The Collings Foundation will bring them to the airport and the event will be hosted by Western Flight. Ms. Reyes stated that anyone who knows of any school or youth group interested in the event is encouraged to attend. Ms. Finnila stated that she intends to invite several members of the Tuskegee Airmen to the event.

Mr. Hutter asked if there was an update from the City of Oceanside concerning the PAAC seat. Ms. Finnila stated that she had a response that they were no longer interested. Ms. Reyes stated that she knew of several parties interested in coming to sit on the PAAC, mostly active Oceanside Airport members. These parties were going to attempt to pursue it through the supervisory level.

ADJOURN

Meeting was adjourned at 8:07 p.m.

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Ramona Finnila, Chairperson

PALOMAR AIRPORT ADVISORY COMMITTEE
2198 Palomar Airport Road
Carlsbad, California 92008
Phone: (760) 431-4646

MINUTES

THURSDAY, MARCH 20, 2003

Chairperson Ramona Finnila called the meeting to order at 7:02 p.m. on March 20, 2003, in the Carlsbad City Council Chambers, 1200 Carlsbad Village Drive, Carlsbad, California.

MEMBERS PRESENT	MEMBERS ABSENT
Ramona Finnila, Chairperson	Bill Bradford
Bob Gates	Warren Deem
Tim Hutter	Brad Lunn
Hugh Lyttelton	Thomas Ricotta, Vice Chairperson
Ginna Reyes	
Howard Williams	

Members present did represent a quorum.

COUNTY STAFF PRESENT

Floyd Best
Dee Dee Phillips
Sherry Miller
Sunny Barrett
John Christensen

ROLL CALL AND INTRODUCTIONS

Ms. Finnila stated that Mr. Lunn was not in attendance, and has not been at previous meetings either. Ms. Finnila stated that she will contact Mr. Lunn to find out if he is still interested in being a member, if not she will request a letter of resignation.

TRANSPORTATION SECURITY ADMINISTRATION

Mr. Best introduced Brig. Gen. Michael Aguilar, Retired USMC. Mr. Aguilar is the Transportation Security Administration Federal Director for the San Diego Region.

Mr. Aguilar stated that he oversees Lindbergh Field and Palomar Airport. He regrets not having been able to attend previous meetings. The Deputy Federal Director Kris Dores was quite capable of overseeing Palomar. Mr. Aguilar feels that the TSA employees assigned to Palomar work very well together as a team. Ms. Dores is no longer in the employ of the TSA, and Claude Jones is the Acting Deputy Federal Director. Mr. Aguilar stated that Palomar has met the upgraded security requirements 100%.

Mr. Jones introduced himself, he previously worked for the U.S. Attorneys Office. He has a background in real estate.

Ms. Dores stated that she is presently employed with Unisys, the company that is a provider to Homeland Security.

PUBLIC COMMENT ON ITEMS NOT ON THE AGENDA

Ms. Reyes announced the upcoming B-17 and B-24 Bomber Exhibit to be held at Western Flight April 18, 19 and 20. There are also World War II veterans willing to speak about their experiences to youth groups.

APPROVAL OF MINUTES

The February 2003 Minutes were approved with no corrections, Ms. Reyes seconded the motion and all concurred. Minutes carried.

CITY COUNCIL REPORT

Ms. Finial stated the City of Carlsbad recently held a two and a half-day Futuring Conference. The roll of the city in twenty years was discussed. A video and storyboard will soon be available on the City of Carlsbad web page.

Ms. Finnila briefly spoke on the relationship between terrorism and the drug trade. While in Washington D.C. the Armed Services Committee addressed and acknowledged the issue.

Ms. Finnila stated she went on the Wave. The boat ferry available from the Oceanside Harbor. The fee is $10.00.

AIRPORT COMMUNITY RELATIONS REPORT

Mr. Best stated that there would not be a report. The position has not yet been filled and other events on the airport occupied all employees.

PART 150 PRESENTATION BY URS

Mr. Fuller announced that the first public meeting will be held Thursday 032703 at 7PM in the City of Carlsbad Faraday Offices. Roughly 185 notices were sent out. Several newspaper announcements were placed as well. Mr. Fuller stated that data is being collected to develop the forecast. F.B.O.'s will soon be contacted. Ms. Finnila stated that it would be helpful for all PAAC members to attend the meeting. Mr. Fuller stated that there will be a half-hour presentation and an hour and a half for question and answer. Mr. Fuller stated that there will be sign in sheets and notes will be taken.

MCCLELLAN-PALOMAR AIRPORT REAL PROPERTY REPORT

Ms. Barrett stated that she is the program coordinator, manages redevelopment projects, supervises the budget process, and reports to the Airports Director. The budget this year will be broken down by airport. It will be a slow process and a difficult year in terms of budget.

Ms. Miller stated that the Real Property report has been postponed to the month of April.

CITY OF CARLSBAD CHAMBER OF COMMERCE AIRPORT SURVEY TASK FORCE

Ms. Finnila gave a brief review of the types of questions in the survey. Mr. Gates stated his objection to question eight be noted. Mr. Hutter made the motion to forward the survey to the Board of Supervisors, the motion was carried.

REGIONAL AIRPORT AUTHORITY REPORT

Ms. Miller stated that there is no update as of yet. Ms. Miller did attend a meeting held for airport operators. The Airport Land Use Commission duties were discussed. A Comprehensive Land Use Plan (CLUP) will be developed for all airports within the county. Previously the desert airports were not included and did not have a CLUP, they will now be included in the appendix developed for the entire county. The Part 150 study done at Palomar will be very useful in this process.

Ms. Miller stated that it is the duty of the Airport Authority to develop the CLUP. The Authority will have input when changes increasing capacity occur.

DIRECTOR'S REPORT

Ms. Miller introduced Mr. Larry Watt the Deputy Director of Public Works in charge of the Transportation Division. Mr. Watt stated that interviews for the position of Airport Director will occur the week of the 24th.

Mr. Hutter inquired about the Environmental Noise Coordinator position. Mr. Watt stated that the budget is being reviewed, and how the position will be staffed. Next

month after a more detailed budget can be presented there will be a more definitive answer.

STAFF REPORT

Mr. Best stated that the storm water issues are a priority right now, in order to minimize the damage caused by the rain. The Taxi Way Alpha Rehab Project is underway. The project is quite broad, and operations will be affected. A run-up area will be constructed as well as additional ramp space. The drainage in the infield will all be replaced with reinforced concrete pipes, which will create a much better storm water flow. New taxiway lights will be the full length of the taxiway, and the taxiway will be widened to the full 50ft it should be.

Security condition Orange has increased vigilance on the airport especially because of all the construction crews working on various projects on the airport, including the inactive landfill staff.

SET AGENDA FOR MEETING ON APRIL 17, 2003

Ms. Reyes stated that she will try to get a WW II veteran to come and speak at the next PAAC meeting.

Ms. Finnila stated that she and Ms. Miller are in the process of setting up a meeting to discuss Lots 29, 30, and 31. Results of that meeting, if any will be shared at the next PAAC meeting.

MEMBER ANNOUNCEMENTS

Mr. Best will do his best to try and arrange for Mr. Larry Simon to attend the next PAAC meeting.

ADJOURN

Meeting was adjourned at 8:08 p.m.

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Ramona Finnila, Chairperson

PALOMAR AIRPORT ADVISORY COMMITTEE
2198 Palomar Airport Road
Carlsbad, California 92008
Phone: (760) 431-4646

MINUTES

THURSDAY, APRIL 17, 2003

Chairperson Ramona Finnila called the meeting to order at 7:12 p.m. on April 17, 2003, in the Carlsbad City Council Chambers, 1200 Carlsbad Village Drive, Carlsbad, California.

MEMBERS PRESENT	MEMBERS ABSENT
Ramona Finnila, Chairperson	Bill Bradford
Bob Gates	Warren Deem
Tim Hutter	Brad Lunn
Ginna Reyes	Hugh Lyttleton
Tom Ricotta	Howard Williams

Members present did represent a quorum.

COUNTY STAFF PRESENT

Floyd Best
Dee Dee Phillips
Sherry Miller
John Christensen

ROLL CALL AND INTRODUCTIONS

There were no introductions.

PUBLIC COMMENT ON ITEMS NOT ON THE AGENDA

Mr. Zealer, a resident of Golden Hills community in the City of Oceanside, addressed the Palomar Airport Advisory Committee. Mr. Zealer was a member of the Palomar Airport Roundtable 2000, which strongly urged the County of San Diego to create and fill an Environmental Noise Specialist position at Palomar Airport. Mr. Zealer stated that if the County decides to not fill the position, that it would create a foreseeable brake down of communication with the surrounding communities. This would only cause citizens to revert back to a confrontational stance in regards to dealing with airport noise

issues. Mr. Zealer would like the PAAC to once again remind the County administration of the importance of the position in maintaining a good working relationship with the surrounding communities. Mr. Zealer stated that the government invested funding in both the Part 150 Study and noise monitoring equipment. The County has a responsibility to fill the position.

Ms. Finnila responded by stating that interviews for the Director of Airport's position are currently taking precedence.

Mr. Hutter stated that a billet needs to be created specifically for the position. Currently, Airport Operations Coordinators fill the actual position.

Ms. Finnila requested that a motion be added to the May agenda, for the drafting of a letter to the Board of Supervisors. The letter would ask the Board to consider an increase in salary for the Noise Specialist position.

CITY COUNCIL REPORT

Ms. Finnila stated that Cannon Road will now be open all the way through to El Camino Real.

WORLD WAR II B-17 AND B-24 BOMBER PILOTS

Ms. Reyes introduced both Jack Kellog and Bill Reynard. The two will be present at the airport this weekend along with a B-17 and B-24 World War II plane. Both gentlemen gave an overview of their participation in World War II. They each gave the members of PAAC and its audience a synopsis of what they went through as POW's during the war.

APPROVAL OF MINUTES

Minutes were not approved. A quorum was not met.

PART 150 PRESENTATION BY URS

Mr. Fuller gave a brief update on the study so far. He commented on the public meeting held on the 27th of March. Thirty-five citizens attended and thirty-three questions were addressed. Data for the five and ten year forecast is being collected.
Interviews with Fixed Based Operators have been completed. A short delay in receiving data from the FAA will cause a slight change in the Part 150 schedule.
The next public meeting is tentatively set for sometime in August, but could possibly be pushed back. The noise contour maps will be presented at that time.

DIRECTOR'S REPORT

Ms. Miller stated that Ms. Barrett will attend the May meeting and present the 2003-2004 Fiscal Budget. A member from the Real Property Division will attend the May meeting to present the SCIF North Leasehold Amendment, the federal agreement for the Automated Surface Observation System, the Jetsource Leasehold Amendment, and the PAC, LLC. Temporary Restaurant Lease.

SAN DIEGO REGIONAL AIRPORT AUTHORITY

Ms. Miller has nothing to report. The Authority has not reconvened to address the new airport site. A community meeting will be held on Saturday, March 19, 2003 at 0900 AM hosted by Diane Jacobs. The possibility of the Ramona International Airport will be discussed.

The position of Airport Director will hopefully be filled fairly soon. Olivier Brackett will temporarily fill the Noise position at Palomar.

Ms. Reyes reiterated that the salary for the Noise Specialist position should be reevaluated.

STAFF REPORT

Mr. Best stated that the construction on Taxi Way Alpha is well underway. The West End taxiway is closed. The rain did not cause any damage to the project as expected. The ramp and run-up areas on the West End are currently under construction as well. Drainage on the infield is being replaced also. Taxi way lights on the south side of the West End are currently being installed along the full length of the airport.

Security level yellow has been upgraded to orange. A new Security Plan under the TSA guideline 1542 is being drafted.

Mr. Simon visited the airport. He will try to attend the May meeting.

SET AGENDA FOR MEETING ON MAY 15, 2003

An item for Action on a letter addressing the Noise Specialist position should be placed on the May agenda.

ADJOURN

Meeting was adjourned at 8:17 p.m.

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Ramona Finnila, Chairperson

PALOMAR AIRPORT ADVISORY COMMITTEE
2198 Palomar Airport Road
Carlsbad, California 92008
Phone: (760) 431-4646

MINUTES

THURSDAY, MAY 15, 2003

Co-Chairperson Tom Ricotta called the meeting to order at 7:06 p.m. on May 15, 2003, in the Carlsbad City Council Chambers, 1200 Carlsbad Village Drive, Carlsbad, California.

MEMBERS PRESENT	MEMBERS ABSENT
Bill Bradford	Warren Deem
Bob Gates	Ramona Finnila, Chairperson
Tim Hutter	Brad Lunn
Tom Ricotta, Co-Chairperson	Hugh Lyttleton
Howard Williams	Ginna Reyes

Mr. Gates arrived at 1911.

Members present did not represent a quorum.

COUNTY STAFF PRESENT

Roger Griffiths
Dee Dee Phillips
Lidia Sosinsky
Tim Caulder
John Christensen

ROLL CALL AND INTRODUCTIONS

There were no introductions.

PUBLIC COMMENT ON ITEMS NOT ON THE AGENDA

There were no public comments.

CITY COUNCIL REPORT

The City Council Report was not given.

APPROVAL OF MINUTES

Minutes were not approved. A quorum was not met.

PART 150 PRESENTATION BY URS

Mr. Czech gave a brief status report on the Part 150 study. The data acquisition is almost completed. The five and ten year forecasts will be developed next, as will the flight track information. The forecasts should be completed in a month, they will then be sent to the FAA for a thirty-day review. The FAA requested more review time for the draft Noise Exposure maps, instead of thirty, they would need sixty-days to review them. The Noise Exposure maps will then not be available for revisions until mid-October. This delay will push back the next public meeting to November 2003. The original Part 150-study schedule will have a three-month delay. Mr. Fuller will present a revised project schedule in June.

Roughly thirty-seven question/comment forms have been received by URS. Seventy percent of them were positive, while the rest were comprised of either complaints or suggestions.

JETSOURCE LEASE AMENDMENT

Mr. Caulder stated that Jetsource's two leases will be coming up for amendment purposes. Mandated rent adjustments will be addressed. The County is still in the negotiation process.

WESTERN FLIGHT LEASE AMENDMENT

Mr. Caulder stated that the Western Flight lease is scheduled to expire later this year. The County is currently in negotiations with Western Flight, and there are a number of options available to both parties. When something becomes available, he will present it at that time. The Western Flight lease expires in August.

Mr. Ricotta questioned ownership of assets on a leasehold should the leaseholder choose to vacate. Mr. Caulder responded that traditionally the County would take possession of all assets, but the County has the option to require a lessee to remove them.

NORTH COUNTY ANIMAL SHELTER LEASE AMENDMENT

The North County Animal Shelter will be getting a 32,000sq.ft. two story facility. The FAA approved the plans for the improvement. The facility is on airport property, but not aviation related. Estimated completion is sometime in 2005. Mr. Caulder stated that it is not a leasehold, but rather a Memorandum of Understanding between County departments. All revenue from this property must be put back into the Airport Revenue Fund, per FAA guidelines. The property is roughly three and a half acres.

FAA-ASOS LEASE

Ms. Sosinsky presented the Automated Surface Observation System lease amendment. The U.S. Department of Commerce through the National Oceanic Atmospheric Administration signed a fifteen-year lease. The FAA maintains the ASOS and will now take ownership of the lease located on the north side of the runway by the glide slope antenna. It occupies less than half an acre.

SCIF LEASE AMENDMENT

Ms. Sosinsky presented the SCIF (Magellan Aviation) 2ND lease amendment. This amendment adjusts the rent of the leasehold to the current market value and addresses storm water clauses.

Mr. Ricotta stated that the PAAC could not motion for a vote due to lack of a quorum.

STAFF REPORT

Mr. Griffiths spoke briefly on the Environmental Noise Specialist position.
Mr. Brackett will assume some of the Noise Specialist duties, as well as tend to County Airports Safety and Security.

Mr. Griffiths gave a brief update on the Taxiway Alpha project. The far west end will be paved by the end of next week. Once this is completed aircraft operations will resume on the west end. Work will then progress farther down the taxiway.

SET AGENDA FOR MEETING ON JUNE 19, 2003

ADJOURN

Meeting was adjourned at 7:34 p.m.

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Tom Ricotta, Co-Chairperson

PALOMAR AIRPORT ADVISORY COMMITTEE
2198 Palomar Airport Road
Carlsbad, California 92008
Phone: (760) 431-4646

MINUTES

THURSDAY, JUNE 19, 2003

Chairperson Ramona Finnila called the meeting to order at 7:00 p.m. on June 19, 2003, in the Carlsbad City Council Chambers, 1200 Carlsbad Village Drive, Carlsbad, California.

MEMBERS PRESENT	MEMBERS ABSENT
Ramona Finnila, Chairperson	Bill Bradford
Tom Ricotta, Co-Chairperson	Warren Deem
Bob Gates	Brad Lunn
Tim Hutter	Hugh Lyttleton
Ginna Reyes	
Howard Williams	

Members present did represent a quorum.

COUNTY STAFF PRESENT

Roger Griffiths
Dee Dee Phillips
Sunny Barrett
Lidia Sosinsky
John Christensen

ROLL CALL AND INTRODUCTIONS

Mr. Griffiths introduced Sunny Barrett, County of San Diego Airports Division, Program Coordinator.

APPROVAL OF MINUTES

Minutes for the month of May were approved. Ms. Finnila abstained.

PUBLIC COMMENT ON ITEMS NOT ON THE AGENDA

Gordon Sieler inquired as to if the letter concerning the Environmental Noise Specialist position would be addressed because the item did not appear on the agenda. Mr. Griffiths stated that Mr. Brackett is currently filling the position of Noise Specialist and will be making a presentation at the July meeting. Ms. Finnila reiterated that the Noise Specialist position is currently filled and no further discussion or motions will be necessary. Mr. Griffiths stated that Mr. Brackett's duties will entail both that of the Noise Specialist and other County related security issues.

PART 150 PRESENTATION BY URS

Mr. Fuller stated that the noise contour maps as well as the five and ten year forecasts will be underway shortly. Eleven more comment forms have been received by URS, they were for the most part favorable. The FAA has requested more time to review data, this has caused the study to fall behind roughly three months, and a revised schedule will be available at the July PAAC meeting. Mr. Seiler questioned the accuracy of the five and ten year forecasts. Mr. Fuller stated that the five and ten year forecasts will be accurate because both 2002 operations data and a FAA approved methodology are utilized in the creation of the forecast. Mr. Fuller stated that the County of San Diego has provided URS with very good detailed data obtained from the noise monitors, and this data will greatly benefit the Part 150 study.

MEMORANDUM OF AGREEMENT FOR GROUND LEASE AND CONSERVATION EASEMENT FOR FARADAY AVE. AND SEWER LINE EXTENSIONS

Item tabled until July PAAC meeting when Ms. Haslett-Kitchen can present the item.

FAA-ASOS LEASE

Ms. Sosinsky presented the Automated Surface Observation System lease amendment. The U.S. Department of Commerce through the National Oceanic Atmospheric Administration signed a fifteen-year lease. The FAA maintains the ASOS and will now take ownership of the lease located on the north side of the runway by the glide slope antenna. It occupies less than half an acre. This item has already been presented to the Board of Supervisors and is for information only.

SCIF LEASE AMENDMENT

Ms. Sosinsky presented the SCIF (Magellan Aviation) 2ND lease amendment. This amendment adjusts the rent of the leasehold to the current market value and addresses storm water clauses. Ms. Sosinsky stated that this item has also already been presented to the Board of Supervisors and is for information only.

FISCAL YEAR 2003-2004 DRAFT BUDGET PRESENTATION

Ms. Barrett presented the 2003-2004 Draft Budget. She stated that this year each airport will have its own budget, this will simplify tracking individual airport expenses. This will also allow each airport manager to have more of a decision-making role in how funds are budgeted and spent. Ms. Barrett stated that the administration budget includes costs incurred at all eight airports. The administration budget includes the airport Director, the airport engineer, real property and accounting staff.

Ms. Barrett stated that an Operations Coordinator fills the Noise Specialist position. The position is budgeted solely by Palomar, the duties are not limited to noise and as an Operations Coordinator position provides services to other county airports as well. Mr. Griffiths assured PAAC members that his priority is as Noise Specialist.

Ms. Finnila pointed out that Mr. Best advises the County of San Diego on budget spending, but he does not make the final decisions.

Ms. Barrett stated that in regards to Lots 29, 30, and 31, it is still in negotiations. Mr. Griffiths stated that the liability of the methane gas flame and its regular maintenance is and will be the responsibility of County of San Diego Inactive Landfill. Ms. Finnila stated that the inactive landfill will always be a partial expense for the airport.

DIRECTOR'S REPORT

Mr. Griffiths stated that Ms. Miller will be making a presentation to the Regional Airport Authority on Monday in regards to all eight County airports. This information is necessary because the Regional Airport Authority heads the County Airport Land Use Commission.

Mr. Drinkwater will assume the position of Airport Director sometime mid-July.

STAFF REPORT

Mr. Griffiths gave a brief overview of the Taxi Way Alpha construction project. Runway 6 will have a run-up area. The project started March 17th and is progressing. It is set to finish July 19th.

Mr. Drinkwater is currently in Maine, and served in the Air Force. Prior experience is with Ontario Airport.

Ms. Barrett stated that the Taxi Way Alpha project was allotted for in the 2002-2003 budget.

SET AGENDA FOR MEETING ON JULY 17, 2003

MEMBER ANNOUNCEMENTS

Mr. Hutter requested that the PAAC member make-up be addressed at the July meeting. There have been problems meeting a quorum. Ms. Finnila stated that a letter has been sent to Mr. Lunn requesting his resignation.

ADJOURN

Meeting was adjourned at 8:20 p.m.

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Ramona Finnila, Chairperson

PALOMAR AIRPORT ADVISORY COMMITTEE
2198 Palomar Airport Road
Carlsbad, California 92008
Phone: (760) 431-4646

MINUTES

THURSDAY, JULY 17, 2003

Chairperson Ramona Finnila called the meeting to order at 7:07 p.m. on July 17, 2003, in the Carlsbad City Council Chambers, 1200 Carlsbad Village Drive, Carlsbad, California.

MEMBERS PRESENT	**MEMBERS ABSENT**
Bill Bradford	Warren Deem
Ramona Finnila, Chairperson	Bob Gates
Tim Hutter	Brad Lunn
Hugh Lyttleton	Tom Ricotta, Co-Chairperson
Ginna Reyes	
Howard Williams	

Members present did represent a quorum.

COUNTY STAFF PRESENT

Floyd Best
Roger Griffiths
Dee Dee Phillips
Peter Drinkwater
Darlene Haslett-Kitchen
Tim Caulder
John Christensen

ROLL CALL AND INTRODUCTIONS

Mr. Best introduced Peter Drinkwater, County of San Diego, Director of Airports.

APPROVAL OF MINUTES

Minutes for the months of March, April and June were approved.

PUBLIC COMMENT ON ITEMS NOT ON THE AGENDA

Robert Billmeyer resides at 1566 Maritime Drive in Carlsbad. Mr. Billmeyer is the President of the Cantamar Home Owners Association, the development is located one mile South of the runway. Mr. Billmeyer presented graphics representing 159 jet departures during the hours of Voluntary Noise Abatement over the past three years. Mr. Billmeyer stated that all 159 noise concerns were reported to the noise office.

Mr. Best stated that overall in relation to airport operations spanning three years, the statistics reflect a very good compliance on the part of the pilots. The County of San Diego along with the Transportation Security Administration provides security for the airport. Airports that are a part of the National Transportation System across the nation have not been precluded from operating. McClellan-Palomar has increased its security measures greatly since 091101. Fixed Based Operators (F. B. O'S) and pilot's operating out of McClellan-Palomar are briefed monthly on both security measures and voluntary noise abatement procedures.

Mr. Frank Milian, Chief Operating Officer of Jetsource stated that security measures are taken not only on the facilities, but on the aircraft themselves as well.

CITY COUNCIL REPORT

State Street redevelopment is currently being considered for ways in which to allow for a better quality of life for the citizens of Carlsbad. Future population growth is being considered as an influence.

A response letter concerning Customs By Request was received from the Governor's office. The letter stated that McClellan-Palomar is still under review for the service.

PART 150 PRESENTATION BY URS

Mr. Fuller stated the study is moving along. Flight tracks submitted to the FAA have been approved with some minor corrections. The Noise Model is currently underway, as well as existing noise contours. Modifications to the Part 150 Study schedule were necessary. This was due in part to FAA requests for extended review time. Forecasts are expected to go for review by the FAA early in August. Noise exposure maps will be submitted early in December. Public meeting number two is tentatively set for sometime in March 2004. The Noise Compatibility Plan will be completed sometime in April. The first draft of the Part 150 Study is scheduled to be submitted to PAAC for review sometime in May. The preliminary draft of the study will be submitted to the FAA in July. Edits to the draft will be made before releasing the study for public review in December. The draft will be submitted to the FAA for formal review in January. If the FAA finds the document satisfactory, in July 2005 they will provide a record of approval to the public register.

MEMORANDUM OF AGREEMENT FOR GROUND LEASE AND CONSERVATION EASEMENT FOR FARADAY AVE. AND SEWER LINE EXTENSIONS

Ms. Haslett-Kitchen presented the Memorandum of Agreement. Briefly stated the extension of Faraday Avenue and sewer line eastward requires mitigation of sensitive habitat. 108 acres of Airport property east of El Camino Real will meet this mitigation requirement. The developer of the area east of Airport property, Techbilt Companies, will donate a fully developed industrial lot valued at $1.22 million and $730,000 cash to the Airport Enterprise Fund for a long term ground lease for the conservation area valued at $1.95 million. The City of Carlsbad will be granted the conservation easement in perpetuity to comply with the regulatory agency requirements. The FAA is pleased so far with the proposal.

JETSOURCE I AND II LEASE AMENDMENTS

Mr. Caulder presented the final draft of the Board Letter. In summary the letter addressed increased revenue and storm water issues.

Ms. Finnila inquired as to a motion to vote on the item. Vote to approve unanimous.

DIRECTOR'S REPORT

Mr. Drinkwater has nothing to report at this time.

AIRPORT COMMUNITY RELATIONS ISSUES

Mr. Griffiths reported monthly operations for June 13,795, bringing the total number year to date 96,154. Air carrier enplanements 4,169. Annual air carrier enplanements 23,309.

Noise concerns for the month of June, 38 calls. The number year to date 150.

STAFF REPORT

Mr. Best briefly spoke of an incident that occurred on the airport over the 4th of July weekend involving a Falcon 50. There were no injuries, the incident is under investigation by the FAA.

America West will be reducing their flights to only one per day. Skywest may be losing one flight per day as well.

SET AGENDA FOR MEETING ON AUGUST 21, 2003

MEMBER ANNOUNCEMENTS

There were no member announcements.

ADJOURN

Meeting was adjourned at 8:26 p.m.

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Ramona Finnila, Chairperson

PALOMAR AIRPORT ADVISORY COMMITTEE
2198 Palomar Airport Road
Carlsbad, California 92008
Phone: (760) 431-4646

MINUTES

THURSDAY, AUGUST 21, 2003

Vice-Chairperson Tom Ricotta called the meeting to order at 7:05 p.m. on August 21, 2003, in the Carlsbad City Council Chambers, 1200 Carlsbad Village Drive, Carlsbad, California.

MEMBERS PRESENT	**MEMBERS ABSENT**
Vice-Chairperson Tom Ricotta	Warren Deem
Bill Bradford	Chairperson Ramona Finnila
Bob Gates	
Tim Hutter	
Hugh Lyttleton	
Ginna Reyes	
Howard Williams	

Members present did represent a quorum.

COUNTY STAFF PRESENT

Floyd Best
Olivier Brackett
Dee Dee Phillips
Peter Drinkwater
Lidia Sosinsky
Tim Caulder
John Christensen

ROLL CALL AND INTRODUCTIONS

There were no introductions.

APPROVAL OF MINUTES

Minutes for the month of July were approved.

PUBLIC COMMENT ON ITEMS NOT ON THE AGENDA

There were no public comments.

CITY COUNCIL REPORT

The City Council Report was not given.

AIRPORT COMMUNITY RELATIONS ISSUES

Mr. Brackett reported monthly operations for July 16,230, bringing the total number year to date 112,384. Air carrier enplanements 4,984. Annual air carrier enplanements year to date 29,538. The monthly air carrier passenger throughput 5,960. The local transient traffic breakdown for the month of July was 4,654, itinerant, 11,576. IFR traffic 5,025 and VFR traffic 11,205.

Noise concerns for the month of July, 59 calls. The number year to date 209. Ratio of concerns to operations for the month of July, 1 call;275 operations. The majority of calls during the month of July were south/west from the airport. Forty-eight of the calls concerned jet operations, one for a helicopter, and four for propeller operations. Five concerns were for unidentifiable aircraft.

Eight concerns were for loud aircraft, and four were for low flying aircraft. The remaining calls were for operations during Voluntary Noise Abatement Procedures hours. Fifteen of the concerns were for operations between 0700-1700. Two concerns for operations between 1700-2200, and forty-two concerns for operations between 2200-0700.

PART 150 PRESENTATION BY URS

Mr. Best presented the Part 150 monthly progress update for URS Corporation. He reported that URS had completed compiling the operational data used to generate the noise contours from the airport's noise monitoring system, Air Traffic Control Tower records and Fixed Base Operators on the airport.. This data will be input into the FAA's Integrated Noise Model and the first set of contours should be generated in the first week in September. These contours will be the base-line for the five and ten year projections. The data collection process took longer than originally projected due to complications encountered in extracting sub-sets of information from extensive data bases maintained by the airports noise monitoring equipment and an unexpected turn over in airport staff. Additional time and effort was required by a URS engineer working with the manufacturer of the noise monitoring system to extract the required operational data.

A representative from the National Business Aircraft Association(NBAA) inquired about stakeholder participation in the Part 150 study. He stated that in his past experience with other airport Part 150 studies, various groups are involved, and attend multiple

stakeholder meetings. Input from these groups is involved in several aspects of the study. He expressed concern that this might not be the case with Palomar Airport's Part 150 study.

Mr. Best replied that URS received the Notice to Proceed with the Noise Compatibility Study on January 6th. of this year. On March 3rd. a letter was sent to an extensive list of potential stakeholders advising them that a Part 150 study was being conducted at McClellan-Palomar airport, that a public meeting to explain the process for the study would be held on March 27th. and invited all interested parties to participate in this public process. Mr. Best stated that he was certain that the NBAA was among the parties receiving this notification, but that he would confirm his recollection with URS. It was subsequently confirmed that National Office of the NBAA in Washington D.C. was sent this notification. Mr. Best further stated that aside from the public meeting held in March to advise interested parties about the Part 150 process and their opportunity to participate in the study, the efforts expended by URS thus far in the study have focused on collecting the data that represents the flight activity at the airport for CY 2002. The public input phase of the process as outlined at the first public meeting will begin at the second public meeting, presently scheduled for March 2004. Mr. Drinkwater stated that the Part 150 study is open and public. The impact of flight activity at the airport on the local community and recommendations to minimize that impact within flight safety and regulatory agency mandates, is an integral part of the study. The public and aircraft owners need to be represented in this aspect.

The NBAA representative inquired if the PAR 2000 would be utilized by URS as an integral part of the study or just as information. Mr. Best responded that the entire PAR 2000 report had been provided to URS to document the public and stakeholder concerns over activity at the airport since February 2000. Mr. Best stated that great care was exercised to insure that the public and all stakeholders were represented during the PAR 2000. It is the intent to do the same thing with the Part 150 process; it is part of the specifications upon which the contract is based. The public and stakeholders will have additional opportunity for input at the second and third public meetings.

A homeowner in Carlsbad expressed concern about the way the study was being conducted. He did not participate in the PAR 2000 process or attend the first Part 150 Public Meeting and is unable to obtain any information in the newspapers or from the internet. Mr. Drinkwater stated that the County's website will be updated to have information, provided by URS, that states the status of the Part 150 study. The website will also include information regarding all Capitol Improvement Projects(CIP) as well. Mr. Drinkwater hopes to be able to use the website to provide more up to date information to the public concerning meeting schedules and project status for all County airports. The homeowner expressed concern over the lack of a noise abatement specialist at the airport. Mr. Best responded that Mr. Brackett, who had just given the community relations report, was the airport's noise specialist and was actively responding to community concerns regarding airport noise.

Mr. Hutter inquired into the time lag between the first public meeting in March 2003 and the second public meeting in March 2004. Mr. Best referred back to the brief given by URS at the July PAAC meeting regarding extension of the project schedule. The project schedule has been extended from the originally planned 15 months to 32 months. The extension was driven by an FAA requirement for more review and response time at five intervals during the process and more time consumed in extracting the operational data from the noise monitoring system than was originally anticipated. Specifically the following tasks needed to be completed between the first and second public meetings:

1. The data needed to be collected to create the input streams that generate the noise contours that represent the impact of flight activity on the local community over the previous 12 months.
2. Noise Exposure Contours needed to be generated utilizing the FAA's Integrated Noise Model.
3. Noise Exposure Forcasts needed to be generated for 5 and 10 year projections.
4. FAA review and approval of the 5 and 10 year forcasts.
5. FAA review and approval of Noise Exposure Maps.

The public review process will begin at the next public meeting. This involves review of the noise contours and the impact on the areas surrounding the airport. The public will assist in formulating the suggestions that will go to the FAA for consideration in the noise compatibility process.

Mr. Drinkwater stated that it is still early enough in the Part 150 process to include input from all major stakeholders. There is a good opportunity to make this work well.

SCIF PALOMAR, LLC (SOUTH) LEASE AMENDMENT – L. Sosinsky

Ms. Sosinsky presented the lease amendment. Every five years the base monthly rent is adjusted to account for the fair market rent. 11.25 acres, increased by $1,650 will make the new monthly rent $18,562. This is a significant increase of more than $6,000 per month. Over the course of a year will amount to $$74,957. The lease amendment is effective June 1st , the rent will be retroactive. The last increase was in 1998. The storm water clause will also be addresses in the amendment. This is a requirement for all new and amended leases. Mr. Lyttleton called for the motion. Motion passed unanimously.

WESTERN FLIGHT NEW AVIATION LEASES – T. Caulder

Mr. Caulder presented the lease amendment. Western Flight's single lease will be converted to three individual leases. This will allow new improvements to be expedited. The first lease will cover the far western section, which is occupied by buildings. The second lease will include the tie downs, and the third lease will be the fuel farm. Three

separate leases will allow funding to be expedited. The base monthly rent will also be adjusted. These are all thirty-year leases and subject to rent amendments.

Mr. Hutter questioned if each separate lease was based on land use, and if so, how did that affect the rate per acre. Mr. Caulder responded that the difference in rates was due to the limited use of the land over the previously existing landfill. Mr. Caulder agreed that this difference in pricing may be unique to Palomar Airport because of its location over a previously existing landfill.

Mr. Lyttleton called for the motion. Motion passed, Ms. Reyes abstained from voting.

DIRECTOR'S REPORT

Mr. Drinkwater stated that he has been reviewing projects and their priorities within the division. The budget is currently operating with little if no reserve. There are still a few capitol improvement projects that have yet to be reimbursed, but during the interim there is a gap. Mr. Drinkwater is currently reviewing the internal system of the operations of the airports in regards to staff and management i.e. individual airport, property and financial. The priorities of the division and project priority within the system will be critical as well. An ordered plan will need to be developed, a strategic plan for each airport in a priority order within the airport system. This would be a long-term goal, but there are immediate issues that will need to be addressed in order to not delay progress.

Mr. Hutter questioned Mr. Drinkwater as to how the master plan fits into the larger systemic plan. Mr. Drinkwater stated that worked into master plans is the ability for modifications. Mr. Drinkwater has plans to meet with members from the City of Carlsbad in hopes of understanding their thoughts on the direction of Palomar Airport.

Ms. Reyes asked Mr. Drinkwater as to the affect that the PAC, LLC lease could have on the master plan. Mr. Drinkwater stated that a six month process will be necessary before a plan can be generated that will outline the direction Palomar Airport is moving.

Mr. Ricotta questioned Mr. Drinkwater in regards to employee retention. Mr. Drinkwater stated that several departments are sharing the effects of the budget cutbacks. Mr. Drinkwater stated that he will also review how salary and compensation grades are evaluated.

Mr. Hutter inquired as to how plans from the San Diego Regional Airport Authority(SDRAA) will be integrated. Mr. Best stated that Senille Harmon from the SDRAA spoke to members from the Airport Taskforce earlier in the day. Addressed were the issues of augmenting Lindbergh Field to accommodate the growing airport use, other airports were not discussed. Mr. Drinkwater stated that he has met with a member from SDRAA, but the relationship is limited. The focus of the SDRAA right now is finding a location for a major airport. Mr. Drinkwater stated that there is a dialogue between the County and SDRAA.

Mr. Ricotta questioned Mr. Drinkwater in regards to the PAC, LLC lease. Ms. Reyes stated that PAAC had a tied vote as to endorsing the lease. She stated that a lack of vision on the part of the County and PAC, LLC was to blame.

Mr. Drinkwater stated that funding has come forward for Lots 29, 30, and 31. This too will be discussed with the City of Carlsbad in September.

Jason Daniels, CFI and air craft owner Palomar Airport. He stated that redevelopment approved for the PAC, LLC is a concern. There is little knowledge of what redevelopment will actually take place. No one on the airport in regards to PAC, LLC tenants were consulted. Sixty plus aircraft will be displaced. Mr. Ricotta stated that PAAC has little or no information as well.

The PAC, LLC lease was approved. Mr. Ricotta stated that some sketches were presented but nothing else. He also stated that County Land Use might have detailed information. Mr. Drinkwater stated that a plan has been presented, but it has not been fully agreed upon.

Mr. Drinkwater stated that every effort would be made to solve this issue and to avoid displacing people from a public use facility. Mr. Daniels has concern because there is not a plan available. Mr. Drinkwater stated that the space would be aviation related, it has been approved. Mr. Daniels stated that if necessary he could still attempt to stop the plan. Mr. Daniels feels that his question has still not been answered.
Mr. Drinkwater stated that it is up to Mr. Daniels as to how he intends to proceed.

STAFF REPORT

Mr. Best reported that the taxiway improvement has been substantially completed. The taxiway is in use and the lights are up. Survey work needs to be done as well as the painting. The ramp in front of the terminal will be slurry coated. Everyone worked very well together to get the job completed. A fifty foot wide taxiway and run up area for Runway 6 was the final result, as well as extra transient space parking.

Mr. Best stated that www.san.org is very informative in regards to the SDRAA.

Mr. Best stated that a compass rose would be placed in the center of the run up area on the west end.

SET AGENDA FOR MEETING ON SEPTEMBER 18, 2003

MEMBER ANNOUNCEMENTS

There were no member announcements.

ADJOURN

Meeting was adjourned at 8:55 p.m.

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Tom Ricotta, Co-Chairperson

PALOMAR AIRPORT ADVISORY COMMITTEE
2198 Palomar Airport Road
Carlsbad, California 92008
Phone: (760) 431-4646

MINUTES

THURSDAY, SEPTEMBER 18, 2003

Chairperson Ramona Finnila called the meeting to order at 7:13 p.m. on September 18, 2003, in the Carlsbad City Council Chambers, 1200 Carlsbad Village Drive, Carlsbad, California.

MEMBERS PRESENT	MEMBERS ABSENT
Chairperson Ramona Finnila	Bill Bradford
Vice-Chairperson Tom Ricotta	Warren Deem
Tim Hutter	Bob Gates
Hugh Lyttleton	
Ginna Reyes	
Howard Williams	

Members present did represent a quorum.

COUNTY STAFF PRESENT

Roger Griffiths
Olivier Brackett
Dee Dee Phillips
Peter Drinkwater

ROLL CALL AND INTRODUCTIONS

There were no introductions.

APPROVAL OF MINUTES

Minutes for the month of August were approved. Chairperson Ramona Finnila abstained from voting.

PUBLIC COMMENT ON ITEMS NOT ON THE AGENDA

There were no public comments.

CITY COUNCIL REPORT

Ms. Finnila stated that members of the City of Carlsbad met with County of San Diego representatives. Both organizations intend to work in unison on projects concerning the airport. Meetings will continue between the two groups.

AIRPORT COMMUNITY RELATIONS ISSUES

Mr. Brackett reported monthly operations for August were 18,333, bringing the total number year to date 130,717. Air carrier enplanements 4,846. Annual air carrier enplanements year to date 34,440. The monthly air carrier passenger throughput 4,446. The local transient traffic breakdown for the month of August was 5,279, itinerant, 13,054. IFR traffic 4,291 and VFR traffic 14,042.

Noise concerns for the month of August, 47 calls. The number year to date 256. Ratio of concerns to operations for the month of August, 1 call;390 operations. The majority of calls during the month of August were south/west from the airport. 49 of the calls concerned jet operations, 2 for a helicopter, and 6 for propeller operations.

7 concerns were for loud aircraft, and 3 were for low flying aircraft. The remaining calls were for operations during Voluntary Noise Abatement Procedures hours. 7 of the concerns were for operations between 0700-1700. The remaining concerns were for operations between 2200-0700.

PART 150 PRESENTATION BY URS

Mr. Fuller stated that the five and ten year forecasts are complete, they have been submitted for review to airport staff. The forecasts will then be sent on to the FAA for a sixty-day review.

The creation of the noise models is the next phase of the study. The noise model is the basis for the noise contour maps. There has been a short delay due to specific military aircraft needing to be profiled because they do not appear in the FAA noise model database.

The Part 150 study project schedule has been revised. The FAA has requested additional time for review and added two more steps to the process causing a several month delay. Loss of an airport staff member integral to the study contributed to the delay. The first public meeting was held March 27th, 2003. The second public meeting will be held at a time and place yet to be determined in March 2004.

Prior to the March public meeting, notices will be sent out to roughly 180 individuals, professional organizations and institutions affected by the study. A press release will be issued as well.

The draft of the Part 150 study is scheduled to be released to the public for review and comment in September 2004. The third public meeting will take place mid-September, allowing for public comment.

The FAA will then receive the revised draft of the Part 150 study for a 180-day review in November 2004. It is estimated that the FAA approval will be issued sometime by June 2005.

Mr. Drinkwater stated that more information concerning the Part 150 study would be presented at upcoming PAAC meetings. This will allow the public more chances to review and comment on the study. Mr. Hutter suggested that the public be notified that the Part 150 study will be addressed at PAAC meetings, and at that time they can take part in the process and voice their concerns. Mr. Brackett added that the County of San Diego web site now has information regarding the study and a link as well to URS.

Joe Czech gave an update presentation on the Part 150 study. The presentation appears on the County web site.

PAC, LLC. RESTAURANT LEASE

Mr. Drinkwater stated that he met with members of Palomar Airport Center, LLC. (PAC, LLC.) The design phase of the entire development is underway. The permanent potential site for the restaurant has been identified. It will be in the air carrier parking area immediately next to the fire vehicles. The plan is for a two-story building, roughly 10,000 sq. ft. PAC, LLC will have one year to complete the building from the time of design approval. This proposal allows for a commercial terminal 20,000 sq. ft. to be built adjacent to the PAC, LLC. Building and benefit from preexisting oversized utility connections that will be needed for the restaurant.

Mr. Drinkwater discussed a proposal for general aviation aircraft parking on the northeast side of the airport. This proposal is contingent on acquiring a temporary waiver from the FAA allowing for aircraft parking in this area. The plan will hopefully save many general aviation aircraft from being displaced by the PAC, LLC. Construction project.

A proposal is being drafted for the automobile parking lots, it will be submitted to the City of Carlsbad. The plan is for the parking lots to be a joint effort between the City of Carlsbad and the County of San Diego, both benefiting from the project.

Mr. Drinkwater spoke briefly on the loss of commercial air carrier flights. A study with consultant SH&E will soon be underway to present to the air carriers for alternate destinations.

DIRECTOR'S REPORT

Mr. Drinkwater addressed the proposed budget and presented informational folders outlining all county airports key projects and funding. In addition, he advised that the plan in upcoming months is to present to PAAC a more defined report concerning projects on Palomar Airport and show how they integrate with all other county airports projects and priorities.

STAFF REPORT

The taxiway alpha project is complete. Staff is now working to catch up on regular upkeep of the airport. The ARFF hangar had the roof replaced.

SET AGENDA FOR MEETING ON OCTOBER 16, 2003

Mr. Hutter suggested that the open PAAC positions be addressed.

MEMBER ANNOUNCEMENTS

There were no member announcements.

ADJOURN

Meeting was adjourned at 8:55 p.m.

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Ramona Finnila, Chairperson

PALOMAR AIRPORT ADVISORY COMMITTEE
2198 Palomar Airport Road
Carlsbad, California 92008
Phone: (760) 431-4646

MINUTES

THURSDAY, OCTOBER 16, 2003

Chairperson Ramona Finnila called the meeting to order at 7:13 p.m. on October 16, 2003, in the Carlsbad City Council Chambers, 1200 Carlsbad Village Drive, Carlsbad, California.

MEMBERS PRESENT	**MEMBERS ABSENT**
Chairperson Ramona Finnila	Bill Bradford
Vice-Chairperson Tom Ricotta	Warren Deem
Ginna Reyes	Bob Gates
	Timothy Hutter
	Hugh Lyttleton
	Howard Williams

Members present did not represent a quorum.

COUNTY STAFF PRESENT

Floyd Best
Olivier Brackett
Peter Drinkwater
Roger Griffiths
Leeann Lardy
Dee Dee Phillips

ROLL CALL AND INTRODUCTIONS

There were no introductions. Any motions requiring action will be tabled until the November PAAC meeting.

APPROVAL OF MINUTES

Tabled until the November PAAC meeting for lack of a quorum.

PUBLIC COMMENT ON ITEMS NOT ON THE AGENDA

Glenn Snavely a representative of the North County Chapter of the Experimental Aircraft Association (EAA) gave a brief report. The association has hopes of getting one million children flying in the air by the end of the year.

Ron Cozad a representative of the Carlsbad Airport Association gave a brief statement. The association is concerned about the possible displacement of roughly 125 aircraft on the airport. Their next meeting is planned for Wednesday, October 22, 2003 at Calaveras Park, 2997 Glasgow Drive. Mr. Drinkwater plans to attend.

CITY COUNCIL REPORT

Ms. Finnila informed the committee that the Leo Carrillo Ranch Historical Park is now open. It is located on Carrillo Way next to the elementary school.

PROPOSAL FOR A NEW 30 YEAR LEASE FOR JETSOURCE INC.

Leeann Lardy presented the proposed new lease, which will be presented at the County Board of Supervisors meeting in December. This lease will combine two leases into one new thirty year lease to start 010104 and to run through 123133. The minimum Capitol Improvement standards are $5000.00 per acre per year of extended lease term. Jetsource plans to build a 42,000 sq. ft. hangar, with an estimated cost of 2.5 million. An equity payment has been requested. The base rent appraisal at Palomar airport is $13,046.00 per month. There will be demolition of hangar three, it will be utilized as a Jetsource parking lot. Jetsource will ultimately have access to their “hangar one” via taxiway Charlie.

Frank Milian the Chief Operating Officer of Jetsource gave a brief review of the lease hold plan. A new 41,000 sq. ft. hangar will replace “hangar two”. The law suit has been terminated. The company intends to have “hangar three” down in roughly 90 days. Jetsource has an incentive to early perform on “hangar three” removal as stated in the lease proposal.

Members of the committee present were all pleased with the proposal.

AIRPORT COMMUNITY RELATIONS ISSUES

Mr. Brackett reported monthly operations for September were 14,647, bringing the total number year to date 145,364. Air carrier enplanements 4,382. Annual air carrier enplanements year to date 38,786. The monthly air carrier passenger throughput 4,021. The local transient traffic breakdown for the month of September was 4,654, itinerant, 11,132. IFR traffic 4,842 and VFR traffic 9,805.

Noise concerns for the month of September, 74 calls. The number year to date 330. Ratio of concerns to operations for the month of September, 1 call; 198 operations. The

majority of calls during the month of September were south/west from the airport. 58 of the calls concerned jet operations, 2 for helicopter, 8 for propeller operations, and 6 unknown aircraft type.

18 concerns were for loud aircraft, and 11 were for low flying aircraft. 47 calls were for operations during Voluntary Noise Abatement Procedures hours. 15 of the concerns were for operations between 0700-1700. 51 concerns were for operations between 2200-0700. 8 concerns were for operations between 1700-2200.

PART 150 PRESENTATION BY URS

Mr. Fuller stated that the Preliminary Forecast has been submitted to the FAA for review and approval.

Mr. Czech presented a brief summary of the Preliminary Forecast to the committee. 22 years of past airport activity 1980-2002 was utilized in the forecast. The 1997 Airport Master Plan was reviewed and provided data. Commercial and general aviation activity presented a wide variation of growth. Trend analysis was utilized in determining the rate of growth. Commercial, general aviation (transient/local), and military activity are the components considered in the market share approach to growth rates.

Ms. Finnila suggested that a glossary of terminology be included in the final Part 150 Report.

In response to several suggestions by PAAC, newspaper ads were placed in both the North County Times and the San Diego Union Tribune advertising the meetings. An announcement was also placed on the City of Carlsbad public information channel operated by Adelphia, several flyers were also placed around the airport and at all F.B.O.'s. Staff hopes that this will increase the PAAC attendance by the public.

DIRECTOR'S REPORT

Mr. Drinkwater spoke briefly about the future for Palomar airport. The possibilities are not definitive. There is a comprehensive plan, and the committee as well as the public will continuously be appraised of the progress made. Currently, the FAA is reviewing a plan which allows for roughly 65 temporary tie down spaces on the east end of the airport. The restaurant will be relocated to an area next to the ARFF office.

STAFF REPORT

A staff report was not presented.

SET AGENDA FOR MEETING ON NOVEMBER 20, 2003

MEMBER ANNOUNCEMENTS

There were no member announcements.

ADJOURN

Meeting was adjourned at 8:50 p.m.

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Ramona Finnila, Chairperson

PALOMAR AIRPORT ADVISORY COMMITTEE
2198 Palomar Airport Road
Carlsbad, California 92008
Phone: (760) 431-4646

MINUTES

THURSDAY, NOVEMBER 20, 2003

Chairperson Ramona Finnila called the meeting to order at 7:05 p.m. on November 20, 2003, in the Carlsbad City Council Chambers, 1200 Carlsbad Village Drive, Carlsbad, California.

MEMBERS PRESENT	**MEMBERS ABSENT**
Chairperson Ramona Finnila	Warren Deem
Vice-Chairperson Tom Ricotta	Hugh Lyttleton
Bill Bradford	
Bob Gates	
Tim Hutter	
Ginna Reyes	
Howard Williams	

Members present did represent a quorum.

COUNTY STAFF PRESENT

Sunny Barrett
Floyd Best
Olivier Brackett
Peter Drinkwater
Jeremy Keating
Lee Ann Lardy
Eric Nelson
Dee Dee Phillips
Bill Polick
Wayne Thomas
John Christensen

ROLL CALL AND INTRODUCTIONS

There were no introductions.

APPROVAL OF MINUTES

Mr. Ricotta made a motion to approve minutes for the months of September and October. Ms. Reyes seconded the motion. The minutes were approved. Mr. Bradford and Mr. Gates abstained from voting for both months.

PUBLIC COMMENT ON ITEMS NOT ON THE AGENDA

There were no public comments.

CITY COUNCIL REPORT

Ms. Finnila pointed out that there was a supplement about McClellan-Palomar in the San Diego Union Tribune last week.

The new appointments for the PAAC will be an item on the agenda for the Board of Supervisors meeting to be held 120203. The committee is still lacking a representative from the City of San Marcos.

The Carlsbad City Council voted on amending the master plan for sewer and water plans. There will be new construction facilities, new programs and existing facilities will be modified and changed. Although several of the project components are located in the airport influence area and flight activity zone, the airport will not be significantly impacted

A proposal for joint development of a parking lot on the airport, involving lots 29, 30 and 31, has been submitted to the City of Carlsbad by the County of San Diego. When the City of Carlsbad acts on the proposal, Ms. Finnila will report back to the PAAC.

PALOMAR AIRPORT ADVISORY COMMITTEE RULES OF ADVISORY – T. Bosworth

Mr. Bosworth is a Deputy County Council. There have been several inquiries to his office from airport advisory committees requesting information on rules and responsibilities, as well as certain issues regarding conflict. A presentation is being prepared and will be made to the committees in March 2004. All members of the PAAC are invited to a briefing on the most recent policies and procedures.

Rules governing the airport advisory committees are not only set forth in sections of the government code, but sections of County policy as well. If there are any questions in the meantime, Mr. Bosworth suggests that members contact Mr. Drinkwater.

PART 150 PRESENTATION BY URS

The project manager Mr. Fuller stated that the Preliminary Forecast of aviation activity and other aircraft operation profiles have been submitted to the FAA for review and approval. A response is expected from the FAA within the next thirty days.

Once the forecasts are approved, the noise exposure maps will be developed.
After review of the noise exposure maps by the FAA, the second public hearing will be held possibly late February/March 2004. At this time the existing and projected (2008 and 2013) noise exposure maps will be presented. The second public hearing will give the public an opportunity to review and comment on the forecasts.

The Noise Compatibility Plan will be prepared utilizing feedback from both the FAA and the public. Once completed, the public will have a chance to review and comment on the plan.

RESTAURANT LEASE WITH PALOMAR AIRPORT CENTER LLC– L. Lardy

Ms. Lardy presented a request that the Committee approve motion to recommend the County Board of Supervisors approve a 30-year lease with Palomar Airport Center LLC (PAC) for .24 acres of land at McClellan Palomar Airport. As background Ms. Lardy reports that five aviation leases and a Memorandum of Understanding regarding a proposed restaurant lease (MOU) were brought to the Committee in October and November of 2002 and approved by the County Board of Supervisors on December 11, 2002. The MOU stated that PAC and the County would negotiate a rental agreement for a temporary restaurant, to be brought before the Board by April 11, 2003. The MOU further stated that when a site for a new terminal/administration building was identified, PAC would have the first right of refusal for a restaurant in the new terminal. This consideration was given to PAC for its cooperation in the future relocation of the existing restaurant. This was necessary due to safety and security concerns by the Transportation Security Administration (TSA) because the restaurant is currently located inside the security perimeter of the airport.

After further investigation, the County and PAC determined that a temporary restaurant was infeasible due to the high cost and the lack of a temporary location without safety or security.

As reported to the Committee in October, a permanent location for a restaurant has now been selected. The proposed location is east of Jetsource Hangar 1. The two-story building would be approximately 60ft. X 80ft. with 5,000 sq ft. on each story and a 10ft. clearance all the way around. The lot is approximately 95ft. X 110ft., roughly 10,450 sq. ft. equivalent to .24 acres. The term of the proposed lease would be 30 years with an incentive for and additional 1 year 5 months if PAC completes the restaurant in two years with minimum service requirements that limit the disruption of service.

The rent will consist of a minimum base rent of $1,650 per acre based on the current appraised rate for aviation at Palomar with percentage of gross sales. PAC will pay for

all permitting and construction costs, an estimated 1.5 million. PAC will install super size utilities that will be adequate to serve the terminal/administration building that will be constructed adjacent to the restaurant in the future.

PAC plans to operate a restaurant on the second story and sublease the first floor to Barnstorming Adventures.

Richard Sax, managing member of PAC provided additional information on the restaurant. PAC's plan is to transform the cafe into a full service restaurant and make the airport restaurant a dinner attraction. The restaurant operator intends to offer-catered events, as well as full service catering to both the business and private community. The facility will be over four times as large as the current café and still offer a great view of the planes.

PAC has been in negotiations with Barnstorming Adventures to add an air museum on the first floor.

Mr. Gates inquired how the restaurant ties into the future terminal and if there is a master plan that reflects it. Mr. Best responded that the modular design of the future terminal is conceptual. This concept precedes an update of the master plan.

Mr. Hutter requested clarification on the current lease under consideration. Ms. Lardy stated that the proposed lease was for a 30-year term on .24 acres of property on the airport. The MOU approved by the Board in December 2002 gives PAC first right of refusal for a permanent restaurant in the terminal. Now that a permanent site has been determined the County gave a proposal to PAC. If PAC accepts terms an RFP will not be conducted. This is because the Board granted PAC the first right of refusal when they approved the MOU in December 2002. If PAC declines, the County could then conduct an RFP.

Mr. Hutter stated he interpreted the MOU to include prerequisites that had not been met. Therefore the first right of refusal could not be awarded to PAC. He stated that the MOU does not mention a stand-alone facility on separate leasehold.

Ms. Lardy responded that these goals were not referred to as prerequisites and are currently being worked towards. The MOU also called for a temporary restaurant but in order to move forward with the project in was determined to accept this as an alternate plan. This lease will supersede the MOU. Approval of this lease will allow development to proceed at McClellan-Palomar Airport.

Mr. Sax stated that the restaurant is in response to the public desire for food service. He said PAC will not move ahead if the committee and the Board of Supervisors decide that future study is necessary or a terminal must be in place first but that the existing restaurant must come down before the PAC Leasehold can be developed.

Mr. Hutter stated that the site chosen for the restaurant was not the issue. But, if .24 acres went out for a public RFP, there may be a number of parties interested in bidding for new leasehold to build a restaurant on the airport.

Ms. Finnila reiterated that PAC was awarded the first right of refusal by the court and when PAAC was asked whether a restaurant on the airport was desirable, all members concurred.

Ms. Lardy informed the Committee that the minimum base rent would start February 2004 at the commencement date of the lease. The percentage rent would not go into effect until the restaurant began sales.

Mr. Ricotta inquired as to parking for the restaurant leasehold. Mr. Best stated that Lots 29, 30 and 31 would serve as the primary parking for both the restaurant and the commercial terminal. This concept allows the County to take advantage of the limited aviation useable space inside the airport boundary.

Ms. Reyes inquired if a cost of living adjustment (COLA) would be in place in this lease. Ms. Lardy responded that there would be percentage rent and minimum base rent, every five years the minimum base rent would be reviewed and adjusted.

Ms. Reyes asked what requirements there are regarding time frame and what if any incentives. Ms. Lardy stated that there is a two-year time frame for construction along with a minimum one-month shut down and two-month limited service only requirement in order to qualify for the incentive of extending the term for 1 year and 5 months. Should PAC fail to complete the restaurant within three years, they would be in default and the County would take appropriate action.

Ms. Reyes asked about seating capacity. Mr. Sax responded by stating that the restaurant would be three to four times larger than the current café. Ms. Reyes also inquired if there were guidelines built into the lease. Ms. Lardy stated that staff intends to include guidelines as an exhibit, subject to modification by the Airports Director.

The following members of the public addressed the Committee:

Ron Cozad, stated the concern at hand involves PAC and their grant of right of first refusal after the development of an RFP, but before the RFP is published.

Paul Breed a general aviation pilot. Mr. Breed feels that there is no justification that the lease requirements for the restaurant will be met.

Philip Espinsen feels that the terminal should be the primary emphasis at this point. The restaurant should in fact be the primary lease of the terminal.

Kurt Mihalco, PAPA feels that a public process should be followed with an RFP issued and published by the County.

Ms. Lardy stated that the County Board of Supervisors approved five leases and the restaurant MOU on 121102. County Council was consulted at that time and government code does not require the County go out for an RFP for any lease.

Ms. Lardy stated that the County can not move forward with an airport terminal until an area is located on the airport layout plan, which we are currently in the process of doing. Advance money needs to be put into design before the County can ask the FAA for a grant. Projects at other airports must be considered, Palomar's terminal may not take precedence over other airport's safety and security.

Mr. Drinkwater stated that a commercial air study is currently underway, a terminal cannot be designed and built for a market that does not exist commercially. The direction the airport is headed must be determined in terms of what kinds of service it can provide. The restaurant is tied to a bigger development plan. A number of issues are tied together. This is the first step approved by the Board of Supervisors that will move us forward for the modernization of Palomar Airport.

Mr. Gates inquired as to feasibility of alternate restaurant sites. Ms. Lardy stated that because of the limited amount of space there were not very many alternate sites to consider.

Mr. Sax addressed the temporary restaurant site idea. Both Mr. Sax and Mr. Drinkwater concluded that it would not be economically beneficial for the County to relocate a temporary restaurant. The restaurant site was chosen only recently and the MOU, which the Board of Supervisors approved, addresses that issue.

Ms. Reyes asked Mr. Sax what type of assurances PAC has received that the restaurant will be tied to the future terminal. Will PAC be reimbursed if an alternate site for the terminal is utilized?

Mr. Drinkwater stated that the terminal does not have to be tied to the restaurant; it may be desirable to be in the same proximity. If the market does not support a new terminal, a new terminal will not be built. This restaurant will be built as a stand-alone facility that will finance and pay its own way. If there is market demand to support a new terminal, the terminal building will be built in close proximity or connected to the restaurant.

Mr. Hutter asked Mr. Drinkwater if PAC had provided the County with a business plan, market study and financials all specific with this project. Mr. Drinkwater responded in the negative and stated if PAC does not perform in the appropriate time frame, the area will become available for an open RFP.

Ms. Reyes stated that by moving forward with the restaurant PAC may serve as an anchor for future development and may spur such development forward.

Mr. Ricotta concurred with Mr. Hutter and feels that this lease is premature without a master plan. This lease should be up for public bid.

Mr. Williams stated that Palomar competes with other County airports for money. The café is liked, and everyone would like a better one. Mr. Williams called for a motion to approve the PAC lease. Ms. Reyes seconded the motion. The motion passed with a vote of four to three. Mr. Hutter, Mr. Ricotta and Mr. Gates voted against the motion.

PAC LEASE AMENDMENT FOR PALOMAR AIRPORT CENTER LLC – L. Lardy

The Committee is requested to approve a motion to recommend the County Board of Supervisors approve lease amendments with Palomar Airport Center, LLC

Ms. Lardy stated that the five existing PAC leases were all approved by the County Board of Supervisors 121102. The amendment currently before PAAC will extend PAC the incentive period for PAC to complete the construction to two years from today. The five existing leases were broken down into:

1. The fuel concession.
2. Non-landfill impacted area of development (i.e. jet hangars and general aviation hangars).
3. Landfill impacted area that is approved for lightweight use.
4. Port-a-ports that are subleased by P.A.P.A.
5. Deeply impacted landfill area approved for parking by the PAC and/or available for temporary housing during landfill remediation.

The amendment allows for PAC to meet the development term should they choose to meet the development incentive in terms of time. The County agreed to this amendment to be fair because the County was somewhat responsible in not being able to help identify a location for the restaurant.

Mr. Ricotta inquired if any trade off of land was given to the County by PAC. Mr. Drinkwater responded that minimal consideration was given to this idea, but the amount of land that would be given to the County would not be placed well for any practical use by the County and would possibly complicate other parts of future developments.

Mr. Drinkwater stated that the County of San Diego wants PAC to get on with their development. The County intends to move out of the way with obstacles that have been stopping the development, the restaurant location being the most notable one. The County wants Mr. Sax and his investors to perform and have the market dictate how well the development succeeds. Mr. Drinkwater further stated that this is the free market economy and the same market that the rest of the airports and their leaseholders enjoy.

Mr. Hutter responded by asking Mr. Drinkwater why the County chose not to put the lease out for an RFP to maximize the market potential? Mr. Drinkwater responded by

stating that the County Board of Supervisors dictated the terms, the County is simply complying with those original agreed terms.

Ms. Lardy stated that PAC returned to the County approximately 1.17 acres adjacent to the center of Palomar Airport for commercial services and the terminal providing a needed taxiway and maneuver area to adequately accommodate current as well as future airport needs. This additional area to the taxiway would then eventually become eligible for FAA grants as a 150-ft. taxiway.

Ms. Finnila stated that she and Supervisor Horn have received a great deal of letters from the public. Two issues appear to be circulating:

1. The fear that general aviation will be taken away somehow as a basic use for this airport.
2. The amendment at hand for the five existing leases, strictly refers to only extending the incentive time to November 2005, not the validity of the leases.

All letters Ms. Finnila has received will be forwarded to Supervisor Horn and the Board of Supervisors.

Members of the public addresses the Committee:

Ron Cozad spoke briefly of the settlement between the County and Mr. Burrows in 1993.

John Earle requested that clarification be given regarding P.A.P.A. It was clarified that P.A.P.A. would be on the leasehold for 30-years also.

An unidentified citizen addressed the PAAC. Just because a legal process is correct does not mean that it is right. Displacing 180 people to serve a few does not work. As a representative of the public the County has the obligation to fight for what is right.

Kurt Mihalco stated that the majority of the attendees are interested in commenting after the proposal by Mr. Sax

Mr. Sax explained the basis of the lease amendment saying the leases did not start until after the Board approved them. By giving PAC 24 months from now, two months are still lost.

Mr. Ricotta stated that he would like to vote on the motion after hearing the presentation by Mr. Sax. Ms. Finnila stated that the agenda would be followed as always.

Ms. Reyes asked if the extension of time pertained to the full development of the five leases entertained previously, not only the restaurant or phase one. Ms. Reyes stated that she feels that things moved forward previously because of the order in which things were going to happen in.

Ms. Reyes stated that she feels that it is premature to vote on a time frame without knowing what the developments are that are going to happen within that time frame. Mr. Sax stated that the incentive is for accomplishing the front row construction. Construction of the rows of hangars is dependent upon the status of the permitting process and pre-reservation of pre-leasing. . PAC hopes that everyone displaced will be taken care of with temporary facilities. Ms. Reyes stated that one reason she could vote positively previously was because of the way the things were structured. The first phase would be built and there would be an attempt to relocate those businesses displaced.

Mr. Sax stated that PAC is working with the County to try to obtain temporary facilities for everyone and to try to place hangar and tie down customers if possible in adjacent areas or on other airports. Mr. Sax stated that there is not room for everyone under this plan but there will be tie downs and general aviation hangars available to the public on the PAC leasehold.

Mr. Williams stated that the issue is the extension. He asked if anyone had an argument as to why it would not be fair to award PAC the extension? Mr. Ricotta responded by stating that this project is not good for the airport and not good for the people. This project is not what the public wants; this airport should stay a general aviation airport for public use.

Mr. Williams made a motion to recommend the proposal for the extended lease amendment, Mr. Bradford seconded. The motion was passed 4/3 in favor. Mr. Ricotta, Mr. Hutter and Mr. Gates opposed.

PAC PROPOSED PLAN FOR DEVELOPMENT – R. Sax

Mr. Sax presented the five leases visually on a diagram. Mr. Sax pointed out the five acres Mr. Ricotta referenced earlier. PAC and the County negotiated that this land remains general aviation, and P.A.P.A would be the subleasee. Redevelopment of PAC will consist of a front row of G5 capable hangars. Fourteen other hangars will immediately follow behind. One row will be dedicated to maintenance and above these hangars will be office space. When complete PAC will have 200,000-sq. ft. of new space net on the airport. 60,000 of which will be office space and a 130,000 of which is new hangar space. There will be a lot more hangar space than has ever been.

Mr. Sax stated if PAC were to build general aviation hangars with the burden of the infrastructure and the cost of development today (i.e. permitting, taxiways and underground utilities etc.) small hangars would be available to rent for somewhere between $2,500 to $3,000 a month. Although it is not a popular notion the general aviation community has access to all of these hangars. The hangars could be shared. These hangars are suitable for small planes; four to six planes can be accommodated. Mr. Sax stated that PAC does not have a final plan because final approval has not yet been given on what will be going into the project. Mr. Sax stated that he welcomes

anyone who can produce a plan that would replace the current hangars and not exceed a $3,000 rental price.

Public comment to the Committee:
Ron Cozad spoke of a letter to the FAA from Mr. Drinkwater that referenced the displacement of roughly 200 tie down locations. He said Palomar Airport faces losing affordable space available to the general aviator and that little notice was given to those being displaced. Mr. Cozad presented a rough draft of a plan he would like to build for general aviation hangars and tie downs at Palomar Airport

Paul Disantis a tenant of PAC, inquired as to what if anything would be happening with the fuel island, and how many tie downs would actually be lost. He also inquired as to what was planned for both the far west and east ends of the airport. Mr. Disantis stated that he would encourage PAC to consider the outdoor tie downs.

Mr. Sax stated that PAC intends to take away some auto parking spaces and turn them into aircraft tie downs. Currently there are 95 tie downs. After development there will be 32. The County is currently working to create 33 tie downs on the west end. Of these 33 hangars, 23 will be new tie downs and 10 will replace the 10 transient tie downs on the present PAC Leasehold. There are roughly 30 remaining that may be displaced and the County is working to find a place for them.

Mr. Best stated the County has submitted a proposal to the FAA to see if additional temporary tie downs can be developed on the east end of the airport in and around the runway protection zone to accommodate small aircraft for a limited period of time until another place is found.

Dave Kline addressed the PAAC. Mr. Kline stated that he does not feel that the tie down displacement is an issue. Mr. Kline feels that jet traffic will be increased dramatically. Pilots currently can expect to wait in line for take off anywhere from 20 minutes to an hour while jet traffic is given priority.

Jason Daniels, requested clarification on a few items. He said there are 141 aircraft tie downs not including the ten spots designated for transient planes. There are also 36 hangars in the area. A total of 171 aircraft not including those planes in front of the maintenance hangars will be affected. PAC will have 32 spots, the County has 23 spots, and ten spots for transient. He said 100 aircraft will be displaced and of those, 36 of them are in hangars in which businesses are located that will not be accommodated as well. He stated that the airport needs to be redeveloped, but requested that it be a fair development.

Kurt Mihalco stated that in relation to the planned development, the smallest of the proposed 19 hangars would work out to roughly $6,800 per month. Four aircraft would have to be jockeyed around, and the monthly rental per plane would be roughly $1,700. Mr. Mihalco would also like PAAC to consider the true economic impact in terms of the users of the space (i.e. businesses, avionics shops, maintenance shops) that depend

on the single engines/light planes to maintain them. If the general aviators go away, there will be no means for these businesses to survive.

Roger Baker stressed that everyone should understand that there is nothing in the proposal before you tonight for small general aviation. The costs associated with this project are far beyond that of the local general aviator. A compromise could be made with PAC that could serve both the large corporate businesses and small general aviation community.

John Earle would like more port-a-ports considered or something that the local general aviator could afford.

Tony De Palola a tenant of PAC stated that the option of using another airport is not always feasible to pilots. Palomar Airport has a precision instrument approach that allows planes to land when otherwise not possible at other airports due to weather.

Eric Ross stated that Palomar Airport cannot afford to lose any spaces for aircraft, there is already a shortage. If hangars are infeasible, tie downs are a possibility. There must be a solution for small aircraft.

An unidentified citizen referenced was Mr. Sax's statement that the PAC development was a risky venture without a guaranteed market. He pointed out there are guaranteed customers currently in attendance.

Dave Carlton stated that he is in attendance to confirm whether or not those displaced by the PAC will be relocated, and if the existing businesses will have a hope of sustaining their businesses in the future. The existing people displaced should be taken care of first.

Mr. Sax concluded his proposal by stating that he never lied to anyone. All of the airplanes that want to be accommodated on the airport can. PAC is simply trying to do what is commercially feasible.

Mr. Drinkwater stated that there will be 23 tie downs on the west end, not including the ten set aside for transient parking. The request to the FAA is still under consideration. There are 8 airports in the County of San Diego, Fallbrook has shade hangars in construction and are going to be very favorably priced. Ramona has a lot of tie down area and a brand new tower to be opened on December 8th. Gillespie has over 70 acres of land becoming available in 2004. There are other options available within the system.

Ms. Finnila reiterated that this item is information only and there is no action that will be taken. Ms. Finnila stated that the members of the PAAC have fought to keep the airport open. On many an occasion the PAAC was the only thing that stood behind the airport when other organizations fought to beat down the airport. A legitimate process has been in place for dealing with the airport. It has only been recently that some have

decided that the process is not working because they have not been a part of it. Everyone has always been welcome to participate in the process; the PAAC is doing all they can to keep general aviation available at Palomar.

Mr. Sax stated that if the association can underwrite a portion of the project in a way that is commercially viable that an underwriter and a banker will see to that makes profits instead of losses he will consider it.

Mr. Bradford suggested that everyone send their comments to the Board of Supervisors in writing, so that they know what the general feelings are concerning the airport.

FISCAL YEAR 04/05 ACCELERATED BUDGET PREPARATION REQUIRED BY COUNTY – S. Barrett

Ms. Barrett presented the accelerated budget for review by the PAAC. The County Board of Supervisors has requested that the budget process be accelerated. The budget presented is only a draft. The numbers will change because the budget analyst along with the airport managers will review the numbers very closely. The budget will go to the Board sometime late January. There will be a budget review opportunity in the spring so that other projects that come up may be addressed.

Mr. Drinkwater stated that the airport enterprise fund and revenues for the airport have to be generated through airport development and through other developments that are independent of any general fund or taxpayer support.

AIRPORT COMMUNITY RELATIONS ISSUES

Mr. Brackett reported monthly operations for October were 14,568, bringing the total number year to date 159,932. Air carrier enplanements 4,139. Annual air carrier enplanements year to date 42,925. The monthly air carrier passenger throughput 3,785. The local transient traffic breakdown for the month of October was 4,021, itinerant, 10,547. IFR traffic 4,753 and VFR traffic 9,815.

Noise concerns for the month of October, 39 calls. The number year to date 369. Ratio of concerns to operations for the month of October, 1 call; 374 operations. The majority of calls during the month of October were south/west from the airport. 27 of the calls concerned jet operations, 6 for propeller operations, and 6 unknown aircraft type. 5 concerns were for loud aircraft and 5 were for low flying aircraft. 29 calls were for operations during Voluntary Noise Abatement Procedures hours. 9 of the concerns were for operations between 0700-1700. 29 concerns were for operations between 2200-0700. There was only 1 concern for operations between 1700-2200.

DIRECTOR'S REPORT

A Director's report was not presented.

STAFF REPORT

A staff report was not presented.

SET AGENDA FOR MEETING ON DECEMBER 18, 2003

MEMBER ANNOUNCEMENTS

The new PAAC members will be seated. Ms. Finnila requested that they receive any kind of background that they may need concerning the Part 150 study or the CLUP so that they can readily step into their position. Four members will be appointed on December 2nd. Mr. Deem is an honorary member.

ADJOURN

Meeting was adjourned at 10:15 p.m.

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Ramona Finnila, Chairperson

PALOMAR AIRPORT ADVISORY COMMITTEE
2198 Palomar Airport Road
Carlsbad, California 92008
Phone: (760) 431-4646

MINUTES

THURSDAY, DECEMBER 18, 2003

Chairperson Ramona Finnila called the meeting to order at 7:11 p.m. on December 18, 2003, in the Carlsbad City Council Chambers, 1200 Carlsbad Village Drive, Carlsbad, California.

MEMBERS PRESENT	**MEMBERS ABSENT**
Chairperson Ramona Finnila	Warren Deem
Bill Bradford	Bob Gates
Tim Hutter	Hugh Lyttleton
Ginna Reyes	Tom Ricotta
Howard Williams	

Members present did represent a quorum.

COUNTY STAFF PRESENT

Peter Drinkwater
Floyd Best
Roger Griffiths
Dee Dee Phillips
John Christensen

ROLL CALL AND INTRODUCTIONS

There were no introductions.

APPROVAL OF MINUTES

The minutes for the month of November were approved.

PUBLIC COMMENT ON ITEMS NOT ON THE AGENDA

There were no public comments.

CITY COUNCIL REPORT

The Carlsbad City Counsel approved a golf course that will be located on Palomar Airport Road at College. It will be a carts only course. The clubhouse will be available to the public for private functions. The Coastal Commission has titled the course as organic, this means that pesticides will not be used and the course will need to adhere to other specific guidelines.

The new PAAC members have been named. Ms. Finnila plans to have them seated at the January 2004 meeting.

PART 150 PRESENTATION BY URS

Mr. Fuller stated that the FAA approved the Preliminary Forecast of Aviation Activity. When the user defined profiles are approved by the FAA, URS will move forward with the Noise Exposure maps, which they hope to have completed by the middle of January 2004. The forecast presentation may need to go to the FAA for approval prior to the public presentation, but that decision will be made by the FAA.

Ms. Finnila suggested that Mr. Fuller detail the Part 150 at the January 2004 meeting in order to apprise the new members of the study.

AIRPORT COMMUNITY RELATIONS ISSUES

Mr. Griffiths reported monthly operations for November were 18,284, bringing the total number year to date 178,260. Air carrier enplanements 4,357. Annual air carrier enplanements year to date 47,282. The local transient traffic breakdown for the month of November was 5,494, itinerant, 12,786. IFR traffic 4,009 and VFR traffic 14,275.

Noise concerns for the month of November, 47 calls. The number year to date 416. Ratio of concerns to operations for the month of November, 1 call; 389 operations. The majority of calls during the month of November were south/west from the airport. 39 of the calls concerned jet operations, 5 for propeller operations, and 4 unknown aircraft type. 46 of the concerns were for operations between 0700-1700. There was only 1 concern for operations between 1700-2200.

Ms. Finnila requested that the Noise Specialist look into an early morning VNAP violation.

DIRECTOR'S REPORT

Mr. Drinkwater briefed the PAAC members on the regional carrier study. SH & E were the consultants of choice to conduct a study that would determine the future of Palomar Airport as a regional carrier and new market possibilities. The study through SH & E would utilize a data bank already in existence created for the San Diego Regional Airport Authority, thus saving the County of San Diego a substantial amount in fees.

The report currently being presented is an initial review of preliminary findings. A complete report will be delivered in January. Preliminary findings suggest that Las Vegas would be the only new market that appears to have traffic demand capable of supporting a turbo prop service. A prospective airline for Palomar to Las Vegas is not readily definable. There is a need for a further study once conclusions are drawn as to whether Palomar Airport should proceed in the regional carrier direction. PAAC members will play a vital role in these matters.

STAFF REPORT

Mr. Best stated that the taxiway Alpha project is almost wrapped up. The FAA was very happy with the progress of the project and the product. Along with the new run up area on the west end, thirty-three tie downs will be made available. Ten of the tie down spaces will be County transient spaces and the remaining twenty-three will be made available for lease at the beginning of 2004. The tweny-three spaces have already been filled by general aviation pilots, there are only eight currently on the waiting list. The rate will be determined by the going rate on the airport currently.

The FAA Part 139 inspection started yesterday and will continue today.

Staff is getting ready for the PAC, LLC. redevelopment as well as the Jetsource hangar "3" removal and hangar "2" enlargement.

SET AGENDA FOR MEETING ON JANUARY 15, 2004

Ms. Finnila requested that the final report submitted by SH & E be an action item on the agenda. A subsection should be included that a motion be made as to whether or not SH & E should continue on with a regional jet study as well.

MEMBER ANNOUNCEMENTS

The new PAAC members will be seated. Ms. Finnila requested that they receive any kind of background that they may need concerning the Part 150 study or the CLUP so that they can readily step into their position. Three members will be

appointed on December 17th. Mr Deem is an honorary member.

ADJOURN

Meeting was adjourned at 8:40 p.m.

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Ramona Finnila, Chairperson

PALOMAR AIRPORT ADVISORY COMMITTEE
2198 Palomar Airport Road
Carlsbad, California 92008
Phone: (760) 431 4646

MINUTES

THURSDAY, JANUARY 15, 2004

Chairperson Ramona Finnila called the meeting to order at 6:55 p.m. on January 15, 2004, in Carlsbad City Council Chambers, 1200 Carlsbad Village Drive, Carlsbad, California.

MEMBERS PRESENT
Chairperson Ramona Finnila
Vice-Chairperson Tom Ricotta
Bill Bradford
John Christensen
Chuck Collins
Robert Fusilier
Bob Gates
Tim Hutter
Ginna Reyes
Howard Williams

MEMBERS ABSENT
Hugh Lyttleton

Members present did represent a quorum.

COUNTY STAFF PRESENT

Floyd Best
Roger Griffiths
Olivier Brackett
Peter Drinkwater

ROLL CALL AND INTRODUCTIONS

Three new members to the PAAC were introduced and made brief comments on their backgrounds and interests.

Robert Fusilier, Supervisor Bill Horn's appointment. Local GA pilot based out of Palomar, cabinet maker, attorney and Real estate manager.

Chuck Collins, City of Carlsbad appointment. Local businessman who has had contact with Palomar Airport since 1970's. Mr Collins has had a business on the Airport since 1995.

John Christensen, City of Oceanside appointment. Volunteer at the Airport conducting tours. Mr Christensen has a Real property and property management background.

APPROVAL OF MINUTES

Minutes for the month of December were unavailable due to staff illness. Approval of December minutes will be held over until the February PAAC meeting.

PUBLIC COMMENT ON ITEMS NOT ON THE AGENDA

There were no public comments.

CITY COUNCIL REPORT

Ms. Finnila stated that the San Diego Marathon would be taking place in Carlsbad next Sunday Jan 18 and that this would affect some surface streets. Within the region as a whole, SANDAG will be going forward with a ballot item in November to increase sales tax by ½ cent and Proposition 42 Transportation Bill passed in 2002 will loose some 1.3 million in funding which will affect projects such as I-5/805 merge, expanded trolley services and Freeway 56.

PART 150 PRESENTATION BY URS

Mr. Fuller gave an overview of the FAA Part 150 process for the benefit of new committee members and stated that the Noise Exposure Maps (NEMS) would be completed in the next few weeks. Mr. Fuller outlined the current schedule as follows:

- Draft Part 150 Report to PAAC in May 2004
- Draft Part 150 Report to FAA in Jul 2004
- Draft Part 150 Report presented to public in Sept 2004
- FAA 180 day formal review ends Dec 2004
- If approved, final Part 150 Report in Federal Register Jul 2004

Mr. Hutter enquired about the amount of notice required for the next public meeting to present the NEMs and Ms. Reyes asked if such a meeting could be done in conjunction with a PAAC meeting. Mr. Fuller said that 30 day notice was required for the public meeting and that it was up to the PAAC to decide if they wished to combine a PAAC meeting with a public Part 150 presentation.

Ms. Reyes enquired about how the public could comment on the NEMs once they had been presented by URS. Mr. Fuller stated that all comments would be forwarded to FAA.

Mr Gates and Mr Fusilier enquired about how notification of the public meeting would be made and who would notify directly. Individual mailers would be sent out to those who participated in the PAR 2000 process, those who attended the initial Part 150 public meeting (some 45-50 people) as well as school districts and Libraries. Print ads in North County Times and Union Tribune as well as on Airports website and in Plane News magazine would also be taken out. Mr. Best stated that also the SW coalition of homeowners had been informed and Mr. Gates offered to get names of management companies he was aware of. Consideration was also given to doing a mass mailing to Airport neighbors, however, this would have an affect on the overall cost of the project. In response to a question form Mr. Earl of Carlsbad, Mr Hutter said that it was to the Airports advantage to have as many people involved in the process as possible so that the Part 150 process could be shown to have included everyone.

Mr. Clarence Magnuson of Oceanside asked what the lowest level depicted on the NEMs (60 CNEL) in everyday terms; Mr Fuller said that it was comparable to standing 50' from a 2-4 lane highway.

AIRPORT COMMUNITY RELATIONS ISSUES

Mr. Brackett reported monthly operations for December were 15,120, bringing the total number year to date 193,336. Monthly air carrier enplanements 4,519. Annual air carrier enplanements year to date 51,801. The monthly air carrier passenger throughput was 8,836. The local transient traffic breakdown for the month of December was 5498, itinerant, 12,786. IFR traffic 3,679 and VFR traffic 11,441.

Noise concerns for the month of December, 32 calls. The number year to date 448. Ratio of concerns to operations for the month of December, 1 call; 473 operations. The majority of calls during the month of October were south/west from the airport. 24 of the calls concerned jet operations, 5 for propeller operations, 2 for helicopters, and 1 unknown aircraft type.
3 concerns were for loud aircraft, 4 were for low flying aircraft and 1 was an over flight. 24 calls were for operations during Voluntary Noise Abatement Procedures hours. 8 of the concerns were for operations between 0700-1700. 24 concerns were for operations between 2200-0700. There were no concerns for operations between 1700-2200.

In response to a question from Mr. Collins, Mr. Brackett said that he would look into what percentage of alleged VNAP complaints were actual operations out of Palomar and what percentage were over flights.

AIRPORT LAYOUT PLAN

Mr. Drinkwater made a presentation of the new proposed Airport Layout Plan (ALP) which will go to FAA within 10 days. ALP is revised by airport operator and has to be approved by FAA when changes to airport layout are proposed. New ALP shows the proposed new Palomar Airport Center development, County operated general aviation parking on the north side of the airport, new vehicle parking as well as a conceptual layout of future terminal building on the south side of the airport. Once approved by FAA the ALP will be available for public viewing. Mr. Drinkwater reiterated that all proposed developments still required FAA Form 7460 approval to ensure that they do not affect the Airport's airspace. In response to a question from Mr. Ricotta, Mr. Drinkwater said he did not see the airport getting any physically bigger and that there would be limits to the amount of parking required in the future. Additionally, there are no conceptual plans as yet to consider future forms of air transportation such as tilt-rotor technology.

Mr. Fusilier asked if it was thought that the PAC development would go ahead as outlined on the ALP, Mr. Drinkwater replied that that was his understanding. IN response to a question by Mr. Hutter about avoiding development problems that had taken place at Gillespie Field here at Palomar concerning crew quarters and accommodation. It was stated that no such facilities were planned at Palomar or on the PAC leasehold. The definition of crew quarters remained allusive.

Ms. Reyes thanked Mr. Drinkwater for his presentation and for the work put into the design.

DIRECTOR'S REPORT

Mr. Drinkwater had nothing further to add following his ALP presentation.

STAFF REPORT

Mr. Best reported that Airport maintenance and Operations staff had continued to finish up some of the last elements of Twy Alpha project such as painting tie down spaces and ensuring stormwater compliance.

SET AGENDA FOR MEETING ON FEBRUARY 19, 2004

Ms. Finnila stated that it was time for the election of Chairperson and Vice-Chairperson.

MEMBER ANNOUNCEMENTS

There were no member announcements.

ADJOURN

Meeting was adjourned at 9:08pm

_____

Ramona Finnila, Chairperson

PALOMAR AIRPORT ADVISORY COMMITTEE
2198 Palomar Airport Road
Carlsbad, California 92008
Phone: (760) 431-4646

MINUTES

THURSDAY, FEBRUARY 19, 2004

Chairperson Ramona Finnila called the meeting to order at 7:08 p.m. on February 19, 2004, in the Carlsbad City Council Chambers, 1200 Carlsbad Village Drive, Carlsbad, California.

MEMBERS PRESENT	**MEMBERS ABSENT**
Chairperson Ramona Finnila	Bob Gates
Vice-Chairperson Tom Ricotta	
Bill Bradford	
John Christensen	
Chuck Collins	
Robert Fuselier	
Tim Hutter	
Hugh Lyttleton	
Ginna Reyes	
Howard Williams	

Members present did represent a quorum.

COUNTY STAFF PRESENT

Peter Drinkwater
Olivier Bracket
Roger Griffiths
Dee Dee Phillips

ROLL CALL AND INTRODUCTIONS

There were no introductions.

APPROVAL OF MINUTES

The minutes for the month of December 2003 and January 2004 were approved.

PUBLIC COMMENT ON ITEMS NOT ON THE AGENDA

There were no public comments.

CITY COUNCIL REPORT

Ms. Finnila addressed the topic of the total number of members that comprise the PAAC. She explained that due to the change in County Board Supervisors caused by redistricting, an error was made in the reporting of current PAAC members. Although PAAC is chartered to have eleven members, twelve have currently been appointed. Due to personal reasons Mr. Bradford has decided to resign, consequently bringing the member total back to eleven. Ms. Finnila stated that a resident of San Marcos would fill the next open seat.

The City of Carlsbad has been working towards a decision regarding Lots 29, 30 and 31. Once the process between both the City of Carlsbad and the County is complete, Ms. Finnila will report the decision to the PAAC.

The Carlsbad City Council met to workshop the goals and objectives for 2004. Among the several goals are: four parks, a golf course and four arterial roads.

PART 150 PRESENTATION BY URS

Mr. Fuller stated that the FAA has approved the user-defined profiles. Based upon this approval URS has moved forward and is completing the noise exposure maps which will be ready by the end of next week and available for review on the airports web page (www.sdcdpw.org/airports/) in roughly three weeks. There are three sets of exposure maps, one detailing existing conditions, and a five and ten year forecast. The approved forecast of aviation will be available for review on the airports website as well.

PAAC agreed that the second public meeting will take place on one of the following three dates:

1. Thursday, March 25th, 2004
2. Monday, March 29th, 2004
3. Thursday, April 1st, 2004

The meeting will be held at the City of Carlsbad, Faraday Center, 1635 Faraday Avenue, Carlsbad, CA. PAAC members preferred Thursday, March 29th, 2004, however the date is unofficial pending key personnel confirmation. Public notifications will be sent out next week, as well as a press release to all local newspapers. The format of the meeting is still to be decided.
Mr. Hutter suggested that future Carlsbad developments be included on maps that address impacted areas.

Supervisor Horn will be invited to attend the next public meeting.

AIRPORT COMMUNITY RELATIONS ISSUES

Mr. Brackett reported monthly operations for January were 17,228, bringing the total number year to date 17,228. Air carrier enplanements 3,931. Annual air carrier enplanements year to date 3,931. The local transient traffic breakdown for the month of January was 5,019, itinerant, 12,209. IFR traffic 4,292 and VFR traffic 12,936.

Noise concerns for the month of January, 56 calls. The number year to date 56. Ratio of concerns to operations for the month of January, 1 call;308 operations. The majority of calls during the month of January were south/west from the airport. 8 concerns were from the south/east. 37 of the calls concerned jet operations, 13 for propeller operations, 3 for helicopter operations and 3 unknown aircraft type. 16 of the concerns were for operations between 0700-1700. There was only 1 concern for operations between 1700-2200. There were 39 concerns for operations between 2200-0700.

Mr. Brackett wanted it noted that a large twin-engine aircraft was the cause of the 8 concerns from the south/east. The aircraft was executing a precautionary approach procedure due to mechanical difficulties.

A Carlsbad resident addressed the PAAC. He stated that he had concerns about helicopters to the south west of the Airport.

DIRECTOR'S REPORT

Airport administration has been in contact with Scenic Airlines for possible service. The airline is considering bringing in twin otters for service to Las Vegas.

Mr. Hutter stated concerns regarding the lack of a current master plan.
Mr. Drinkwater responded by stating that there are several projects currently being considered, but they will have to be completed by priority. The Airport Layout Plan is currently being utilized in the planning phase of these projects. The airport has immediate issues that need to be addressed. Moving forward with an update to the master plan would be beneficial, but the FAA has their own priority list for projects they are willing to fund.

Mr. Drinkwater stated that phase one of the SH&E report into potential future commercial operations is almost ready for review. SH & E will not be given the go ahead for phase two until all financing is secured and the scope of work can be adequately defined.

STAFF REPORT

A staff report was not presented.

ELECTIONS

The committee conducted the annual election for the position of Chairperson and Vice-Chairperson in accordance with the Advisory Committee Policies and Procedures contained the County of San Diego Board of Supervisors' Policy A-74. The committee elected Ms. Ramona Finnila to the position of Chairperson and Mr. Tim Hutter to the position of Vice-Chairperson.

SET AGENDA FOR MEETING ON MARCH 18, 2004

Meeting will be held at the City of Carlsbad Faraday Center, located at 1635 Faraday, Carlsbad, CA.

MEMBER ANNOUNCEMENTS

There were no member announcements.

ADJOURN

Meeting was adjourned at 8:35 p.m.

_____

Ramona Finnila, Chairperson

PALOMAR AIRPORT ADVISORY COMMITTEE
2198 Palomar Airport Road
Carlsbad, California 92008
Phone: (760) 431-4646

MINUTES

THURSDAY, MARCH 18, 2004

Chairperson Ramona Finnila called the meeting to order at 7:08 p.m. on March 18, 2004, in the City of Carlsbad Faraday Center, 1635 Faraday Avenue, Carlsbad, California.

MEMBERS PRESENT	**MEMBERS ABSENT**
Chairperson Ramona Finnila	Hugh Lyttleton
Co-Chairperson Tim Hutter	
John Christensen	
Chuck Collins	
Robert Fuselier	
Bob Gates	
Ginna Reyes	
Tom Ricotta	
Howard Williams	

Members present did represent a quorum.

COUNTY STAFF PRESENT

Peter Drinkwater
Floyd Best
Olivier Bracket
Roger Griffiths
Dee Dee Phillips

ROLL CALL AND INTRODUCTIONS

There were no introductions.

APPROVAL OF MINUTES

The minutes for the month of February 2004 were approved.

PUBLIC COMMENT ON ITEMS NOT ON THE AGENDA

There were no public comments.

CITY COUNCIL REPORT

PART 150 PRESENTATION BY URS

AIRPORT COMMUNITY RELATIONS ISSUES

Mr. Brackett reported monthly operations for February were 17,228, bringing the total number year to date 17,228. Air carrier enplanements 3,931. Annual air carrier enplanements year to date 3,931. The local transient traffic breakdown for the month of February was 5,019, itinerant, 12,209. IFR traffic 4,292 and VFR traffic 12,936.

Noise concerns for the month of February, 56 calls. The number year to date 56. Ratio of concerns to operations for the month of February, 1 call;308 operations. The majority of calls during the month of February were south/west from the airport. 8 concerns were from the south/east. 37 of the calls concerned jet operations, 13 for propeller operations, 3 for helicopter operations and 3 unknown aircraft type. 16 of the concerns were for operations between 0700-1700. There was only 1 concern for operations between 1700-2200. There were 39 concerns for operations between 2200-0700.

DIRECTOR'S REPORT

STAFF REPORT

A staff report was not presented.

SET AGENDA FOR MEETING ON APRIL 15, 2004

MEMBER ANNOUNCEMENTS

There were no member announcements.

ADJOURN

Meeting was adjourned at 9:15 p.m.

_____

Ramona Finnila, Chairperson

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Palomar Airport initiates noise study

HARD COPY ORDER THE NEWSPAPER FEATURING THIS STORY

PAT STOREY
Staff Writer

CARLSBAD ---- Residents will have a chance this month to sound off on McClellan-Palomar Airport's first noise study in more than a decade.

Airport authorities have scheduled a public meeting for March 27 to gather comments about their Federal Aviation Regulation Part 150 Noise Compatibility Study. The meeting will be from 7 to 9 p.m. at the City of Carlsbad's Faraday Center, 1635 Faraday Ave.

HARD COPY ORDER COPIES OF THIS PHOTOGRAPH

Waldo Nilo / Staff Photographer

Jets park at McClellan-Palomar Airport in Carlsbad on Monday.

Although no time is set for doing the studies, they are generally held periodically to foster better relations between the airport and surrounding community. The last one done at Palomar was in 1990.

Three public meetings will be held, the first of which will explain the Part 150 process.

"We will be doing a technical study that will determine the types of aircraft that use the airport, the numbers and times of day they are used, and based on that, a computer model map will be generated that will show noise contours, or noise exposure maps," said Floyd Best, airport manager.

The map will show how much noise businesses, employees and residents in the region are exposed to from aircraft using the airport, he said.

Best said officials at the public meeting will also explain that Palomar is part of the National Air Transportation System, is federally funded and operates under certain federal

requirements.

A second public meeting will be held after the noise exposure maps are done. The third will be held after the public has had a chance to review the draft study.

The study is expected to take 15 months, and once completed will go to the Federal Aviation Administration for review and approval.

The public is invited to attend the meeting with comments or concerns about the airport. Best said officials would try to respond as much as possible.

"Within the parameters of our operating requirements, we would look to see if there are ways to accommodate concerns from the public and still keep the airport functional," he said.

Palomar Airport is used mostly by private and business pilots. It has two commercial passenger carriers: America West Express, which offers two flights daily to Phoenix; and United Express, which offers six daily flights to Los Angeles.

Contact staff writer Pat Storey at (760) 901-4068 or pstorey@nctimes.com.

3/11/03

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PLANENEWS

Summer 2002

Palomar Noise Study To Begin

A unique process to ensure full public input regarding McClellan-Palomar Airport's aircraft-related noise impacts is now in place. A Part 150 Noise Compatibility Study for the Airport pursuant to receipt of an FAA-sponsored grant and will be underway this Fall.

While such a study typically runs 18 to 24, the County anticipated the need for full public input and conducted a "roundtable" effort to ensure a quality product to address community concerns.

The *PAR 2000* (Palomar Airport Roundtable) *Final Report* was approved for inclusion in the study by the County Board of Supervisors in late April. This action allows the airport to process recommendations that may be achievable within current County resources. One recommendation was to hire a full time Environmental Noise Specialist for McClellan-Palomar. Russ Couchman, a pilot with a degree in Aviation Management was appointed in November. Since the Board's action, Couchman met with various pilot groups to discuss aircraft operations-related recommendations from the report. He is also currently working on the *PAR 2000* recommendation to place a noise abatement sign depicting the Runway 24 Alpha departure at the approach end of Runway 24 clearly visible to departing pilots. The Alpha departure calls for a heading of 250 degrees off Runway 24 until ½ mile offshore.

Other Voluntary Noise Abatement Procedures request pilots to hold turns until reaching 800', and to maintain 2000' until descending to pattern altitude, using the north pattern when possible. Couchman interfaces with airport users, pilots, the general public, and businesses on the airport. He also maintains and operates a sophisticated flight tracking/noise monitoring system.

Feeling Secure With OB

Gates at County airports are locked for good reason. Access is restricted to facilities. Security is the purview of Olivier "OB" Brackett.

As Airport Security and Safety Coordinator, OB develops security plans for airports. Included is ensuring airport fences are properly installed and in good condition, that gates and locks work properly and preventing runway incursions. He also oversees private security officer contracts.

OB is no stranger to security or airports. He spent 20 years in the Marine Corps, where his first duty was armed protection of United States assets and his second was as an air traffic controller. But he thinks he's found a home at County airports.

"I love it. There's a real dedication among everybody to provide good customer service here," he said. "Having come from the Marine Corps where commitment is a big part of what we're about, the level of commitment at the County is right in step with what I'm used to."

Mailed

February 27, 2003

Dear (insert name here):

You have been identified as an interested party for the McClellan-Palomar Airport. This letter is to inform you that San Diego County has received authorization to proceed by the Federal Aviation Administration (FAA) to prepare a Federal Aviation Regulation Part 150 Noise Compatibility Study Update at McClellan-Palomar Airport. URS Corporation has been retained by the County to prepare the study. A Part 150 Study consists of two parts: the development of airport noise exposure maps and the creation of a noise compatibility program including public involvement. The study is anticipated to take approximately 15 months to complete. Upon completion, the study will be submitted to the FAA for review and approval, which will take up to six months.

The Part 150 Study will incorporate a public participation process. Three public meetings will be held to solicit input from the community. The first meeting, scheduled for March 27, 2003, will explain the Part 150 process. The second meeting will be held after completion of the noise exposure maps. The third meeting will be held after the public has had the opportunity to review the draft study. Advance notice of these meetings will be made available to the public through mailers and news releases to local newspapers.

The ultimate goal of the study is to facilitate the best possible relationship between the airport and the surrounding communities by minimizing airport noise, ensuring that existing compatible land uses will remain compatible, and by developing an ongoing process to implement program recommendations. Throughout the process, we will remain in contact to notify you of upcoming events or developments.

You can expect to receive a mailer containing more detailed information regarding the first public meeting soon. If you have any questions before then, please contact the Part 150 Noise Compatibility Study Project Manager, Jeff Fuller, at (619) 294-9400. Thank you for your time, and we look forward to working with you.

Sincerely,

Floyd Best
Manager, McClellan-Palomar Airport

FRONT SIDE:
McClellan-Palomar Airport logo

Public Meeting Planned for McClellan-Palomar Airport Noise Compatibility Study

McClellan-Palomar Airport invites you to attend the first of three public meetings scheduled to provide information on the Part 150 Airport Noise Compatibility Study and gather public input.

San Diego County has received authorization from the Federal Aviation Administration (FAA) to prepare a Federal Aviation Regulation Part 150 Noise Compatibility Study at McClellan-Palomar Airport. The goal of the study is to facilitate the best possible relationship between the airport and surrounding residential and business communities by reducing aviation noise impacts and achieving land use compatibility. The major components of the study include the development of noise exposure maps and the creation of a noise compatibility program including public involvement. At the end of this approximately 15-month process, study results will be presented to the FAA for review and approval.

Local community members are encouraged to attend a public meeting on March 27 from 7 to 9 p.m. at the City of Carlsbad's Faraday Center to learn more about the Part 150 Study and provide input.

Please join us for a meeting on March 27 from 7 to 9 p.m. at the City of Carlsbad's Faraday Center, 1635 Faraday Ave., Carlsbad, CA 92008.

BACK SIDE:
McClellan-Palomar Airport

Public Meeting

McClellan-Palomar Airport
2198 Palomar Airport Rd.
Carlsbad, CA 92008

- When: March 27, 7 to 9 p.m.
- Where: City of Carlsbad
  Faraday Center
  1635 Faraday Ave.,
  Carlsbad, CA 92008

Postage indicia

Attention: Pam Slater
County Board of Supervisor (Dist. 3)
County Administration Center
1600 Pacific Highway, Room 335
San Diego, CA 92101

Attention: Bill Horn
County Board of Supervisor (Dist. 5)
County Administration Center
1600 Pacific Highway, Room 335
San Diego, CA 92101

Attention: Jerome Stocks
Mayor
City of Encinitas
505 S. Vulcan Avenue
Encinitas, CA 92024-3633

Attention: Maggie Houlihan
Deputy Mayor
City of Encinitas
505 S. Vulcan Avenue
Encinitas, CA 92024-3633

Attention: Christy Guerin
Council Member
City of Encinitas
505 S. Vulcan Avenue
Encinitas, CA 92024-3633

Attention: James Bond
Council Member
City of Encinitas
505 S. Vulcan Avenue
Encinitas, CA 92024-3633

Attention: Dan Dalager
Council Member
City of Encinitas
505 S. Vulcan Avenue
Encinitas, CA 92024-3633

Attention: Pat Murphy
Planning & Building Director
City of Encinitas
505 S. Vulcan Avenue
Encinitas, CA 92024-3633

Attention: Vance Morris
Mayor
City of Vista
P.O. Box 1988
Vista, CA 92085

Attention: Paul Campo
Mayor Pro Tempore
City of Vista
P.O. Box 1988
Vista, CA 92085

Attention: Bob Campbell
City Council
City of Vista
P.O. Box 1988
Vista, CA 92085

Attention: Doris Calvo
Secretary to the City Council
City of Vista
P.O. Box 1988
Vista, CA 92085

Attention: Judy Ritter
City Council
City of Vista
P.O. Box 1988
Vista, CA 92085

Attention: Stephen Gronke
City Council
City of Vista
P.O. Box 1988
Vista, CA 92085

Attention: Robin Putnam
Director of Community Development
City of Vista
P.O. Box 1988
Vista, CA 92085

Attention: Claude A. “Bud” Lewis
Mayor
City of Carlsbad
1200 Carlsbad Village Drive
Carlsbad, CA 92008-7314

Attention: Ramona Finnila
Mayor Pro Tempore
City of Carlsbad
1200 Carlsbad Village Drive
Carlsbad, CA 92008-7314

Attention: Matt Hall
Council Member
City of Carlsbad
1200 Carlsbad Village Drive
Carlsbad, CA 92008-7314

Attention: Ann J. Kulchin
Council Member
City of Carlsbad
1200 Carlsbad Village Drive
Carlsbad, CA 92008-7314

Attention: Mark Packard
Council Member
City of Carlsbad
1200 Carlsbad Village Drive
Carlsbad, CA 92008-7314

Attention: Michael Holzmiller
Planning Director
City of Carlsbad
1635 Faraday Avenue
Carlsbad, CA 92008-7314

Attention: F.H. “Corky” Smith
Mayor
City of San Marcos
1 Civic Center Drive
San Marcos, CA 92069

Attention: Pia Harris
Vice-Mayor
City of San Marcos
1 Civic Center Drive
San Marcos, CA 92069

Attention: Hal Martin
Council Member
City of San Marcos
1 Civic Center Drive
San Marcos, CA 92069

Attention: Lee B. Thibadeau
Council Member
City of San Marcos
1 Civic Center Drive
San Marcos, CA 92069

Attention: Mike Preston
Council Member
City of San Marcos
1 Civic Center Drive
San Marcos, CA 92069

Attention: Jerry Backoff
Planning Director
City of San Marcos
1 Civic Center Drive
San Marcos, CA 92069

Attention: Terry Johnson
Mayor
City of Oceanside
300 N. Coast Highway
Oceanside, CA 92054

Attention: Esther C. Sanchez
Deputy Mayor
City of Oceanside
300 N. Coast Highway
Oceanside, CA 92054

Attention: Rocky Chavez
Council Member
City of Oceanside
300 N. Coast Highway
Oceanside, CA 92054

Attention: Jack Feller
Council Member
City of Oceanside
300 N. Coast Highway
Oceanside, CA 92054

Attention: Jan Sobel, CEO
Carlsbad Chamber of Commerce
Economic Enhancement Council
P.O. Box 1605
Carlsbad, CA 92008

Attention: Jerry Houser, Director
Palomar Community College – Aeronautics Program
1140 West Mission Road
San Marcos, CA 92069

Attention: Sallyanne Rice
Federal Aviation Administration
Air Traffic Management
10530 Burned Oak Lane
Escondido, CA 92026

Attention: Nan Valerio
San Diego Association of Governments
401 B Street, Suite 800
First Interstate Plaza
San Diego, CA 92101

Attention: George McJimsey
Pinnacle Aviation
2016 Palomar Airport Road, Suite D
Carlsbad, CA 92008

Attention: Leo Mantas, CEO
Vista Chamber of Commerce
127 Main Street
Vista, CA 92084

Attention: David Hydegger, CEO
Oceanside Chamber of Commerce
928 North Coast Hwy
Oceanside, CA 92054

Attention: Keith Holt
Manager of Airport Policy
Aircraft Owners and Pilots Association
421 Aviation Way
Frederick, MD 21701

Attention: Cheryl Betyar, President
San Diego Association of Realtors
CAR Region 24
P.O. Box 85586
San Diego, CA 92186-5586

Attention: Jim Wood
Council Member
City of Oceanside
300 N. Coast Highway
Oceanside, CA 92054

Attention: Ron Rouse
Carlsbad Chamber of Commerce
Economic Enhancement Council
P.O. Box 1605
Carlsbad, CA 92008

Attention: Cheryl Ernst
Superintendent
Carlsbad Unified School District
801 Pine Avenue
Carlsbad, CA 92008

Attention: Jim Braithwaite
Federal Aviation Administration
Air Traffic Management
9175 Kearny Villa Road
San Diego, CA 92126

Attention: Dick Dyer, Director
CALTRANS Department of Transportation
Aeronautics
P.O. Box 94273-0001
Sacramento, CA 95814-5605

Attention: Floyd Best
Airport Manager
McClellan Palomar Airport
2198 Palomar Airport Road
Carlsbad, CA 92008-4814

Attention: Sherry Hamilton, CEO
Encinitas Chamber of Commerce
138 Encinitas Blvd.
Encinitas, CA 92024

Attention: Bob Hall
Air Line Pilots Association
535 Herndon Parkway
Herndon, VA 20170

Attention: Sylvia Gustafson
San Diego County Airport Division
1960 Joe Crosson Drive
El Cajon, CA 92020

Attention: Shaun Monegan, Manager
Jet Source Charter, Inc.
2036 Palomar Airport Rd.
Carlsbad, CA 92008

Attention: Gerald Gilbert
Planning Director
City of Oceanside
300 N. Coast Highway
Oceanside, CA 92054

Attention: Mitch Mitchell
Carlsbad Chamber of Commerce
Economic Enhancement Council
P.O. Box 1605
Carlsbad, CA 92008

Attention: Jerome Pendzick
Federal Aviation Administration
Flight Standards District Office
8525 Gibbs Drive
San Diego, CA 92123

Attention: Linda O'Brien
Federal Aviation Administration
Socal Tracon
9175 Kearny Villa Road
San Diego, CA 92126

Attention: Tom Harnish
Barnstorming Adventures
6743 Montia Court
Carlsbad, CA 92009

Attention: Ted Anasis
Airport Planner
San Diego Regional Airport Authority
P.O. Box 82776
San Diego, CA 92138-2776

Attention: Juanita Hayes, CEO
San Marcos Chamber of Commerce
939 Grand Avenue
San Marcos, CA 92069

Attention: Jeff Gilley
Manager
National Business Aircraft Association
1200 18th Street, NW Suite 400
Washington D.C. 20036-2527

Attention: Brent J. Bohiken, President
San Diego County Commercial Association of Realtors - CAR Region 20
1250 6th Avenue, #211
San Diego, CA 92101

Attention: Martha Greenlaw, Manager
Magellan Aviation
2006 Palomar Airport Rd.
Carlsbad, CA 92008

Attention: Henry Schubach, Manager
Schubach Aviation
2006 Palomar Airport Rd.
Carlsbad, CA 92008

Attention: Ginna Reyes, Manager
Western Flight
2210 Palomar Airport Rd.
Carlsbad, CA 92008

Attention: Scott Walker, President
Elite Jet
5962 La Place Ct.
Carlsbad, CA 92008

Attention: Donald Graham
Station Manager
United Express (Skywest)
2198 Palomar Airport Rd.
Carlsbad, CA 92008

Attention: Ken Zirda
Flying Samaritan Group
5208 Sand Dollar Ct.
San Diego, CA 92130

Attention: Lason Brown
President
Exclusive Charter Services
3753 John Montgomery Drive
San Diego, CA 92123

Attention: Sandy Detherage
Air Traffic Controller, Palomar Airport
2200 Palomar Airport Road
Carlsbad, CA 92008

Attention: Treena Smith, Manager
America West Express, Commuter Terminal
2198 Palomar Airport Road
Carlsbad, CA 92008

Attention: Robert Wolter
Civic Helicopters
2192-H Palomar Airport Road
Carlsbad, CA 92008

Attention: Mel Holmes, President
Grey Eagle Aviation
2186 Palomar Airport Road
Carlsbad, CA 92008

Attention: George McJimsey, President
Pinnacle Aviation Academy
2016 Palomar Airport Road
Carlsbad, CA 92008

Attention: Theresa Terrel, Vice President
Orion Aviation Inc.
2138-B Palomar Airport Road
Carlsbad, CA 92008

Attention: Misty Pawlowski
Operations Supervisor
Eastridge Group
5650 El Camino Real, Suite 101
Carlsbad, CA 92008

Attention: Jack Williams
Aviation
6714 Bamboury Place
Carlsbad, CA 92009

Attention: Wayne Dauber
South Seas
P.O. Box 5035
Rancho Santa Fe, CA 92067

Attention: Greg Hein
Aviation Resource Group
29928 Lilac Road
Valley Center, CA 92082

Attention: Nelson Carrick
Palomar Fuels
2006 Palomar Airport Road
Carlsbad, CA 92008

Attention: Gordon Sieler, Resident
5082 Dassia Way
Oceanside, CA 92056-7400

Attention: Leslie Jantz, Resident
1207 Countrywood Lane
Vista, CA 92083

Attention: Ron Sea, Resident
6423 Merlin Drive
Carlsbad, CA 92009

Attention: Brad Lund, Resident
6708 Lonicera
Carlsbad, CA 92008

Attention: Tom Foster, Resident
2289 Bryant Drive
Carlsbad, CA 92008

Attention: Francis Bonner, Resident
6503 Friendly Place
Carlsbad, CA 92009

Attention: Robert Pat, Resident
2770 Sunny Creek Road
Carlsbad, CA 92008

Attention: Terence A. Davies, Resident
1021 Goldeneye View
Carlsbad, CA 92009

Attention: James R. Wright
Ocean Hills Country Club
6017 Piros Way
Oceanside, CA 92056-7266

Attention: Lee Baldridge, Resident
1139 Cabot Court
Vista, CA 92083

Attention: Principal
Aviara Oaks Elementary School
6900 Ambrosia Lane
Carlsbad, CA 92008

Attention: Principal
Aviara Oaks Middle School
6880 Ambrosia Lane
Carlsbad, CA 92008

Attention: Principal
Buena Vista Elementary School
1330 Buena Vista Way
Carlsbad, CA 92008

Attention: Principal
Carlsbad High School
3557 Monroe St.
Carlsbad, CA 92008

Attention: Superintendent
Carlsbad School District
801 Pine Avenue
Carlsbad, CA 92008

Attention: Superintendent
Carlsbad Unified School District
3556 Monroe Street
Carlsbad, CA 92008

Attention: Principal
Carrillo Elementary School
2875 Pointsettia Avenue
Carlsbad, CA 92008

Attention: Principal
Hope Elementary School
3010 Tamarack Avenue
Carlsbad, CA 92008

Attention: Principal
Jefferson Elementary School
3743 Jefferson Street
Carlsbad, CA 92008

Attention: Principal
Kelly Elementary School
4885 Kelly Drive
Carlsbad, CA 92008

Attention: Principal
La Costa Heights Elementary School
3035 Levante Street
Carlsbad, CA 92008

Attention: Principal
Magnolia Elementary School
1905 Magnolia Avenue
Carlsbad, CA 92008

Attention: Principal
Pacific Rim Elementary School
1100 Camino De Las Ondas
Carlsbad, CA 92008

Attention: Principal
Pine Elementary School
3333 Harding Street
Carlsbad, CA 92008

Attention: Principal
Valley Middle School
1645 Magnolia Avenue
Carlsbad, CA 92008

Attention: Principal
Capri Elementary School
941 Capri Road
Encinitas, CA 92024

Attention: Principal
Diegueno Junior High School
2150 Village Park Way
Encinitas, CA 92024

Attention: Superintendent
Encinitas School District
101 S. Rancho Santa Fe Road
Encinitas, CA 92024

Attention: Principal
Oak Crest Junior High School
675 Balour Drive
Encinitas, CA 92024

Attention: Principal
Pacific View Elementary School
608 3rd Street
Encinitas, CA 92024

Attention: Principal
Park Dale Lane Elementary School
2050 Park Dale Lane
Encinitas, CA 92024

Attention: Principal
Paul Ecke Central Elementary School
185 Union Street
Encinitas, CA 92024

Attention: Principal
San Dieguito High School
800 Santa Fe Drive
Encinitas, CA 92024

Attention: Superintendent
San Dieguito School District
710 Encinitas Blvd.
Encinitas, CA 92024

Attention: Principal
Sunset High School
684 Requeza Street
Encinitas, CA 92024

Attention: Principal
Alamosa Park Elementary School
5130 Alamosa Park Drive
Oceanside, CA 92057

Attention: Principal
Del Rio Elementary School
5207 E Parker Street
Oceanside, CA 92057

Attention: Principal
Ditmar Elementary School
1125 S Ditmar Street
Oceanside, CA 92057

Attention: Principal
E. G. Garrison Elementary School
333 Garrison Street
Oceanside, CA 92057

Attention: Principal
El Camino High School
400 Rancho Del Oro Drive
Oceanside, CA 92057

Attention: Principal
Empresa Elementary School
4850 Avenida Empressa
Oceanside, CA 92057

Attention: Principal
Futures Tutoring
2204 S El Camino Real, #310
Oceanside, CA 92057

Attention: Principal
Ivey Ranch Elementary School
4275 Via Rancho Road
Oceanside, CA 92057

Attention: Principal
Jefferson Middle School
823 Acacia Avenue
Oceanside, CA 92057

Attention: Principal
King Middle School
1290 Ivey Ranch Road
Oceanside, CA 92057

Attention: Principal
Lake Elementary School
4950 Lake Blvd.
Oceanside, CA 92057

Attention: Principal
Laurel Elementary School
1410 Laurel Street
Oceanside, CA 92057

Attention: Principal
Libby Elementary School
423 W. Redondo Drive
Oceanside, CA 92057

Attention: Principal
Lincoln Middle School
2000 California Street
Oceanside, CA 92057

Attention: Principal
Madison Middle School
4930 Lake Blvd.
Oceanside, CA 92057

Attention: Principal
Mary Fay Pendleton Elementary School
110 Marine Drive
Oceanside, CA 92057

Attention: Principal
Mc Auliffe Elementary School
3701 Kelton Drive
Oceanside, CA 92057

Attention: Principal
Mission Elementary School
2100 Mission Avenue
Oceanside, CA 92057

Attention: Principal
Mission Meadows Elementary School
5657 Spur Avenue
Oceanside, CA 92057

Attention: Principal
North Terrace Elementary School
940 Capistrano Drive
Oceanside, CA 92057

Attention: Principal
Ocean Shores High School
3131 Oceanside Blvd
Oceanside, CA 92057

Attention: Principal
Oceanside High School
100 S. Horne Street
Oceanside, CA 92057

Attention: Superintendent
Oceanside Unified School District
2111 Mission Avenue
Oceanside, CA 92057

Attention: Superintendent
Oceanside Unified School District
2070 Mission Avenue
Oceanside, CA 92057

Attention: Principal
Pacific View Charter School
3355 Mission Avenue, #139
Oceanside, CA 92057

Attention: Principal
Pacifica Elementary School
4991 Macario Drive
Oceanside, CA 92057

Attention: Principal
Palmquist Elementary School
1999 California Street
Oceanside, CA 92057

Attention: Principal
Reynolds Elementary School
4575 Douglas Drive
Oceanside, CA 92057

Attention: Principal
Roosevelt Middle School
850 Sagewood Drive
Oceanside, CA 92057

Attention: Principal
ROTC Oceanside High School
1st and Horne
Oceanside, CA 92057

Attention: Principal
San Luis Rey Elementary School
3535 Hacienda Drive
Oceanside, CA 92057

Attention: Principal
San Rafael Elementary School
1616 San Rafael Drive
Oceanside, CA 92057

Attention: Principal
Santa Margarita Elementary School
1 Carnes Road
Oceanside, CA 92057

Attention: Principal
South Oceanside Elementary School
1806 S. Horne Street
Oceanside, CA 92057

Attention: Principal
Stuart Mesa Elementary School
100 Yamanako Way
Oceanside, CA 92057

Attention: Principal
Discovery Elementary School
730 Applewilde Drive
San Marcos, CA 92069

Attention: Principal
Foothills High School
158 Cassou Road
San Marcos, CA 92069

Attention: Principal
Knob Hill Elementary School
1825 Knob Hill Road
San Marcos, CA 92069

Attention: Principal
Paloma Elementary School
660 Camino Magnifico
San Marcos, CA 92069

Attention: Principal
Richland Elementary School
910 Borden Road
San Marcos, CA 92069

Attention: Principal
San Marcos Academy
300 W. San Marcos Blvd.
San Marcos, CA 92069

Attention: Principal
San Marcos High School
1615 W. San Marcos Blvd.
San Marcos, CA 92069

Attention: Principal
San Marcos Middle School
650 W. Mission Road
San Marcos, CA 92069

Attention: Superintendent
San Marcos School District
1 Civic Center Drive, #300
San Marcos, CA 92069

Attention: Principal
Twin Oaks Elementary School
1 Cassou Road
San Marcos, CA 92069

Attention: Principal
Twin Oaks High School
158 Cassou Road
San Marcos, CA 92069

Attention: Principal
Woodland Park Middle School
1270 Rock Springs Road
San Marcos, CA 92069

Attention: Principal
Alta Vista Continuation High
1575 Bonair Road
Vista, CA 92084

Attention: Principal
Beaumont Elementary School
550 Beaumont Drive
Vista, CA 92084

Attention: Principal
Bobier Elementary School
220 W. Bobier Drive
Vista, CA 92084

Attention: Principal
Breeze Hill Elementary School
1111 Melrose Way
Vista, CA 92084

Attention: Principal
California Avenue School
215 W. California Avenue
Vista, CA 92084

Attention: Principal
Casita Elementary School
260 Cedar Road
Vista, CA 92084

Attention: Principal
Crestview Elementary School
510 Sunset Drive
Vista, CA 92084

Attention: Principal
Grapevine Elementary School
630 Grapevine Road
Vista, CA 92084

Attention: Principal
Guajome Park Academy
2000 N. Santa Fe Aveune
Vista, CA 92084

Attention: Principal
Lincoln Middle School
151 Escondido Avenue
Vista, CA 92084

Attention: Principal
Monte Vista Elementary School
1720 Monte Vista Drive
Vista, CA 92084

Attention: Principal
Olive Elementary School
836 Olive Avenue
Vista, CA 92084

Attention: Principal
Palomar High School
1401 Palomar Place
Vista, CA 92084

Attention: Principal
Rancho Buena Vista High School
1601 Longhorn Drive
Vista, CA 92084

Attention: Principal
Sierra Vista High School
325 E. Bobier Drive
Vista, CA 92084

Attention: Principal
Vista High School
1 Panther Way
Vista, CA 92084

Attention: Superintendent
Vista Unified School District
1234 Arcadia Avenue
Vista, CA 92084

Attention: Principal
Washington Middle School
740 Olive Avenue
Vista, CA 92084

Attention: Library Manager
Carlsbad City Library
1775 Dove Lane
Carlsbad, CA 92009

Attention: Library Manager
Carlsbad Library
3333 Harding St., #11
Carlsbad, CA 92009

Attention: Library Manager
Oceanside Mission Branch Library
3861 Mission Ave., #B1
Oceanside, CA 92054

Attention: Library Manager
Oceanside City Library
321 N. Nevada St.
Oceanside, CA 92054

Attention: Library Manager
Oceanside Public Library
330 N. Coast Highway
Oceanside, CA 92054

Attention: Library Manager
Encinitas Public Library
540 Cornish Drive
Encinitas, CA 92024

Attention: Library Manager
Vista Library
700 Eucalyptus Ave.
Vista, CA 92084

Federal Aviation Administration
San Diego Flight Services
Manager, Rose L. Sardisco
4302 Ponderosa Avenue
San Diego, CA 92123

Attention: Betsy Eskridge
Department of Transportation
Division of Aeronautics, MS #40
P.O. Box 942874
Sacramento, CA 94274-0001

Attention: Floyd Best
Palomar Airport Advisory Committee
2198 Palomar Airport Road, MS N137
Carlsbad, CA 92008-4814

Fact Sheet

McClellan-Palomar Airport

FAR Part 150 Noise Compatibility Study

McClellan-Palomar Airport opened in 1959 and is operated by the County of San Diego. The airport serves the general aviation community, corporate aircraft and commercial services. In 2002, the airport had 204,289 operations.

In 2000, the Palomar Airport Advisory Committee (PAAC) formed the Palomar Airport Roundtable 2000 (PAR 2000) to inform the public of the regulations that the airport operator must follow and seek public input for the upcoming Part 150 Noise Compatibility Study Update. The Airport completed its first Part 150 Study in 1990.

Under funding and authorization from the Federal Aviation Administration (FAA), the County of San Diego is updating its FAR Part 150 Noise Compatibility Study at McClellan-Palomar Airport. The County has retained URS Corporation to develop the study. The goal of the study is to facilitate the best possible relationship between the airport and surrounding residential communities by minimizing aviation noise impacts and maintaining land use compatibility.

NOISE COMPATIBLE LAND USES STUDY

What is a Part 150 Noise Compatibility Study?

Part 150 is a federal program using aviation-generated funds to achieve the greatest possible compatibility between an airport and the surrounding community. Objectives of the study are to:

- Determine existing aircraft activity and identify its effects on the community
- Assess aircraft flight tracks and airport facilities to determine if changes would result in reduced noise impacts on surrounding communities
- Maintain land use compatibility
- Establish procedures for implementing the noise compatibility program that results from the Study

The study will consider current land uses, runway operations and alignment, airport boundaries, streets, buildings, permitted development, aircraft noise levels and fixed wing and rotary-wing flight tracks routinely occurring over the cities of Carlsbad, Encinitas, Oceanside, Vista and San Marcos. The Part 150 Study is comprised of two components: the Noise Exposure Maps and the Noise Compatibility Program.

Continues Next Page

PHOTO BY WALDO NILO

For More Information...

Contact *Jeff Fuller, Project Manager* | **619.294.9400**

Noise Exposure Maps

The development of the noise exposure maps is the most technical component of the study. This process includes compiling existing flight and engine run-up operations data, types and times of operations, departure and arrival flight tracks and runway utilization. Local terrain features will be considered in the computation of a Community Noise Equivalent Level (CNEL) contours using the FAA's Integrated Noise Model (INM). Five and 10-year forecasts will be developed in addition to maps reflecting current noise exposure.

Computer-generated noise exposure maps will show the noise contours determined from the types of aircraft using the airport and the numbers of flights and times of day they are used.

Noise Compatibility Program

The Noise Compatibility Program (NCP) is a series of actions that, if approved by the FAA, the airport operator will implement to reduce the level of noise exposure. These actions consider both airport and aircraft operational measures that are intended to reduce noise directly.

Since the situation at McClellan-Palomar Airport is not identical to any other airport, it will require a unique combination of mitigation measures to achieve an acceptable resolution. A wide range of alternatives will be explored in order to determine the most feasible set of alternatives for implementation.

Modification of certain aircraft and airport operational procedures has the potential to reduce aircraft noise exposure on people, residential areas, schools, churches, and other noise-sensitive sites around the airport. Operational noise abatement alternatives may result in a shift in the shape of the noise contours. New or revised air traffic control procedures are subject to environmental assessment. This includes procedures that alter flight tracks or the specific altitudes utilized by aircraft. If the FAA makes a Finding of No Significant Impact (FONSI), then the proposed procedures may be implemented.

Public Involvement

The Part 150 Study will incorporate an extensive public participation process. The PAAC will serve as the citizen review committee for the study. In addition, three public meetings will be held to solicit input from the community. The first meeting will explain the Part 150 process. The second meeting will be held after completion of the noise exposure maps. The third meeting will be held after the public has had the opportunity to review the draft study. The public will be invited to provide written and oral comments on the draft study.

We Need Your Input

Public involvement is a crucial component of the Part 150 process to attain the ultimate goal of land use compatibility. A series of public meetings will be held to inform the public and gather their input on the Noise Compatibility Study, and public comments will be incorporated into the Study for presentation to the FAA.

For More Information...

Contact *Jeff Fuller, Project Manager* | **619.294.9400**

Presentation

McClellan-Palomar Airport Part 150 Noise Compatibility Study Update

Public Meeting - Kickoff
March 27, 2003

URS

Welcome

- Introductions
- Opening Remarks
- Presentation
- Questions and Answers

URS

Presentation

- Project Team
- Study Definition and Goals
- Project Approach
- Schedule

URS

Project Team

- URS Corporation
  - Deborah Murphy – Project Director
  - Jeff Fuller – Project Manager
  - Joe Czech – Project Engineer
- Katz & Associates
  - Patricia Tennyson
  - Kristina Alexanders

URS

URS Overview

- Planning, engineering, environmental, and applied sciences
- 25,000 people worldwide
- 2,500 people in California
- San Diego office since 1938

URS

Part 150 Noise Compatibility Studies

- Four Corners Regional Airport
- Key West International Airport
- Austin-Bergstrom International Airport
- Birmingham International Airport
- Brownsville/South Padre Island International Airport
- Manchester Airport
- Memphis International Airport
- Alliance Airport
- Spinks Airport
- Ft. Worth-Meacham International Airport
- Ft. Smith Regional Airport
- Alexandria International Airport

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What is a Part 150 Study?

A Part 150 Study is a voluntary effort by an airport to achieve the greatest possible compatibility between an airport and surrounding community.

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Why conduct a Part 150 Study?

- To help facilitate the best possible relationship between the airport and surrounding communities
- Update the previous study (13 years old)
- Utilize FAA funding to help implement a noise compatibility program

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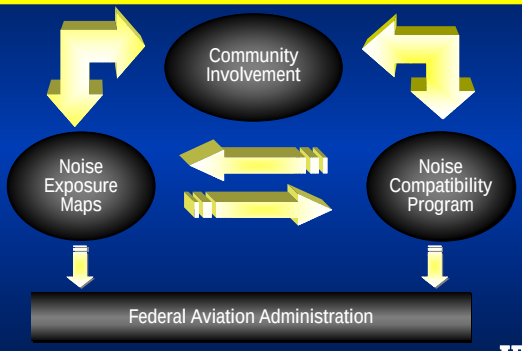
Part 150 Requirements



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Approach

- Develop Noise Exposure Maps
- Develop Noise Compatibility Program
- Involve the Community
- Prepare Draft Report

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Develop Noise Exposure Maps

- Compile Existing Flight and Run-Up Operations Data
- Develop 5- and 10-year Forecasts
- Input Local Terrain Features
- Compute CNEL Contours With INM V6.1

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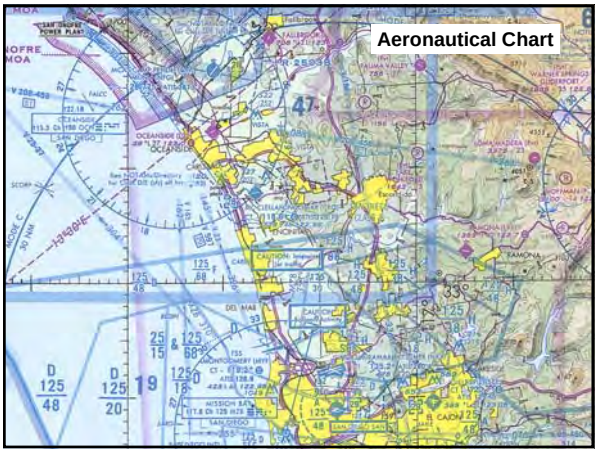
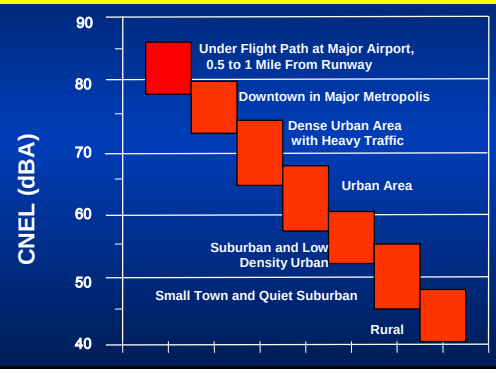


Community Noise Equivalent Level (CNEL)

- Accounts for noise from single specific aircraft types events
- Penalizes evening and nighttime events
- Utilizes annual average daily operations
- Specified by CCR Title 21

URS

CNEL Comparison



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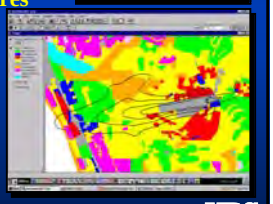
Develop Noise Compatibility Program

- Operational Noise Abatement Measures
  - Review Existing Procedures
  - Identify Alternatives
- Land Use Mitigation Measures
  - Corrective
  - Preventive
- Program Management Measures
- Consider PAR 2000 Recommendations and the 1990 Part 150 Study



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Community Involvement

- Public Meetings
  - Kick-Off
  - Present NEMs
  - Present Draft Study
- Monthly PAAC Meetings
  - www.co.san-diego.ca.us/dpw/airports Palomar Airport Advisory Committee
  - Third Thursday, 7 PM, Carlsbad City Hall
- Public Comment on Draft Part 150 Study

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Project Schedule

- FAA interim reviews
  - Activity Forecast
  - Noise Exposure Maps
- Approximately 15 Months to Submit Noise Compatibility Program to FAA
- 180 Day FAA Formal Review Period
  - Reviews and approves or disapproves each individual recommendation

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Frequently Asked Questions

- What can the Airport do to keep aircraft from flying over particular neighborhoods surrounding CRQ?
- Can flight track/path alterations be made?
- What type of operating restrictions can be imposed by the Airport?
- How is the Airport limited to control its operations?

URS

Thank You for Participating

Questions and Answers

URS

McClellan-Palomar Airport Part 150 Noise Compatibility Study Update

Public Meeting - Kickoff
March 27, 2003

URS

end

Summary of Meeting

MEETING SUMMARY

McClellan-Palomar Airport
FAR Part 150 Noise Compatibility Study Public Meeting #1

Date/Time:	Thursday, March 27, 2003, 7 to 9 p.m.
Location:	City of Carlsbad, Faraday Center, 1635 Faraday Avenue, Carlsbad, CA 92008
Facilitator:	Patricia Tennyson
Number of public attendees:	38

Participants:

Ramona Finnila, Mayor Pro Tem of Carlsbad and Palomar Airport Advisory Committee Member, Chair
Jeff Fuller, Project Manager, URS
Deborah Murphy, Project Director, URS
Joe Czech, Project Engineer, URS
Floyd Best, Airport Manager, McClellan-Palomar Airport
Patricia Tennyson, Katz & Associates
Kristina Alexanders, Katz & Associates
Kellie James, Katz & Associates

Introductions and Meeting Agenda Review

P. Tennyson started the meeting with introductions, a review of the agenda and a mention of the aerial map at the sign-in table. Meeting attendees were encouraged to place a pin in the map corresponding to where they live so the project team is aware of the reach of aviation noise impacts. Opening remarks were made by R. Finnila welcoming the public and providing a brief overview of the study.

Presentation

J. Fuller, D. Murphy and J. Czech provided details of the study with a PowerPoint presentation, answering questions afterward. Questions and comments were recorded by Katz & Associates for future consideration by the project team and are included below.

Questions and Answers

Who conducts the environmental assessment for this study?

> If they find it necessary, the Federal Aviation Administration (FAA) would conduct the environmental assessment for the study.

What weight will the PAR 2000 study hold in this study?

The findings of the PAR 2000 study will be fully taken into account and incorporated in the FAR Part 150 Study.

Is this study being conducted or initiated by the San Diego County Regional Airport Authority, or is it an independent study?

This is an independent study, unaffiliated with the Airport Authority.

In the end, who really will control the outcome of the study? Will it all depend on the FAA? This seems like a confusing process.

The FAA has the final say over what outcomes result from the Part 150 Study.

You mentioned that an airport cannot be restricted. Can you explain the recent John Wayne restriction?

We are not familiar with any restrictions placed on John Wayne Airport.

Is there a similar noise compatibility study or noise abatement process for trains?

Trains are federally regulated. We recommend that you contact North County Transit District (NCTD) for information. R. Finnila provided the address for the NCTD office in Carlsbad.

What land use changes are you going to recommend? What land use change can occur at this time?

That determination will be made once the study is complete. The study can make recommendations for non-designated land to be used in a compatible way, but the airport does not have the authority to implement these recommendations.

Are there any measures currently in place at the airport to measure noise? What measures will be taken as a result of the study and who is designated to control this?

The noise abatement officer position at McClellan-Palomar Airport is currently being reviewed. This person is tasked with measuring airport noise and responding to noise concerns. Due to understaffing, the position is currently not filled.

Has the current fleet mix at McClellan-Palomar Airport been analyzed? Are there any plans to increase the fleet mix?

The current fleet mix is being analyzed for the study. There are no plans to increase the fleet mix at this point.

Will any field testing of the noise at the airport be included in the model? Is there a base year run included?

No field testing will be conducted. Field testing is not required as part of the Part 150 process.

Is there current empirical data that you start with for the study? Please explain where you start.

Current empirical data including flight operations, fleet mix and noise models are used at the beginning of the study.

Have there been any studies on the effectiveness of a noise officer at an airport? Are results better when the position is filled, and do they decrease when it is not?

There are no known studies of this kind to our knowledge. It can be recommended that the position be filled, as it has been effective in the past.

When will the noise exposure maps and the draft study be presented to the public?

The noise exposure maps will be completed in four to five months if a quick response from the FAA is provided. The draft study will be complete in March 2004.

Is there another reference that you use in your study analysis aside from the advisory circular? From where are your study tasks derived?

The tasks for the study are derived from the FAR Part 150 Noise Compatibility checklist provided by the FAA.

The number of flights overhead is a large concern. Is there consideration for noise levels in the Ocean Hills area too, or just in Carlsbad?

If a high volume of flights are routinely heard overhead in your neighborhood, the study will capture that and will account for it. The study will consider areas that are affected by airport noise. These areas will be reflected in the noise exposure maps that will be produced.

What restrictions are currently imposed on the airport regarding flights and flight patterns? What are the time-of-day restrictions on flights?

Current flight pattern restrictions are established by the FAA for arrival and departure. There are no mandatory time restrictions on flights. There are, however, voluntary time restrictions that pilots are asked to follow. The FAA would have the authority to make these voluntary restrictions mandatory.

Is expansion a future possibility for the airport? Will larger, noisier airplanes be using it?

URS is in the data gathering phase and will examine any changes predicted to occur at the airport in the next 5 to 10 years, which could involve the use of noisier, but not necessarily larger, aircraft.

Are there any plans in the aviation industry to make aircraft quieter?

There are currently studies being done to investigate the effectiveness of new aircraft noise-reduction technology.

Was public comment helpful in choosing this airport for a study?

Yes. Public concerns over noise levels were considered when choosing this airport for a Part 150 Study. Residential development occurring over the last few years was also taken into consideration.

The most serious noise violators seem to be experimental aircrafts. Are there any sanctions placed on serial violators?

In order for these routine violators to be documented and sanctioned, a noise abatement officer needs to be present. Because of the lack of staffing, the airport manager often does not have the time or resources to research responses to every inquiry.

Will you be considering what criteria if any are used for over-burdening the runway? Slower planes seem to hold up faster planes in the flight pattern. This disrupts the flow of air traffic and causes it to not adhere to the regular air pattern over the ocean. What about the safety issues connected to this?

These flight patterns are controlled by the FAA, not the airport. Safety issues connected to flight patterns are not addressed in the Part 150 Study.

What are the flight regulations regarding sea level? What is the minimum altitude restriction above populated areas?

Within a three-mile radius of the airport, there are no minimum altitude restrictions, since aircraft are either departing or arriving within this area. Outside the three-mile radius surrounding the airport, the minimum altitude is 1,000 feet.

How many FAA representatives are involved in the fate of this study? Where are they located and what are their names?

David Kessler of the Hawthorne/Los Angeles office will be the FAA project lead. Once received by his office, the study findings will then be sent to FAA headquarters in Washington, D.C.

In the last four or five years, there has been an increase in air traffic during weekends. More homes are going up that will be affected by air traffic noise. What considerations are being made for these new residential areas?

Many scenarios will be studied during this process to find the best possible land use compatibility to accommodate existing and future aircraft noise, taking into account homes that will soon be built in the area.

Should citizens still call in their concerns regarding noise in the absence of a designated noise officer?

Yes, concerns should still be called in to the airport, even in the absence of a noise officer. All concerns are recorded and documented.

The touch and go landings of the flight school are noisy and bothersome. Are there any restrictions on the flight school?

There are no special restrictions on the flight school.

How many proposals resulting from the 1990 Part 150 Study were accepted by the FAA? Were these accepted proposals restrictive in nature? Do you consider that to be an indicator of how successful you expect this study to be?

There were 18 Noise Abatement Measures and 6 Noise Mitigation Measures proposed as a result of the 1990 study. Nine of the 18 Noise Abatement Measures were approved by the FAA, and five of the approved measures were voluntary. The six Noise Mitigation Measures were also approved. Regardless of what was approved in the past by the FAA, we expect a successful study. Congress has passed legislation since the last Part 150 Study that has additional requirements.

I hear flights taking off occasionally between 4 and 6 a.m. Is there someone at the airport monitoring these flights occurring at odd times of the day?

Security is present at the airport 24 hours a day, seven days a week.

Will there be a conflict with the airport if a golf course is built? Is that land use considered "compatible"?

The presence of a golf course near the airport would be considered compatible in regards to noise, as opposed to homes.

Why aren't there stricter security measures that deal with noise problems?

Noise issues are evaluated independent of security issues. They are not directly related.

New houses have been approved by Cabrillo Ranch. Isn't the City concerned for the future residents of this area?

There is a disclosure form sent to all homeowners within the Noise Impact Notification Area with their deed that must be signed. New homeowners are aware of the presence of the airport.

Can it be recommended to the FAA and incorporated into the study that smaller planes should not turn upon departure? Can the benefits of this change be quantified to the FAA? It would be a good way to reduce noise over residential neighborhoods.

Considerations from the public such as this can be considered for input into the Study for submittal to the FAA. These are the types of public comments that are

beneficial to the project team, allowing them to consider multiple concerns and possible solutions.

Are peaks and valleys in flight traffic taken into account in the noise model? There is much transient air traffic at the airport that causes fluctuations in flight traffic.

The model looks at the average flight traffic in one day, and considers time of day as well. When decibels are averaged, it's typical that the higher decibel levels of louder aircrafts are reflected.

Comments

There doesn't appear to be any accountability for low-flying aircraft.

Noise problems have improved over the last few months. The noise officer was helpful.

The airport noise reporting form is a good way to collect information for the study. The form can be found at www.sdcdpw.org/noise/

Jet departures should be included in the data collection for the study.

The City of Carlsbad should lobby to have the noise officer position filled. The lack of staffing for this position affects the citizens of Carlsbad.

Part of the noise problem is that planes take off and go in different directions.

Traffic should head out over the ocean and there should be two runways.

Please consider the heavy traffic of flight departures. Homeowners on the north side of the airport and Calavera Hill are affected by the frequent noise of the jet engines from these departures.

Nothing has been resolved in reference to noise control. We have gone nowhere and nothing has been accomplished.

There is a disconnect between the City and those who conduct these noise studies. They seem to be operating at cross-purposes. All the approved development makes it difficult for these studies to be successful.

The airport does not bother me. I use it frequently and hope that it is expanded.

Conclusion

P. Tennyson concluded the meeting by informing attendees that project representatives would be available to discuss further questions for a short while until 9 p.m. She also urged those present to take public comment forms with them to fill out and send in, should they have more questions in the future. It was announced that all present would receive information regarding the next public meeting, tentatively scheduled for August 2003.

Written Comments

IF YOU ARE INTERESTED AND WANT YOUR VOICE HEARD PLEASE FILL OUT THIS FORM AND RETURN IT TO THE ADRESSEE BELOW.

JOAN NICKLIN

Question/Comment Form

McClellan-Palomar Airport Part 150 Airport Noise Compatibility Study

We want to hear from you. Please record your question or comment and include your name, mailing address, e-mail address and telephone number:

Date: May 9 2003

Name: Frederic J. Koolhof

Address: 3425 Don Carlos Dr., Carlsbad 92008

E-mail Address: none

Telephone: (760) 438-3364

Question/Comment:

Noisy cars and motorbikes get tickets and a fine. Some planes are VERY NOISY, and other ones you can hardly hear.
Is there not a regulation as to the noise-level a plane engine makes? I mean also on the ground and on take-off.

Please send to:

Jeff Fuller
URS
1615 Murray Canyon Road, Suite 1000
San Diego, CA 92108
Tel: 619-294-9400
Fax: 619-293-7920
jeff_fuller@urscorp.com

IF YOU ARE INTERESTED AND WANT YOUR VOICE HEARD PLEASE FILL OUT THIS FORM AND RETURN IT TO THE ADRESSEE BELOW.

JOAN NICKLIN

Question/Comment Form

McClellan-Palomar Airport Part 150 Airport Noise Compatibility Study

We want to hear from you. Please record your question or comment and include your name, mailing address, e-mail address and telephone number:

Date: 5/8/03

Name: MARGUERITE F. SCHENK

Address: 3467 DON ORTEGA DR.

E-mail Address: FPSCHENK@MAILSTATION.COM

Telephone: 760/438-4054

Question/Comment:

We have no complaints in regard to the airport. Have lived in Rancho Carlsbad about 18 years and were aware of the airport when we moved here. After all - the airport was here first!

Please send to:

Jeff Fuller
URS
1615 Murray Canyon Road, Suite 1000
San Diego, CA 92108
Tel: 619-294-9400
Fax: 619-293-7920
jeff_fuller@urscorp.com

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JOAN NICKLIN

Question/Comment Form

McClellan-Palomar Airport Part 150 Airport Noise Compatibility Study

We want to hear from you. Please record your question or comment and include your name, mailing address, e-mail address and telephone number:

Date: 4-8-03

Name: Anita Gruneisen

Address: 5447 Don Luis Drive

E-mail Address:

Telephone: 760) 929-0331

Question/Comment:

I would like to see larger planes land here - The noise would be worth the convenience of having perhaps American Airlines or other long distance carriers.

Please send to:

Jeff Fuller
URS
1615 Murray Canyon Road, Suite 1000
San Diego, CA 92108
Tel: 619-294-9400
Fax: 619-293-7920
jeff_fuller@urscorp.com

IF YOU ARE INTE[redacted]STED AND WANT YOUR VOICE H[redacted]RD PLEASE FILL OUT THIS FORM AND RETURN IT TO THE ADRESSEE BELOW.

JOAN NICKLIN

Question/Comment Form

McClellan-Palomar Airport Part 150 Airport Noise Compatibility Study

We want to hear from you. Please record your question or comment and include your name, mailing address, e-mail address and telephone number:

Date: 5/8/03

Name: Rita Fanning

Address: 3301 Don Diablo Dr.

E-mail Address: RJF1924@CS.COM

Telephone: 760 431 4712

Question/Comment:

I live @ Rancho Carlsbad. I have lived here for more than 16 years. I have not been aware of any disturbance in any way from the airport. At night, I sleep right next to an open window. No problems. Daytime – no problems

Please send to:

Jeff Fuller
URS
1615 Murray Canyon Road, Suite 1000
San Diego, CA 92108
Tel: 619-294-9400
Fax: 619-293-7920
jeff_fuller@urscorp.com

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JOAN NICKLIN

Question/Comment Form

McClellan-Palomar Airport Part 150 Airport Noise Compatibility Study

We want to hear from you. Please record your question or comment and include your name, mailing address, e-mail address and telephone number:

Date: 5-7-03

Name: John/Pam Barnett

Address: 3420 Don Jose Dr. C.B. 92008

E-mail Address: JohnBarnett@Earthlink.net

Telephone: 760-438-0932

Question/Comment:

We live in Rancho Carlsbad. I do not mind the little noise we hear from time to time. I wouldn't like to see the A/P get any larger or larger aircraft coming in or out. At the present time it isn't bad. I enjoy hearing a plane now & then but no more than now.

"LEAVE THE AIR PORT AS IS"
NO MORE EXPANSION

Please send to:

Jeff Fuller
URS
1615 Murray Canyon Road, Suite 1000
San Diego, CA 92108
Tel: 619-294-9400
Fax: 619-293-7920
jeff_fuller@urscorp.com

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JOAN NICKLIN

Question/Comment Form

McClellan-Palomar Airport Part 150 Airport Noise Compatibility Study

We want to hear from you. Please record your question or comment and include your name, mailing address, e-mail address and telephone number:

Date: 5-12-03

Name: W. G. ARNOLD

Address: 3432 DON ORTEGA DR

E-mail Address:

Telephone: 760-930-9659

Question/Comment:

THERE SEEMS TO BE MORE FLIGHTS THAN EVER.
WE'VE LIVED HERE 4½ YEARS.
ALL FLIGHTS SHOULD BE REQUIRED TO ADHERE TO THE F.A.A. FLIGHT PATHS FOR THIS AIRPORT

Please send to:

Jeff Fuller
URS
1615 Murray Canyon Road, Suite 1000
San Diego, CA 92108
Tel: 619-294-9400
Fax: 619-293-7920
jeff_fuller@urscorp.com

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JOAN NICKLIN

Question/Comment Form

McClellan-Palomar Airport Part 150 Airport Noise Compatibility Study

We want to hear from you. Please record your question or comment and include your name, mailing address, e-mail address and telephone number:

Date: May 5, 2003

Name: KAREN S. VOLZ

Address: 5202 Don Valdez Dr. Carlsbad, Calif. 92008

E-mail Address:

Telephone: (760) 431-0214

Question/Comment:

Our lives are endangered night and day by low-flying planes and helicopters in violation of take off + landing procedures. They are told to take off + land over the ocean + uninhabited areas. Instead they are flying over our senior park. I attended meetings with the city + was shocked to learn that the pilots + owners of planes using this airport do not intend to correct their practices. Instead they want more conveniences for themselves without regard for our safety. NOTE the recent increase in crashes + emergency landings of small planes + helicopters. Our safety should be paramount.

Please send to:

Jeff Fuller
URS
1615 Murray Canyon Road, Suite 1000
San Diego, CA 92108
Tel: 619-294-9400
Fax: 619-293-7920
jeff_fuller@urscorp.com

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JOAN NICKLIN

Question/Comment Form

McClellan-Palomar Airport Part 150 Airport Noise Compatibility Study

We want to hear from you. Please record your question or comment and include your name, mailing address, e-mail address and telephone number:

Date: 5/18/03

Name: Joyce Davenport

Address: 3547 Don Juan Dr.

E-mail Address: JsJoss@adelphia.net

Telephone: 760-931-1635

Question/Comment:

When it was cold and my windows were closed, I was never bothered by the planes flying overhead.
Now that it's warm and I sit out on my deck the noise of the small planes are really annoying, particularly on Sat. + Sunday.

Please send to:

Jeff Fuller
URS
1615 Murray Canyon Road, Suite 1000
San Diego, CA 92108
Tel: 619-294-9400
Fax: 619-293-7920
jeff_fuller@urscorp.com

IF YOU ARE INTE[redacted]STED AND WANT YOUR VOICE H[redacted]RD PLEASE FILL OUT THIS FORM AND RETURN IT TO THE ADRESSEE BELOW.

JOAN NICKLIN

Question/Comment Form

McClellan-Palomar Airport Part 150 Airport Noise Compatibility Study

We want to hear from you. Please record your question or comment and include your name, mailing address, e-mail address and telephone number:

Date: 5-8-03

Name: Wm H. + Susan Wilson

Address: 3472 Don Juan Dr, Carlsbad, CA 92008

E-mail Address:

Telephone:

Question/Comment:

Helicopters fly too low over Rancho Carlsbad Home Park. Jets should also gain altitude west of the park before proceeding east. Private propeller planes should also gain altitude before "buzzing" this area.

Please send to:

Jeff Fuller
URS
1615 Murray Canyon Road, Suite 1000
San Diego, CA 92108
Tel: 619-294-9400
Fax: 619-293-7920
jeff_fuller@urscorp.com

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JOAN NICKLIN

Question/Comment Form

McClellan-Palomar Airport Part 150 Airport Noise Compatibility Study

We want to hear from you. Please record your question or comment and include your name, mailing address, e-mail address and telephone number:

Date: 5/6/03

Name: Robert P. Landes

Address: 5211 Don Ricardo, Carlsbad, Ca. 92008

E-mail Address: R1100RRLL@AOL.com

Telephone: 760-476-3431

Question/Comment:

I feel that the airport noise is managed very well. I live one mile from the runway. The light plane traffic flys over our house when in the traffic pattern and the noise is subdued to the point that it is not at all objectionable. The larger aircraft, including the jet aircraft don't fly this pattern but fly straight in to the runway from the Escondido area. ~~As~~ They descend to the runway they are at vastly reduced power and not over a populated area. The departures do make more noise, but are climbing over an industrial area, then over hegoland and the ocean. The airport is a valuable and necessary asset to our community and it's (our) economy. The airport management, I'm sure, is doing every thing to reduce noise contamination and we should cooperate and cease complaining.

Please send to:

Jeff Fuller
URS
1615 Murray Canyon Road, Suite 1000
San Diego, CA 92108
Tel: 619-294-9400
Fax: 619-293-7920
jeff_fuller@urscorp.com

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JOAN NICKLIN

Question/Comment Form

McClellan-Palomar Airport Part 150 Airport Noise Compatibility Study

We want to hear from you. Please record your question or comment and include your name, mailing address, e-mail address and telephone number:

Date: 5-3-03

Name: GORDON Duffin

Address: 5128 Don Rodolfo Dr.

E-mail Address: TheDuffins@Adelphia.Net

Telephone: 760-804-9629

Question/Comment:

Noise — No Problem
Location — Just Fine
Runways — Limit to Just ONE
Curfews — Present Schedule OK
Convience — Quite Desirable

Owners of
New Houses under Take-Off pattern
were well aware of Conditions before
they Purchased Their Homes.

Please send to:

Jeff Fuller
URS
1615 Murray Canyon Road, Suite 1000
San Diego, CA 92108
Tel: 619-294-9400
Fax: 619-293-7920
jeff_fuller@urscorp.com

IF YOU ARE INT[redacted]STED AND WANT YOUR VOICE [redacted]ARD PLEASE FILL OUT THIS FORM AND RETURN IT TO THE ADRESSEE BELOW.

JOAN NICKLIN

Question/Comment Form

McClellan-Palomar Airport Part 150 Airport Noise Compatibility Study

We want to hear from you. Please record your question or comment and include your name, mailing address, e-mail address and telephone number:

Date: 21 May 03

Name:

Address: B. BUTLER
3467 DON LORENZO
CARLSBAD, CA 92009

E-mail Address:

Telephone: (760) 931-1835

Question/Comment:

As it is now - there is not a problem. If there is Airport expansion it might be a different story - then we might be opposed.

Please send to:

Jeff Fuller
URS
1615 Murray Canyon Road, Suite 1000
San Diego, CA 92108
Tel: 619-294-9400
Fax: 619-293-7920
jeff_fuller@urscorp.com

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JOAN NICKLIN

Question/Comment Form

McClellan-Palomar Airport Part 150 Airport Noise Compatibility Study

We want to hear from you. Please record your question or comment and include your name, mailing address, e-mail address and telephone number:

Date: 5-21-03

Name: DIANE WARNER

Address: 3484 DON ALBERTO DR.

E-mail Address:

Telephone: (760) 438-2132

Question/Comment:

I'VE LIVED NEAR THE AIRPORT FOR 18 YRS. THE NOISE PROBLEMS HAVE CHANGED BOTH TO THE GOOD AND BAD OVER THIS TIME. I HAVE FLOWN IN AND OUT OF PALOMAR IN COMMERCIAL AND PRIVATE PLANES. MY CONSERNS ARE - (1) LOW FLYING AIRCRAFT (MOSTLY HELICOPTERS) (2) PRIVATE AIRCRAFT NOT FOLLOWING RULES AND NOT FILEING FLIGHT PLANS. (3) THE INCREASE IN LATE NIGHT FLIGHTS. How good is SECURITY?

☆ WHEN A LOW FLYING AIRCRAFT (MOSTLY AT NIGHT) CAUSES MY HOME TO SHAKE IT'S VERY UNNERVING.

Please send to:

Jeff Fuller
URS
1615 Murray Canyon Road, Suite 1000
San Diego, CA 92108
Tel: 619-294-9400
Fax: 619-293-7920
jeff_fuller@urscorp.com

related documents will [illegible]

Question/Comment Form

McClellan-Palomar Airport Part 150 Airport Noise Compatibility Study

We want to hear from you. Please record your question or comment and include your name, mailing address, e-mail address and telephone number:

Date: June 1/03

Name: JOE CORWIN

Address: 3429 DON ALBERTO DR

E-mail Address:

Telephone: 760 929 1246

Question/Comment:

WE ARE DIRECTLY UNDER THE LANDING PATTERN
WE NEW THIS WHEN WE MOVED IN. NO PROBLEM.
BUT, LARGER AIRCRAFT IS NOT ACCEPTABLE.

NOT ONLY DANGEROUS BUT PROPERTY VALUE
WILL DRUMET.

Please send to:

Jeff Fuller
URS
1615 Murray Canyon Road, Suite 1000
San Diego, CA 92108
Tel: 619-294-9400
Fax: 619-293-7920
jeff_fuller@urscorp.com

related documents are [illegible]

Question/Comment Form

McClellan-Palomar Airport Part 150 Airport Noise Compatibility Study

We want to hear from you. Please record your question or comment and include your name, mailing address, e-mail address and telephone number:

Date: 5-1-03

Name: MARY FISCHER

Address: 5228 DON VALDEZ Carlsbad 92008

E-mail Address:

Telephone: 760 431 8120

Question/Comment:

I believe the airport is an asset to the city, as a volunteer CUB I deal with tourists and hear their raves re: this service

Most homes are occupied by owners moving in after airport built the noise necessary cannot be a surprise

I lived in Point Loma some years

Please send to:

Jeff Fuller
URS
1615 Murray Canyon Road, Suite 1000
San Diego, CA 92108
Tel: 619-294-9400
Fax: 619-293-7920
jeff_fuller@urscorp.com

related documents are [illegible]

Question/Comment Form

McClellan-Palomar Airport Part 150 Airport Noise Compatibility Study

We want to hear from you. Please record your question or comment and include your name, mailing address, e-mail address and telephone number:

Date: 4/23/03

Name: NANCY LEE RICKERT

Address: 5336 DON RICARDO DR - CARLSBAD CA 92008

E-mail Address:

Telephone: (760) 931-8124

Question/Comment:

I am from Each Each (Ohio Pennsylvania). It is so nice to go to the Palomar Airport & take the shuttle to LAX where I can get a flight straight thru.

Please send to:

Jeff Fuller
URS
1615 Murray Canyon Road, Suite 1000
San Diego, CA 92108
Tel: 619-294-9400
Fax: 619-293-7920
jeff_fuller@urscorp.com

IF YOU ARE INTE[redacted]STED AND WANT YOUR VOICE [redacted]ARD PLEASE FILL OUT THIS FORM AND RETURN IT TO THE ADRESSEE BELOW.

JOAN NICKLIN

Question/Comment Form

McClellan-Palomar Airport Part 150 Airport Noise Compatibility Study

We want to hear from you. Please record your question or comment and include your name, mailing address, e-mail address and telephone number:

Date: 5-1-03

Name: GARRY FOSTER

Address: 3553 DON CARLOS DR. CARLSBAD 92008

E-mail Address:

Telephone: (760) 929-8790

Question/Comment:

What are the current plans for airport expansion? Is this site likely to be proposed or chosen for the future relocation of San Diego Airport? Increased airport noise is not compatible with the present and planned residential construction in this area. How much weight will input from current homeowners carry?

Please send to:

Jeff Fuller
URS
1615 Murray Canyon Road, Suite 1000
San Diego, CA 92108
Tel: 619-294-9400
Fax: 619-293-7920
jeff_fuller@urscorp.com

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JOAN NICKLIN

Question/Comment Form

McClellan-Palomar Airport Part 150 Airport Noise Compatibility Study

We want to hear from you. Please record your question or comment and include your name, mailing address, e-mail address and telephone number:

Date: 5/03/03

Name: JOYCE F BOYLE

Address: 3441 DON ORTEGA DR CARLSBAD 92008

E-mail Address: Boyle1664@aol.com

Telephone: (760)918-1613

Question/Comment:

BEING AWAKENED ON SAT, MAY 3, 2003 AT 2:56 A.M + AGAIN AT 3:27 A.M (PER DIGITAL CLOCK) BY LOUD JET PLANES MAKES A MOCKERY OF THE "VOLUNTARY AIRPORT FLITE HOUR RESTRICTION". NON-MEDICAL/MERCY LOW FLYING HELICOPTERS (CORPORATE OWNED?) CONSISTENTLY FLY MUCH LOWER THAN 1,000 FT, RESULTING IN SHAKING WINDOW PANES + MIRRORED CLOSET DOORS. THE SAFETY OF RESIDENTS SHOULD DICTATE A MANDATORY FLITE PATH + HOURS OF OPERATION WITH STRICT PENALTIES FOR VIOLATORS - INCLUDING THE 1,000 FT. LIMIT OVER RESIDENTIAL AREAS FOR HELICOPTERS

Please send to:

Jeff Fuller
URS
1615 Murray Canyon Road, Suite 1000
San Diego, CA 92108
Tel: 619-294-9400
Fax: 619-293-7920
jeff_fuller@urscorp.com

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JOAN NICKLIN

Question/Comment Form

McClellan-Palomar Airport Part 150 Airport Noise Compatibility Study

We want to hear from you. Please record your question or comment and include your name, mailing address, e-mail address and telephone number:

Date: 05/01/03

Name: REED HARRIS

Address: 5268 DON VALDEZ DR CARLSBAD

E-mail Address:

Telephone: 760-431-0183

Question/Comment:

I AM A RESIDENT CLOSE TO MCCLELLAN AIRPORT. I AM CONCERNED WITH ANY EXPANSION - WE HAVE A NOISE PROBLEM NOW WITHOUT ANY INCREASE IN ACTIVITIES. ALSO IT COULD INFLUENCE THE PROPERTY VALUES OF OUR HOMES.

Please send to:

Jeff Fuller
URS
1615 Murray Canyon Road, Suite 1000
San Diego, CA 92108
Tel: 619-294-9400
Fax: 619-293-7920
jeff_fuller@urscorp.com

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JOAN NICKLIN

Question/Comment Form

McClellan-Palomar Airport Part 150 Airport Noise Compatibility Study

We want to hear from you. Please record your question or comment and include your name, mailing address, e-mail address and telephone number:

Date: 5/1/03

Name: DONALD L. WILLSON

Address: 3427 DON ALVAREZ DR. CARLSBAD, CA. 92008

E-mail Address:

Telephone: 760-431-8116

Question/Comment:

AS IT IS, THE NOISE FROM McCLELLAN-PALOMAR AIRPORT DOES NOT BOTHER US. (4)

Please send to:

Jeff Fuller
URS
1615 Murray Canyon Road, Suite 1000
San Diego, CA 92108
Tel: 619-294-9400
Fax: 619-293-7920
jeff_fuller@urscorp.com

related documents are posted on the [illegible]

Question/Comment Form

McClellan-Palomar Airport Part 150 Airport Noise Compatibility Study

We want to hear from you. Please record your question or comment and include your name, mailing address, e-mail address and telephone number:

Date: April 27, 2003

Name: Joe H. & Adèle F. Glasson

Address: 3461 Don Carlos, Carlsbad 92008

E-mail Address: —

Telephone: (760) 476-0084

Question/Comment:

At this time the noise from small airplanes does NOT disturb us. We can hear them, yes, but the sounds are not too loud.

Please send to:

Jeff Fuller
URS
1615 Murray Canyon Road, Suite 1000
San Diego, CA 92108
Tel: 619-294-9400
Fax: 619-293-7920
jeff_fuller@urscorp.com

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JOAN NICKLIN

Question/Comment Form

McClellan-Palomar Airport Part 150 Airport Noise Compatibility Study

We want to hear from you. Please record your question or comment and include your name, mailing address, e-mail address and telephone number:

Date: 4/30/03

Name: W.A. & JEAN HEFRICH

Address: 5376 Don Ricardo

E-mail Address: WAHJEH@AOL.COM

Telephone: 760 931 1519

Question/Comment:

Current noise levels are tolerable, primarily because of cessation of air traffic after 9:00 PM or before 8:00 AM.

Just last week a plane came in (or out) at 2:20 A.M. ??

Any increase in daytime flights would be undesirable

Please send to:

Jeff Fuller
URS
1615 Murray Canyon Road, Suite 1000
San Diego, CA 92108
Tel: 619-294-9400
Fax: 619-293-7920
jeff_fuller@urscorp.com

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JOAN NICKLIN

Question/Comment Form

McClellan-Palomar Airport Part 150 Airport Noise Compatibility Study

We want to hear from you. Please record your question or comment and include your name, mailing address, e-mail address and telephone number:

Date: April 30, 2003

Name: Mary Anna Williams

Address: 3450 Don Ortega, Carlsbad, Ca. 92008

E-mail Address: —

Telephone: 930-760-1311

Question/Comment:

The airplane noise does not bother me. I seldom hear your noise. Even if I heard airplane noise, I think I would have no right to complain. You were there first and I knew the airport was there when I moved to Rancho Carlsbad. Even if I heard noise I would not complain.

Please send to:

Jeff Fuller
URS
1615 Murray Canyon Road, Suite 1000
San Diego, CA 92108
Tel: 619-294-9400
Fax: 619-293-7920
jeff_fuller@urscorp.com

IF YOU ARE INT[redacted]ESTED AND WANT YOUR VOICE [redacted]ARD PLEASE FILL OUT THIS FORM [redacted]ND RETURN IT TO THE ADRESSEE [redacted]LOW.

JOAN NICKLIN

Question/Comment Form

McClellan-Palomar Airport Part 150 Airport Noise Compatibility Study

We want to hear from you. Please record your question or comment and include your name, mailing address, e-mail address and telephone number:

Date: april 30, 2003

Name: Bunny Thurman

Address: 3496 Don Alberto, Carlsbad, Ca. Rancho Carlsbad

E-mail Address: —

Telephone: —

Question/Comment:

The Airport is absolutely fine just the way it is. Don't change anything. If a person is so nervous they can't stand the plane - they shouldn't be living here.

The size of the airport shouldn't handle more than two airlines.

Please send to:

Jeff Fuller
URS
1615 Murray Canyon Road, Suite 1000
San Diego, CA 92108
Tel: 619-294-9400
Fax: 619-293-7920
jeff_fuller@urscorp.com

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JOAN NICKLIN

Question/Comment Form

McClellan-Palomar Airport Part 150 Airport Noise Compatibility Study

We want to hear from you. Please record your question or comment and include your name, mailing address, e-mail address and telephone number:

Date: 05/01/03

Name: Olive Lieberman

Address: 3346 Don Quixote Dr., Carlsbad, CA 92008

E-mail Address: olieberman@msn.com

Telephone: 760 431-0274

Question/Comment:

I consider the airport an important service to our community. I do not find the noise incompatible. After all the airport was here first. If it is bothersome to some people, they should search for some other place to live.

O. Lieberman

Please send to:

Jeff Fuller
URS
1615 Murray Canyon Road, Suite 1000
San Diego, CA 92108
Tel: 619-294-9400
Fax: 619-293-7920
jeff_fuller@urscorp.com

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JOAN NICKLIN

Question/Comment Form

McClellan-Palomar Airport Part 150 Airport Noise Compatibility Study

We want to hear from you. Please record your question or comment and include your name, mailing address, e-mail address and telephone number:

Date: _____

Name: _____

Address: _____

Mr. & Mrs. Melvin Curtis
3450 Don Jose Dr
Carlsbad, CA 92008

E-mail Address: _____

Telephone: 760-438 3795

Question/Comment:

We feel the Airport was here long before Ranchs Carlsbad and we have no complaints.

Please send to:

Jeff Fuller
URS
1615 Murray Canyon Road, Suite 1000
San Diego, CA 92108
Tel: 619-294-9400
Fax: 619-293-7920
jeff_fuller@urscorp.com

IF YOU ARE INTERESTED AND WANT YOUR VOICE HEARD PLEASE FILL OUT THIS FORM AND RETURN IT TO THE ADRESSEE BELOW.

JOAN NICKLIN

Question/Comment Form

McClellan-Palomar Airport Part 150 Airport Noise Compatibility Study

We want to hear from you. Please record your question or comment and include your name, mailing address, e-mail address and telephone number:

Date: May 5, 2003

Name: Jean M. Simmons

Address: 3473 Don Porfirio Dr. Carlsbad, Ca 92008

E-mail Address:

Telephone: 760-931-1163

Question/Comment:

I feel that the airport should be left alone - just as it is! It has been there a long time and any person who does not like having an airport in their vicinity should never have located near it. They should have purchased their home elsewhere. Surely they knew the airport was near by. I doubt if it is that big a deal, noise-wise.

Please send to:

Jean M. Simmons

Jeff Fuller
URS
1615 Murray Canyon Road, Suite 1000
San Diego, CA 92108
Tel: 619-294-9400
Fax: 619-293-7920
jeff_fuller@urscorp.com

related documents are posted ...

Question/Comment Form

McClellan-Palomar Airport Part 150 Airport Noise Compatibility Study

We want to hear from you. Please record your question or comment and include your name, mailing address, e-mail address and telephone number:

Date: 4/25/03

Name:

Address: Don Valdez Drive

E-mail Address:

Telephone:

Question/Comment: Mr. Fuller:

We live in Rancho Carlsbad. Every now and then a plane or 'copter comes down pretty low.

The noise is at an acceptable level now. Please don't let it get worse! The street traffic is bad enough!

Thank you for your help!

Please send to:

Jeff Fuller
URS
1615 Murray Canyon Road, Suite 1000
San Diego, CA 92108
Tel: 619-294-9400
Fax: 619-293-7920
jeff_fuller@urscorp.com

IF YOU ARE INTERESTED AND WANT YOUR VOICE HEARD PLEASE FILL OUT THIS FORM AND RETURN IT TO THE ADRESSEE BELOW.

JOAN NICKLIN

Question/Comment Form

McClellan-Palomar Airport Part 150 Airport Noise Compatibility Study

We want to hear from you. Please record your question or comment and include your name, mailing address, e-mail address and telephone number:

Date: Sat. May 3, 2003

Name: Louis and Helene Carrara

Address: 3450 Don Carlos Drive - Carlsbad

E-mail Address: none

Telephone: 760-930-6563

Question/Comment:

We have lived in this home 2 1/2 years and can never say that the airport was ever a noise or a nuisance, my husband & I can not understand the reason for the complaint - some people have little else to do!! and they complain about everything!

Hope others feel as we do! Good Luck!

Sincerely,

Louis and Helene Carrara

Please send to:

Jeff Fuller
URS
1615 Murray Canyon Road, Suite 1000
San Diego, CA 92108
Tel: 619-294-9400
Fax: 619-293-7920
jeff_fuller@urscorp.com

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JOAN NICKLIN

Question/Comment Form

McClellan-Palomar Airport Part 150 Airport Noise Compatibility Study

We want to hear from you. Please record your question or comment and include your name, mailing address, e-mail address and telephone number:

Date: 2 May 2003

Name: Hank Gibbia

Address: 5451 Don Felipe Drive

E-mail Address:

Telephone: (760) 921-2537

Question/Comment:

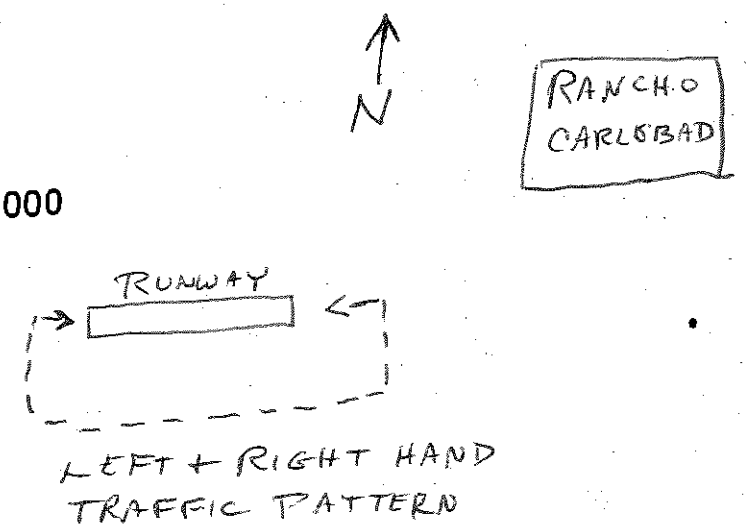
If aircraft are flown as indicated on sketch The noise abatement would be satisfied.

(I'm a retired Air Force pilot with over 6,000 hours flying recip. and jets world wide. 27 years active duty as a Lt. colonel command pilot)

HENRY B GIBBIA JR.
LTCOL USAF RET
5451 DON FELIPE DR
CARLSBAD, CA 92008

Please send to:

Jeff Fuller
URS
1615 Murray Canyon Road, Suite 1000
San Diego, CA 92108
Tel: 619-294-9400
Fax: 619-293-7920
jeff_fuller@urscorp.com



IF YOU ARE INTERESTED AND WANT YOUR VOICE HEARD PLEASE FILL OUT THIS FORM AND RETURN IT TO THE ADRESSEE BELOW.

JOAN NICKLIN

Question/Comment Form

McClellan-Palomar Airport Part 150 Airport Noise Compatibility Study

We want to hear from you. Please record your question or comment and include your name, mailing address, e-mail address and telephone number:

Date: May 1-2003

Name: Mildred W. Donley and James T. Donley

Address: 3302 Don Diablo Drive

E-mail Address: MIDMOMMA28@AOL.COM

Telephone: 760-431-9540

Question/Comment:

The airport was here long before any of these homes were built. Therefore, I don't think the residents should be whining about the noise. They weren't forced to move close to the airport.

Please send to:

Jeff Fuller
URS
1615 Murray Canyon Road, Suite 1000
San Diego, CA 92108
Tel: 619-294-9400
Fax: 619-293-7920
jeff_fuller@urscorp.com

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JOAN NICKLIN

Question/Comment Form

McClellan-Palomar Airport Part 150 Airport Noise Compatibility Study

We want to hear from you. Please record your question or comment and include your name, mailing address, e-mail address and telephone number:

Date: May 1, '03

Name: Gretchen Merritt

Address: 3434 Don Carlos Dr.

E-mail Address: —

Telephone: 760-438-9657

Question/Comment:

It's a nice force for us "oldies" having the airport nearby - we like some help near in case of an emergency. The planes are not a disturbance. (helicopters)

My only comment is that the are so close in their take-offs that one expects them to land right on the roof. A dreadful loud roar! We were here first and we think they could change that if they wanted to.

Please send to:

Jeff Fuller
URS
1615 Murray Canyon Road, Suite 1000
San Diego, CA 92108
Tel: 619-294-9400
Fax: 619-293-7920
jeff_fuller@urscorp.com

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JOAN NICKLIN

Question/Comment Form

McClellan-Palomar Airport Part 150 Airport Noise Compatibility Study

We want to hear from you. Please record your question or comment and include your name, mailing address, e-mail address and telephone number:

Date: 4-30-03

Name: Marilyn D. Knutson

Address: 5255 Don Ricardo

E-mail Address: MArilyn-DoL@AOL.com ~~my~~ marilyndel

Telephone: 760 931 8807

Question/Comment:

can airplane traffic be diverted so Rancho Carlsbad is not on the overhead plan? Noise, especially pm's, is very loud.

Please send to:

Jeff Fuller
URS
1615 Murray Canyon Road, Suite 1000
San Diego, CA 92108
Tel: 619-294-9400
Fax: 619-293-7920
jeff_fuller@urscorp.com

IF YOU ARE INTERESTED AND WANT YOUR VOICE HEARD PLEASE FILL OUT THIS FORM AND RETURN IT TO THE ADRESSEE BELOW.

JOAN NICKLIN

Question/Comment Form

McClellan-Palomar Airport Part 150 Airport Noise Compatibility Study

We want to hear from you. Please record your question or comment and include your name, mailing address, e-mail address and telephone number:

Date: 5-2-03

Name: Hildegard S. Smith

Address: 5362 Don Miguel Drive

E-mail Address: Hildegardwgm78@aol.com

Telephone: 760-438-8313

Question/Comment:

My husband and I are very emphatic about retaining the airport in its present location. We would be agreeable to an expansion to allow additional flights. Our son and daughter use this airport frequently and we want this to continue—

Hildegard Smith

Please send to:

Jeff Fuller
URS
1615 Murray Canyon Road, Suite 1000
San Diego, CA 92108
Tel: 619-294-9400
Fax: 619-293-7920
jeff_fuller@urscorp.com

IF YOU ARE INTERESTED AND WANT YOUR VOICE HEARD PLEASE FILL OUT THIS FORM AND RETURN IT TO THE ADRESSEE BELOW.

JOAN NICKLIN

Question/Comment Form

McClellan-Palomar Airport Part 150 Airport Noise Compatibility Study

We want to hear from you. Please record your question or comment and include your name, mailing address, e-mail address and telephone number:

Date: 5-1-03

Name: Rita Auer

Address: 3301 Don Pablo Dr.
Carlsbad, CA 92008

E-mail Address:

Telephone: 760-918-6677

Question/Comment:

I LOVE OUR LITTLE AIRPORT. I OFTEN FLY OUT ON AMERICAN WEST EXPRESS. I LEAVE MY CAR. NO HASSLES. NOISE-WISE, IT DOESN'T BOTHER WHERE I LIVE AT RANCHO CARLSBAD. MY GRANDCHILDREN LOVE GOING TO THE AIRPORT CAFE FOR BREAKFAST. IT HAS BECOME ONE OF OUR TRADITIONS WHEN THEY ARE HERE VISITING ME

Please send to:

Jeff Fuller
URS
1615 Murray Canyon Road, Suite 1000
San Diego, CA 92108
Tel: 619-294-9400
Fax: 619-293-7920
jeff_fuller@urscorp.com

related documents are [illegible]

Question/Comment Form

McClellan-Palomar Airport Part 150 Airport Noise Compatibility Study

We want to hear from you. Please record your question or comment and include your name, mailing address, e-mail address and telephone number:

Date: 4-23-03

Name: Mr & Mrs Julian P. Phillips

Address: 5321 Don Ricardo Dr. Carlsbad, CA 92008 Rancho Carlsbad Estates

E-mail Address: JoyFlash@AOL.COM

Telephone: 760-438-4194

Question/Comment: For living 3 miles from airport There is not too much excess noise around our area but there are still airplanes occasionally after 11pm at night. Hope this can be eliminated. Thank you for your concerns

Please send to:

Jeff Fuller
URS
1615 Murray Canyon Road, Suite 1000
San Diego, CA 92108
Tel: 619-294-9400
Fax: 619-293-7920
jeff_fuller@urscorp.com

related documents are [illegible]

Question/Comment Form

McClellan-Palomar Airport Part 150 Airport Noise Compatibility Study

We want to hear from you. Please record your question or comment and include your name, mailing address, e-mail address and telephone number:

Date: April 22, 2003

Name: Kenneth B Smith

Address: 5362 Don Miguel Drive Carlsbad 92008

E-mail Address:

Telephone: 760-438-8313

Question/Comment:

We enjoy the airport and its proximity to our home. Noise is no problem. Keep it in its present location.

Please send to:

Jeff Fuller
URS
1615 Murray Canyon Road, Suite 1000
San Diego, CA 92108
Tel: 619-294-9400
Fax: 619-293-7920
jeff_fuller@urscorp.com

related documents are ...

Question/Comment Form

McClellan-Palomar Airport Part 150 Airport Noise Compatibility Study

We want to hear from you. Please record your question or comment and include your name, mailing address, e-mail address and telephone number:

Date: 4/15/03

Name: BABETTE W. GILBERT

Address: 3555 DON JUAN DR, CARLSBAD, CA · 92008

E-mail Address: —

Telephone: (760) 438-5349

Question/Comment:

I think Palomar Airport is just fine. For people moving into the area they should be made aware of the air traffic & if they object to the noise they should move somewhere else!

I don't believe planes should have to reduce their power & endanger the crews or passengers.

Let's hope the realtors do their jobs!

Babette W. Gilbert

Please send to:

Jeff Fuller
URS
1615 Murray Canyon Road, Suite 1000
San Diego, CA 92108
Tel: 619-294-9400
Fax: 619-293-7920
jeff_fuller@urscorp.com

related documents are [illegible]

Question/Comment Form

McClellan-Palomar Airport Part 150 Airport Noise Compatibility Study

We want to hear from you. Please record your question or comment and include your name, mailing address, e-mail address and telephone number:

Date: 4/16/03

Name: GEORGE HILL

Address: 5348 DON RICARDO DR. ; CARLSBAD 92008

E-mail Address: —

Telephone: 760-931-7961

Question/Comment:

Landing and take-off patterns & restrictions should be mandatory.

Please send to:

Jeff Fuller
URS
1615 Murray Canyon Road, Suite 1000
San Diego, CA 92108
Tel: 619-294-9400
Fax: 619-293-7920
jeff_fuller@urscorp.com

related documents [illegible]

Question/Comment Form

McClellan-Palomar Airport Part 150 Airport Noise Compatibility Study

We want to hear from you. Please record your question or comment and include your name, mailing address, e-mail address and telephone number:

Date: 4/15/03

Name: IRWIN GOLDSTEIN

Address: 5135 DON RICARDO DR - RANCHO CARLSBAD

E-mail Address: ——

Telephone: (760) - 603 - 0001

Question/Comment:

PLANES FLYING TOO EARLY IN AM
& TOO LATE IN PM!
SHERIFS PATROL PLANE IS TOO
NOISY & TOO OFTEN ALSO.

Please send to:

Jeff Fuller
URS
1615 Murray Canyon Road, Suite 1000
San Diego, CA 92108
Tel: 619-294-9400
Fax: 619-293-7920
jeff_fuller@urscorp.com

related documents are posted on the coog [illegible]

Question/Comment Form

McClellan-Palomar Airport Part 150 Airport Noise Compatibility Study

We want to hear from you. Please record your question or comment and include your name, mailing address, e-mail address and telephone number:

Date: 4/17/03

Name: Floyd M. Schenk

Address: 3467 Don Ortega Dr # 376
Carlsbad, CA 92008

E-mail Address:

Telephone: 760-438-4054

~~Question/~~Comment: 17 YEAR RESIDENT

WE LIVE IN RANCHO CARLSBAD MOBILE HOME PARK (5200 EL CAMINO REAL). WE CONSIDER THE AIRPORT A GOOD AMENITY TO THE AREA, AND AN OCCASIONAL CONVENIENCE.

I'M SURE IT CONSIDERED AN AID TO THE CORPORATE PLANES THAT SERVE THE THRIVING INDUSTRIAL/COMMERCIAL SURROUNDING THE AIRPORT.

(THE PORT WAS HERE LONG BEFORE THE COMPLAINERS!)

Please send to:

Jeff Fuller
URS
1615 Murray Canyon Road, Suite 1000
San Diego, CA 92108
Tel: 619-294-9400
Fax: 619-293-7920
jeff_fuller@urscorp.com

related documents are posted on the copy viewer www

Question/Comment Form

McClellan-Palomar Airport Part 150 Airport Noise Compatibility Study

We want to hear from you. Please record your question or comment and include your name, mailing address, e-mail address and telephone number:

Date: _____

Name: DAVID C. & DOLORES M. BURWELL

Address: 3423 DON JOSE DRIVE CARLSBAD, CALIFORNIA 92009

E-mail Address: _____

Telephone: 760 - 931 - 7631

Question/Comment:

WHAT'S HAPPENING? DON'T TELL US THE WHINEY ANTI-AIRPORT COMPLAINERS ARE TRYING TO SHUT DOWN MCCLELLAN-PALOMAR. (AS IN OCEANSIDE)
WE LIKE THE PALOMAR A/P JUST AS IT IS & JUST WHERE IT IS. WE WILL BE USING IT IN 2 WKS TO THEN FROM BOISE ID.
NO PROBLEMS!!

Please send to:

Jeff Fuller
URS
1615 Murray Canyon Road, Suite 1000
San Diego, CA 92108
Tel: 619-294-9400
Fax: 619-293-7920
jeff_fuller@urscorp.com

related documents are posted on the copy viewer room

Question/Comment Form

McClellan-Palomar Airport Part 150 Airport Noise Compatibility Study

We want to hear from you. Please record your question or comment and include your name, mailing address, e-mail address and telephone number:

Date: April 15 2003

Name: E. C. ROBINSON

Address: 5117 DON RODOLFO DR

E-mail Address: ecrob780@cs.com

Telephone: 760-431-0222

Question/Comment:

Five or six years ago I wrote a letter to each of the City council members to complain about the frequency and noise from the airport. the reply was that it was up to the Airport Committee which meets periodicly!

The noise and frequency are worse now than before — help!

Low flying helicopters and first week are especially annoying!

Please send to:

Jeff Fuller
URS
1615 Murray Canyon Road, Suite 1000
San Diego, CA 92108
Tel: 619-294-9400
Fax: 619-293-7920
jeff_fuller@urscorp.com

related documents are posted on the copy viewer board

Question/Comment Form

McClellan-Palomar Airport Part 150 Airport Noise Compatibility Study

We want to hear from you. Please record your question or comment and include your name, mailing address, e-mail address and telephone number:

Date: April 14, '03

Name: Minnie Thurman

Address: 3496 Don Alberto Dr, Rancho Carlsbad,

E-mail Address:

Telephone:

Question/Comment:

1. The airport is just fine the way it is!
2. I have lived here 16 years and it has never bothered me.
3. People that are nervous or irritable should never move near an airport. It is their own fault if the noise bothers them.

Don't add on, change our airport!!

Please send to:

Jeff Fuller
URS
1615 Murray Canyon Road, Suite 1000
San Diego, CA 92108
Tel: 619-294-9400
Fax: 619-293-7920
jeff_fuller@urscorp.com

related documents are posted on the copy viewer www

Question/Comment Form

McClellan-Palomar Airport Part 150 Airport Noise Compatibility Study

We want to hear from you. Please record your question or comment and include your name, mailing address, e-mail address and telephone number:

Date: 4-16-03

Name: BILL ARNOLD

Address: 3432 DON ORTEGA DR, CARLSBAD 92008

E-mail Address: [redacted] WGA2SON@AOL.COM

Telephone: 760-930-9659

Question/Comment:

ALL PLANES SHOULD BE REQUIRED TO FOLLOW FAA FLIGHT PATHS AS COMM'L FLIGHTS ARE REQUIRED TO DO.

Please send to:

Jeff Fuller
URS
1615 Murray Canyon Road, Suite 1000
San Diego, CA 92108
Tel: 619-294-9400
Fax: 619-293-7920
jeff_fuller@urscorp.com

elated documents are posted on the copy viewer room

Question/Comment Form

McClellan-Palomar Airport Part 150 Airport Noise Compatibility Study

We want to hear from you. Please record your question or comment and include your name, mailing address, e-mail address and telephone number:

Date: 14 Apr 03

Name: Bruce Enigenburg

Address: 5163 Don Mata Dr, Carlsbad CA 92008

E-mail Address:

Telephone:

Question/Comment:

— no problem with airport noise —

Please send to:

Jeff Fuller
URS
1615 Murray Canyon Road, Suite 1000
San Diego, CA 92108
Tel: 619-294-9400
Fax: 619-293-7920
jeff_fuller@urscorp.com

related documents are [illegible]

Part 150 / FA — noise study 8

Question/Comment Form

McClellan-Palomar Airport Part 150 Airport Noise Compatibility Study

We want to hear from you. Please record your question or comment and include your name, mailing address, e-mail address and telephone number:

Date: 4-17-03

Name: Eva Ott

APR 21 2003

Address: 5209 DON VALDEZ DR Carlsbad, CA 92008

E-mail Address:

Telephone: 760-918-0194

Question/Comment:

I have lived in Carlsbad for 3 years now. I come from San Clemente where I had no aircrafts in flight over the town so I never heard airplane. I dont find it annoying to hear aircrafts flying over head, and I don't feel that they pollute the air as much as the car traffic on El Camino. There need to be a crackdown on cars not the aircrafts that fly in and out of McClellan-Palomar airport. after all the airport was here long before most of the houses. Please leave the airport where it is. Thank You

Please send to:

Jeff Fuller
URS
1615 Murray Canyon Road, Suite 1000
San Diego, CA 92108
Tel: 619-294-9400
Fax: 619-293-7920
jeff_fuller@urscorp.com

Question/Comment Form

McClellan-Palomar Airport Part 150 Airport Noise Compatibility Study

We want to hear from you. Please record your question or comment and include your name, mailing address, e-mail address and telephone number:

Date: Apr 8, 2003

Name: John Bertoldi

Address: 2253 Masters Road
Carlsbad, CA 92008-3849

E-mail Address:

Telephone: 760-929 7959

Question/Comment:

This is to introduce myself. I participated in the Palomar Airport Citizens Action Group PAR 2000 Roundtable as a representative of Evans Point Home Owners Assoc, which is located in the north surrounding area of the airpath.

Encl 1) is a copy of a draft report that I submitted to PAR 2000. Your attention is directed to

(over)

Please send to:

Jeff Fuller
URS
1615 Murray Canyon Road, Suite 1000
San Diego, CA 92108
Tel: 619-294-9400
Fax: 619-293-7920
jeff_fuller@urscorp.com

the hilled area.

Encl (2) is a copy of "Plane News", which is the official news letter of San Diego County Airports.

As noted in encl (1), you can see that departing general aviation aircraft are not following the departure procedure in encl (2). This is because the FAA control tower at the airport directs departing general aviation aircraft to deviate from this procedure, and make a right climbing turn when airborn. This departure route causes aircraft to fly over the residential areas in the north area of the airport. See home owners newsletter column on noisy aircraft.

Please advise me when you will have your next meeting on McClellan-Palomar Airport Part 150 study.

October 31, 2000

FROM: John Bertoldi, 760-9299759

TO: PAR 2000

SUBJ. Low Flying Aircraft and Noisy Flying Aircraft

REF (a) Recommendations to PAR 2000" by Terry Davis, dated October 25, 2000.

Enclosure (1) San Diego County Noise Abatement Procedures for County Airports.
Enclosure (2) Recommendation to PAR 2000 for Runway 24 Departure change.

1. The extension of runway 24 (R24) another 600 feet to the east as suggested in reference (a) will only exacerbate the present conditions of low flying and noisy flying aircreaft that depart from R24. We are speaking of VFR departures on R24 envolving general aviation single and twin engine aircraft that make an early right turn after take off to a northeast course heading. This results in a flight path over the industrial and residential AREAS north of the the airport. Many of these aircraft do not reach traffic patterm altitude beforereaching ~~this~~ THESE areas. Moreover, these aircraft are noisy, because they are using high power settings so that they can reach their designated or desired flight altitude as soon as posible. As experienced pilots ourselves, we can attest that some of these aircraft would be hard pressed to make a safe emergency landing anywhere in this hilly area. We are also concerned with the FAA Control Tower practice of granting early departure turns after takeoff when the enclosure (1) airport procedures requires a straight out departure. This will be discussed in more detail in paragraph 4. below.

2. We respectfully challange the reliability of using the data from the airport noise abatement system in its present configuration as the exclusive source for determining noise violations. We do not, however, question the entegrity of the equipment itself. For example the response from the airport noise abatement program monitor to reports of noisy flying aircraft is always that the questioned aircraft is in compliance with the system noise parameters. We say that this cannot always be true, because the nearest sensing equipment is located several miles from the place of infraction in the aforsaid residential area. Furtheremore, the monitor could not produce for our review a reliable calibrated noise attenuation table that compensates for this anomaly.

3. With respect to low flying aircraft, this anomaly is also true for the FAA Radar Altitude Measureing Equipment, which likewise is located several miles from the airport area. The data produced by this equipment is used by the aforesaid noise abatement monitor as the exclussive source for determining aircraft flight altitudes in the airport control area. We question why the reports of low flying aircraft over the aforesaid residential area that are based on observations of experienced pilots who reside in that area

Encl (1)

not being accepted as reliable data for the purpose of the PAR 2000 study; and why the reliance on the FAA Radar Altitude Measureing Equipment as the exclusive determinant of altitude of low flying aircraft in view of the fact that radar signals, as in the case of noise signals, are also distorted and scattered over distance from the sensing equipment. Further, a departing climbing aircraft is a dynamic flight signature since altitude and position are constantly changing.

4. We call to the attention of PAR 2000 the winter issue of the County of San Diego "PLANE NEWS", Enclosure (1). This publication, as stated therein, is the official news letter of the San Diego County Airports. This winter issue sets forth the specific noise abatement and aircraft departure procedures for McCellan-Palomar airport. One flight procedure, however, that is not mentioned is the option to make early right departure turns after takeoff from R24 when autherized by FAA airport traffic control tower. This is the reason why there are low flying aircraft and noisy flying aircraft violations over the aforesaid residential area. As a matter of interest, the County of San Diego and posibly other governmental agencies could be held liable in the event of a fatal aircraft accident in this industrial and residential area.Also the testimonal information and records of PAR 2000 would not be friendly for a defense in a liability trail or investigation.

5. The conclusion reached from the above discussion is that: (i) low flying and noisy flying aircraft is basically caused by the FAA Air Traffic Control Tower's practice of granting early right VFR turns after takeoff for north-east departures from R24; and (ii) the attitude and behavior of pilots is to disregard the purpose of the airport noise abatement procedures. The McCellan-Palomar Airport has addressed the early right turn departures from R24 in a preveious PAR 2000 meeting. There it was stated that early departure turns are nesessary to maintain safe departing aircraft intervals during busy flight operations, and during times when there are a wide range of aircraft performance awaiting takeoff clearance.

6. Recommendations: That PAR 2000 consider the following as a way of mitigating the low flying aircraft and noisy flying aircraft problem:

(1) During busy flight operations, consider grouping or holding aircraft that are requesting taxi clearance from Ground Control by aircraft performance type in so far as posible. For example, (a) training school aircraft; (b) general aviation aircraft that are departing the airport on flight; (c) twin engine piston aircraft (d) commuter aircraft; and (e) jet aircraft. This would give each type of aircraft its own air space on departing the airport; and which would be in compliance to the R24 departure procedures published the aforesaid PLANE NEWS. Early authorized right turns after takeoff can therefore be reduced to minimum, and used only when it is considered when necessary for ground and flight safety.

(2) Consider adopting the recommendation made in Enclosure (2) as an alternative to the early right turn departures. This would change R24 right turn VFR departures, when authorized, to a climbing right 45 degree turn to a heading of 285 degrees after takeoff, and climbing to an altitude of 1000 feet AGL before making a northeast course turn over the Agua Hedionda Lagoon wet lands and Cannon road.

John Bertoldi

Spring Events–Pg. 5; Western Flight–Pg. 2

SUMMER 2002

PLANENEWS

THE OFFICIAL NEWSLETTER of SAN DIEGO COUNTY AIRPORTS

PALOMAR NOISE STUDY to BEGIN

A unique process to ensure full public input regarding McClellan-Palomar Airport's aircraft-related noise impacts is now in place. A Part 150 Noise Compatibility Study for the Airport pursuant to receipt of an FAA-sponsored grant will be underway this fall.

While such a study typically runs 18 to 24 months, the County anticipated the need for full public input and conducted a "roundtable" effort to ensure a quality product to address community concerns.

The PAR 2000 (Palomar Airport Roundtable) Final Report was approved for inclusion in the study by the County Board of Supervisors in late April. This action allows the airport to process recommendations that may be achievable within current County resources. One recommendation was to hire a full time ~~Environmental Noise Specialist for McClellan-Palomar~~. ~~Russ Couchman~~, a pilot with a degree in Aviation Management was appointed in November. Since the Board's action, Couchman met with various pilot groups to discuss aircraft operations-related recommendations from the report. He is also currently working on the PAR 2000 recommendation to place a noise abatement sign depicting the Runway 24 Alpha departure at the approach end of Runway 24 clearly visible to departing pilots. The Alpha departure calls for a heading of 250 degrees off Runway 24 until 1/2 mile offshore.

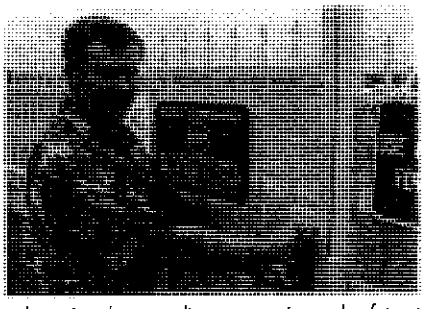
Other Voluntary Noise Abatement Procedures request pilots to hold turns until reaching 800', and to maiutain 2000' until descending to pattern altitude, using the north pattern when possible. Couchman interfaces with airport users, pilots, the general public, and businesses on the airport. He also maintains and operates a sophisticated flight tracking/noise monitoring system. WAYNE thomas

Feeling Secure with OB

Gates at County airports are locked for good reason. Access is restricted to facilities. Security is the purview of Olivier "OB" Brackett.

As Airport Security and Safety Coordinator, OB develops security plans for airports. Included is ensuring airport fences are properly installed and in good condition, that gates and locks work properly and preventing runway incursions. He also oversees private security officer contracts.

OB is no stranger to security or airports. He spent 20 years in the Marine Corps, where his first duty was armed protection of United States assets and his second was as an air traffic controller. But he thinks he's found a home at County airports.



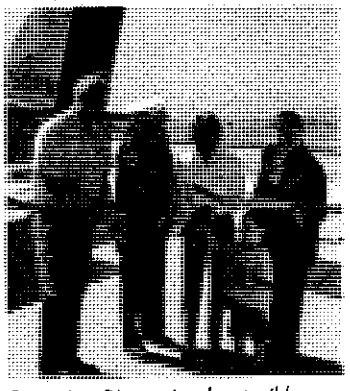
Olivier Bracket coordinates security and safety at County Airports.

"I love it. There's a real dedication among everybody to provide good customer service here," he said. "Having come from the Marine Corps where commitment is a big part of what we're about, the level of commitment at the County is right in step with what I'm used to."

Ramona Runway/ Taxiway Project Completed

With a simple scissors snip, San Diego District 2 Supervisor Dianne Jacob brought to completion the new 1,000-foot runway extension at the Ramona Airport.

The extension allows larger fire fighting aircraft to take off with heavier loads. Ramona is home to the California Department of Forestry and U.S. Forest Service aerial fire attack base, the busiest such facility in the nation.

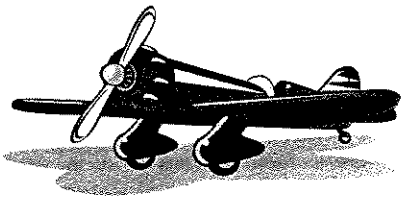


Supervisor Dianne Jacob cuts ribbon for Ramona Airport runway extension with the help of other local dignitaries.

The $6 million project includes runway and taxiway extension and resurfacing, new run-up area at the east end of the taxiway, new compass rose, realignment of the south taxiway and drainage improvements.

Encl (2)

Noisy Flying Aircraft Over Evans Point



by John Bertoldi

To report noisy flying aircraft, call the **McClellan–Palomar Airport** at **760-431-4646** or **760-431-1328**. Follow the menu instructions – that is, **Press 3** and **Press 1**. You will be asked to state: name, address, phone number, time, **type of aircraft, direction of flight,** and any other descriptional information that would help identify violating aircraft. Also, it would be helpful if you stated that the call is made from Evans Point Home Owners Association.

It is important to report a noise complaint as soon as you can.

With respect to **type of aircraft**, almost all noisy aircraft over Evans Point are small, single engine and a few small twin engine aircrafts. If you are not familiar with the type of aircraft, such as a Cessna 182, or a Pipe Cherokee 140 for example, give your best description, such as a high wing, red and white aircraft, or a low wing. blue and white aircraft.

With respect to **direction of flight**, all aircraft over Evans Point are either departing the airport, or will be **remaining** in the airport flight traffic pattern.

Departing aircraft will be flying in a north-easterly direction over Evans Point towards Calavera Hills and Vista.

Aircraft **remaining** in the airport flight traffic pattern will be in an easterly direction towards San Marcos.

You might be interested to know that the FAA aircraft departure procedure from McClellan–Palomar Airport is to fly on a straight-out west heading of 250° degrees until one-half mile off shore. Federal Aviation Administration (FAA) Control Tower at the airport will deviate from this established procedure during periods of high airport traffic activity, and will direct departing aircraft when airborne, to turn to a north-east heading, which results in flying over Evans Point. Furthermore, this change requires the pilot to use high engine power to safely climb away from the airport. Hence, the noisy aircraft. This is analogous to driving your automobile without a muffler in full low gear and a floored gas pedal.

In 2002, Evans Point and other home owner associations affected by aircraft noise filed complaints with McClellan-Palomar Airport. A public hearing and study on the impact of aircraft noise on the surrounding airport communities was conducted over a nine month period. A report was issued; however, in my opinion, it did nothing to reduce the noise of aircrafts over Evans Point. **A personal note:** aircraft pilots are just as inconsiderate as automobile drivers. Your telephone complaints, however, are recorded and reviewed at the airport, and supposedly reported to the FAA and appropriate county officials.

Encl (3)

Dorothy Ricci
<dotricci@worldnet.att.net>

04/15/03 02:44 PM
Please respond to
dotricci

To: jeff_fuller@urscorp.com
cc:
Subject: AIRPORT NOISE STUDY

Question/Comment Form

McClellan-Palomar Airport Part 150 Airport Noise Compatibility Study

We want to hear from you. Please record your question or comment and include your name, mailing address, e-mail address and telephone number:

Date: 4-15-03

Name: Dorothy Ricci

Address: 3457 Don Carlos Drive Carlsbad, CA 92108

e-mail Address: dotricci@att.net if you will be sending an e-mail, I will need to know the name it will be sent from. I delete all e-mails that I do not recognize.

Telephone: 760-922-8850

Question/Comment:

Well this is interesting because I was just standing out front watching cars go by and planes fly over... I have watched planes in awe as far back as my memory bank will allow me to withdraw. Daddy and I would gaze toward the sky as soon as we could hear their approach... we would go to the airport to take a ride in a Piper Cub or just sit and watch take offs and landings.

When we really needed an airplane fix we would go to the big airport and watch the triple tailed, grand CONSTELLATION ... We wondered how that big plane could get off the ground...

As for the noise pollution caused by the planes leaving, arriving and playing around Palomar Airport... the ones that are here are OK with me, but please don't let them bring in any bigger ones. I lived down by Lindberg Airport and North Island for eight years and some of them would shake a person out of their socks. Carlsbad is a quiet community... PLEASE keep it this way.

Thank you for your time and concern

Please send to :

Jeff Fuller
URS
1615 Murray Canyon Road, Suite 1000
San Diego, CA 92108
Tel: 619-294-9400
Fax: 619-293-7920
jef_fuller@urscorp.com

Summary of Comments

Table H-1
First Workshop
Summary Of Public Written And Verbal Comments

Comment Category	Number Received
Are there regulations regarding plane engine noise levels on ground and on take off?	1
Want/like the airport where it is/how it operates/convenience, do not change/expand	25
Not very loud, noise is not a bother	10
Eliminate night flights	1
Would be agreeable to expansion to allow more flights	2
People moving into the area should be notified of noise	1
Plans should not have to reduce power and endanger crews or passengers	1
Landing and take-off pattern restrictions should be mandatory	3
Planes flying too early/late	6
Sheriff's Patrol Plane is too noisy and too frequent	1
Airport was here before many residences	8
Airport is considered an aid to surrounding commercial/industrial area, helps economy	3
Low flying helicopters are too frequent/too noisy	8
All planes should be required to follow FAA flights paths as commercial flights are required to do	2
Aircraft are not following departure procedures	2
Low flying aircraft are dangerous	2
Jets and propeller planes are too low, should gain altitude	1
Limit planes to one runway	1
New houses under take-off pattern were aware of conditions before they purchased their home	1
Expansion concern	3
Property Values	2
Fly a specific traffic pattern (specific pattern is suggested)	1
Divert traffic so it is not overhead of residence	1
Total:	86

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Last modified Tuesday, March 30, 2004 12:20 PM PST

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Public turns out for airport noise

By: TIM MAYER - Staff Writer

Buying A New Car Or Truck?
OUR VOLUME PRICING WILL SAVE YOU BIG MONEY!
Ken Grody
AUTOMOTIVE GROUP
Ford CAR COUNTRY CARLSBAD & BUENA PARK Ford

CARLSBAD ---- Consultants and airport officials on Monday said flight noise from McClellan-Palomar Airport has improved since 1990, but some people who live near the airfield said they sometimes can't hear themselves talk.

Consultants from San Diego-based URS Corp. disclosed the results of a year-long study during a public workshop in which they displayed maps showing sound measurements around the airport located in Carlsbad since the 1950s.

The $250,000 study paid for by the Federal Aviation Administration is part of an effort to update the last study done 14 years ago and will be used to develop a report on how noise problems may be reduced, said study project manager Jeff Fuller.

That report on how to make the airport more compatible with the surrounding community should be completed and submitted to the Federal Aviation Administration next February.

The federal agency has the final say as to which recommendations will be adopted, Fuller said, "and what we're recommending must comply with FAA rules and regulations. They have to have some sort of qualitative benefit."

In no case "is it going to eliminate the noise from the airport," Fuller warned an audience of about 60 at the city's Faraday Center.

Fuller said the latest study shows that in the area west of the airport, the direction which most aircraft take off, the noise level has actually decreased from what was found in 1990.

The critical zone is that in which people on the ground would experience noise of 65 decibels or higher ---- about the noise level if you lived 50 feet from a busy street, Fuller said.

Sixty-five decibels is the point at which state, federal and local guidelines say it becomes

incompatible with residential areas, Fuller said.

News L

...more

Fuller said consultants found there are no homes within that 65 decibel range.

Airport manager Floyd Best said reasons for the decrease include the fact many new airplanes are much less noisy than their predecessors. Increased efficiency also allows them to climb faster and more steeply after takeoff, reducing the impacts on neighborhoods.

Also, since 1990, the airport managed to get the Navy to move a private air contractor ---- which had a noisy fleet of aircraft operating around the clock ---- out of Palomar to a military base, first Miramar and then to North Island.

"They took some very noisy aircraft and moved them away and that addressed the issue of nighttime flights, which was a great irritant," Best said.

With 204,000 takeoffs and landings last year, Best said the airport was third busiest in the county behind Lindbergh and Montgomery fields.

Some local residents said Monday the aircraft noise is still too loud at the county-owned airport.

"I doubt if anything will come of this (study)," said Chris Smoczynski, who lives west of the Palomar Field. "The noise is very bothersome."

Alison Parker, who lives near the airport, said "I can't talk on the phone inside my home."

Parker said the solution would be to change flight paths so planes taking off to the west would head out over the ocean before turning north or south. Now, she said, aircraft turn directly over her home.

John and Anita Dwyer, who live on the northern edge of Encinitas, said the biggest problem they have is with helicopters, at least some of which they are sure come from Palomar.

"If I'm sitting on my deck talking on the telephone, I can't hear," she said.

John Dwyer said the helicopters fly so low that from their blufftop home they are often looking down at the helicopters wave hopping along the beach.

Robin Gartman, a private pilot, said she lives six miles away in La Costa and doesn't mind the noise. In fact, she said she worries if she doesn't hear anything because "it means there is a problem on the runway."

Terry Kemp, who lives in Rancho Carrillo five minutes east of the runway, said he also doesn't mind the noise.

"I live south of the approach path, so there's not a whole lot of noise," he said. "Plus, I am a private pilot, so I'm a little more tolerant."

The public can view the maps and find other information on the study by contacting www.co.san-diego.ca.us/dpw/airports/mcpal.htm.

Consultants are asking the public to comment prior to April 14 by fax at (619) 293-7920 attention Jeff Fuller, or via e-mail at sdo@urscorp.com.

Contact staff writer Tim Mayer at (760) 901-4043 or tmayer@nctimes.com.

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SignOnSanDiego.com
THE SAN DIEGO UNION-TRIBUNE

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Palomar airport's neighbors sound off on jet noise

Discussion part of 3-year federal study

By Elena Gaona
UNION-TRIBUNE STAFF WRITER

March 31, 2004

CARLSBAD – Neighbors of McClellan-Palomar Airport said Monday nightthat rumbling from planes is constant even though they're not in the noise-impact area.

Nearly 50 residents attended the second public comment session at Faraday Center in a three-year noise study being conducted at the airport.

"It does very much frustrate me to see all these beautiful charts that seem to imply no one else is affected," said P.J. DeMaris of Vista, who said she has trouble talking on the phone because so many planes fly near her house.

"I'm seriously thinking of selling my house because I just can't tolerate it anymore."

The Federal Aviation Administration funded the noise study to ensure the airport remains compatible with its surroundings, said Jeff Fuller of URS, the San Diego environmental engineering firm that is conducting the study.

Engineers mapped current noise contours and predicted future ones based on average takeoffs and landings at the airport.

The firm found there were 204,155 takeoffs and landings in 2002. The projection for 2008 is 232,661. For 2013, the number is 259,528.

The noise contours expand in waves around the airport near the center of the city, but people at the meeting complained of the noise being heard as far away as Escondido and Encinitas.

"I can't sit out on the deck because of the noise," said Anita Dwyer of Leucadia. "This is all summer. Yesterday because it was a beautiful day, it was a nightmare. Please, we need help. It's just horrible."

Peter Drinkwater, director of airports for the county, pointed out that the noise maps are based on average number of flights, not individual plane operations. He said the airport can do a better job of communicating with pilots to make them fly at the right altitudes and the right times.

The study is headed to the FAA to develop a plan for future operations at the airport by 2005, and is intended to make sure that the airport is generally compatible with its neighborhood.

An airport is noisy, Fuller said.

"It is not a process to eliminate airport noise," Fuller said. "So I don't want to give some people hope. It is not

going to eliminate the noise."

The noise maps and details of the study are available on the airport's Web site: www.co.san-diego.ca.us/dpw/airports. Through April 15, residents can view the noise maps and then submit comments in writing that will be forwarded to the FAA.

▪ Elena Gaona: (760) 476-8239; elena.gaona@uniontrib.com

Find this article at:
http://www.signonsandiego.com/news/northcounty/20040331-9999-news_1mc31noise.html

☐ Check the box to include the list of links referenced in the article.

Mailed

Second Public Meeting Planned for McClellan-Palomar Airport

Noise Compatibility Study Update

You are invited to attend the second of three public meetings scheduled to provide information and gather public input on the McClellan-Palomar Airport Part 150 Airport Noise Compatibility Study.

Public Meeting

When: March 29, 6 to 9 p.m.

6 p.m. - Information Open House
6:30 p.m. - Presentation
7 p.m. - Questions and Comments Session

Where: City of Carlsbad, Faraday Center, 1635 Faraday Ave. Carlsbad, CA 92008

At this meeting, the following information will be presented:

- Noise exposure map of existing conditions
- Five-year and 10-year projected noise exposure maps
- Information used to develop the noise exposure maps

With authorization and funding from the Federal Aviation Administration (FAA), the County of San Diego is preparing a Federal Aviation Regulation Part 150 Noise Compatibility Study for McClellan-Palomar Airport. The County hired URS, an airport consulting firm, to conduct an analysis of air traffic utilizing the airport to interface with the surrounding community and to update the airport's Noise Compatibility Program. The goal of the Study is to facilitate the best possible relationship between the airport and surrounding residential and business communities by minimizing aviation noise impacts and maintaining land use compatibility. The major components of the Study include the development of noise exposure maps and the creation of a noise compatibility program, which includes public involvement. During this process, results will be presented to the FAA for review, comments and approval.

The FAA wants your input! **Please attend this public meeting on Monday, March 29 from 6 to 9 p.m. at the City of Carlsbad's Faraday Center to learn more about the Part 150 Study and provide input.**

The noise exposure maps and other relevant information pertaining to the Noise Compatibility Study may be found on **www.co.san-diego.ca.us/dpw/airports/mcpal.htm**

URS Corporation • 1615 Murray Canyon Road, Suite 1000 • San Diego, CA 92108

McClellan-Palomar Airport • Department of Public Works • 2198 Palomar Airport Road • MS N137 • Carlsbad, CA 92008

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615 Murray Canyon Road, Suite 1000
San Diego, CA 92108

Public Meeting Notice for McClellan-Palomar Airport

Noise Compatibility Study Update

URS Corporation
615 Murray Canyon Road, Suite 1000
San Diego, CA 92108

Public Meeting Notice for McClellan-Palomar Airport

Noise Compatibility Study Update

Attention: Pam Slater
County Board of Supervisor (Dist. 3)
County Administration Center
1600 Pacific Highway, Room 335
San Diego, CA 92101

Attention: Bill Horn
County Board of Supervisor (Dist. 5)
County Administration Center
1600 Pacific Highway, Room 335
San Diego, CA 92101

Attention: Jerome Stocks
Mayor
City of Encinitas
505 S. Vulcan Avenue
Encinitas, CA 92024-3633

Attention: Maggie Houlihan
Deputy Mayor
City of Encinitas
505 S. Vulcan Avenue
Encinitas, CA 92024-3633

Attention: Christy Guerin
Council Member
City of Encinitas
505 S. Vulcan Avenue
Encinitas, CA 92024-3633

Attention: James Bond
Council Member
City of Encinitas
505 S. Vulcan Avenue
Encinitas, CA 92024-3633

Attention: Dan Dalager
Council Member
City of Encinitas
505 S. Vulcan Avenue
Encinitas, CA 92024-3633

Attention: Pat Murphy
Planning & Building Director
City of Encinitas
505 S. Vulcan Avenue
Encinitas, CA 92024-3633

Attention: Vance Morris
Mayor
City of Vista
P.O. Box 1988
Vista, CA 92085

Attention: Paul Campo
Mayor Pro Tempore
City of Vista
P.O. Box 1988
Vista, CA 92085

Attention: Bob Campbell
City Council
City of Vista
P.O. Box 1988
Vista, CA 92085

Attention: Doris Calvo
Secretary to the City Council
City of Vista
P.O. Box 1988
Vista, CA 92085

Attention: Judy Ritter
City Council
City of Vista
P.O. Box 1988
Vista, CA 92085

Attention: Stephen Gronke
City Council
City of Vista
P.O. Box 1988
Vista, CA 92085

Attention: Robin Putnam
Director of Community Development
City of Vista
P.O. Box 1988
Vista, CA 92085

Attention: Claude A. “Bud” Lewis
Mayor
City of Carlsbad
1200 Carlsbad Village Drive
Carlsbad, CA 92008-7314

Attention: Ramona Finnila
Mayor Pro Tempore
City of Carlsbad
1200 Carlsbad Village Drive
Carlsbad, CA 92008-7314

Attention: Matt Hall
Council Member
City of Carlsbad
1200 Carlsbad Village Drive
Carlsbad, CA 92008-7314

Attention: Ann J. Kulchin
Council Member
City of Carlsbad
1200 Carlsbad Village Drive
Carlsbad, CA 92008-7314

Attention: Mark Packard
Council Member
City of Carlsbad
1200 Carlsbad Village Drive
Carlsbad, CA 92008-7314

Attention: Michael Holzmiller
Planning Director
City of Carlsbad
1635 Faraday Avenue
Carlsbad, CA 92008-7314

Attention: F.H. “Corky” Smith
Mayor
City of San Marcos
1 Civic Center Drive
San Marcos, CA 92069

Attention: Pia Harris
Vice-Mayor
City of San Marcos
1 Civic Center Drive
San Marcos, CA 92069

Attention: Hal Martin
Council Member
City of San Marcos
1 Civic Center Drive
San Marcos, CA 92069

Attention: Lee B. Thibadeau
Council Member
City of San Marcos
1 Civic Center Drive
San Marcos, CA 92069

Attention: Mike Preston
Council Member
City of San Marcos
1 Civic Center Drive
San Marcos, CA 92069

Attention: Jerry Backoff
Planning Director
City of San Marcos
1 Civic Center Drive
San Marcos, CA 92069

Attention: Terry Johnson
Mayor
City of Oceanside
300 N. Coast Highway
Oceanside, CA 92054

Attention: Esther C. Sanchez
Deputy Mayor
City of Oceanside
300 N. Coast Highway
Oceanside, CA 92054

Attention: Rocky Chavez
Council Member
City of Oceanside
300 N. Coast Highway
Oceanside, CA 92054

Attention: Jack Feller
Council Member
City of Oceanside
300 N. Coast Highway
Oceanside, CA 92054

Attention: Jan Sobel, CEO
Carlsbad Chamber of Commerce
Economic Enhancement Council
P.O. Box 1605
Carlsbad, CA 92008

Attention: Jerry Houser, Director
Palomar Community College –
Aeronautics Program
1140 West Mission Road
San Marcos, CA 92069

Attention: Sallyanne Rice
Federal Aviation Administration
Air Traffic Management
10530 Burned Oak Lane
Escondido, CA 92026

Attention: Nan Valerio
San Diego Association of Governments
401 B Street, Suite 800
First Interstate Plaza
San Diego, CA 92101

Attention: George McJimsey
Pinnacle Aviation
2016 Palomar Airport Road, Suite D
Carlsbad, CA 92008

Attention: Leo Mantas, CEO
Vista Chamber of Commerce
127 Main Street
Vista, CA 92084

Attention: David Hydegger, CEO
Oceanside Chamber of Commerce
928 North Coast Hwy
Oceanside, CA 92054

Attention: Keith Holt
Manager of Airport Policy
Aircraft Owners and Pilots Association
421 Aviation Way
Frederick, MD 21701

Attention: Cheryl Betyar, President
San Diego Association of Realtors
CAR Region 24
P.O. Box 85586
San Diego, CA 92186-5586

Attention: Jim Wood
Council Member
City of Oceanside
300 N. Coast Highway
Oceanside, CA 92054

Attention: Ron Rouse
Carlsbad Chamber of Commerce
Economic Enhancement Council
P.O. Box 1605
Carlsbad, CA 92008

Attention: Cheryl Ernst
Superintendent
Carlsbad Unified School District
801 Pine Avenue
Carlsbad, CA 92008

Attention: Jim Braithwaite
Federal Aviation Administration
Air Traffic Management
9175 Kearny Villa Road
San Diego, CA 92126

Attention: Dick Dyer, Director
CALTRANS Department of
Transportation
Aeronautics
P.O. Box 94273-0001
Sacramento, CA 95814-5605

Attention: Floyd Best
Airport Manager
McClellan Palomar Airport
2198 Palomar Airport Road
Carlsbad, CA 92008-4814

Attention: Sherry Hamilton, CEO
Encinitas Chamber of Commerce
138 Encinitas Blvd.
Encinitas, CA 92024

Attention: Bob Hall
Air Line Pilots Association
535 Herndon Parkway
Herndon, VA 20170

Attention: Sylvia Gustafson
San Diego County Airport Division
1960 Joe Crosson Drive
El Cajon, CA 92020

Attention: Shaun Monegan, Manager
Jet Source Charter, Inc.
2036 Palomar Airport Rd.
Carlsbad, CA 92008

Attention: Gerald Gilbert
Planning Director
City of Oceanside
300 N. Coast Highway
Oceanside, CA 92054

Attention: Mitch Mitchell
Carlsbad Chamber of Commerce
Economic Enhancement Council
P.O. Box 1605
Carlsbad, CA 92008

Attention: Jerome Pendzick
Federal Aviation Administration
Flight Standards District Office
8525 Gibbs Drive
San Diego, CA 92123

Attention: Linda O'Brien
Federal Aviation Administration
Socal Tracon
9175 Kearny Villa Road
San Diego, CA 92126

Attention: Tom Harnish
Barnstorming Adventures
6743 Montia Court
Carlsbad, CA 92009

Attention: Ted Anasis
Airport Planner
San Diego Regional Airport Authority
P.O. Box 82776
San Diego, CA 92138-2776

Attention: Juanita Hayes, CEO
San Marcos Chamber of Commerce
939 Grand Avenue
San Marcos, CA 92069

Attention: Jeff Gilley
Manager
National Business Aircraft Association
1200 18th Street, NW Suite 400
Washington D.C. 20036-2527

Attention: Brent J. Bohiken, President
San Diego County Commercial
Association of Realtors - CAR Region
20
1250 6th Avenue, #211
San Diego, CA 92101

Attention: Martha Greenlaw, Manager
Magellan Aviation
2006 Palomar Airport Rd.
Carlsbad, CA 92008

Attention: Henry Schubach, Manager
Schubach Aviation
2006 Palomar Airport Rd.
Carlsbad, CA 92008

Attention: Ginna Reyes, Manager
Western Flight
2210 Palomar Airport Rd.
Carlsbad, CA 92008

Attention: Scott Walker, President
Elite Jet
5962 La Place Ct.
Carlsbad, CA 92008

Attention: Donald Graham
Station Manager
United Express (Skywest)
2198 Palomar Airport Rd.
Carlsbad, CA 92008

Attention: Ken Zirda
Flying Samaritan Group
5208 Sand Dollar Ct.
San Diego, CA 92130

Attention: Lason Brown
President
Exclusive Charter Services
3753 John Montgomery Drive
San Diego, CA 92123

Attention: Sandy Detherage
Air Traffic Controller, Palomar Airport
2200 Palomar Airport Road
Carlsbad, CA 92008

Attention: Treena Smith, Manager
America West Express, Commuter Terminal
2198 Palomar Airport Road
Carlsbad, CA 92008

Attention: Robert Wolter
Civic Helicopters
2192-H Palomar Airport Road
Carlsbad, CA 92008

Attention: Mel Holmes, President
Grey Eagle Aviation
2186 Palomar Airport Road
Carlsbad, CA 92008

Attention: George McJimsey, President
Pinnacle Aviation Academy
2016 Palomar Airport Road
Carlsbad, CA 92008

Attention: Theresa Terrel, Vice President
Orion Aviation Inc.
2138-B Palomar Airport Road
Carlsbad, CA 92008

Attention: Misty Pawlowski
Operations Supervisor
Eastridge Group
5650 El Camino Real, Suite 101
Carlsbad, CA 92008

Attention: Jack Williams
Aviation
6714 Bamboury Place
Carlsbad, CA 92009

Attention: Wayne Dauber
South Seas
P.O. Box 5035
Rancho Santa Fe, CA 92067

Attention: Greg Hein
Aviation Resource Group
29928 Lilac Road
Valley Center, CA 92082

Attention: Nelson Carrick
Palomar Fuels
2006 Palomar Airport Road
Carlsbad, CA 92008

Attention: Gordon Sieler, Resident
5082 Dassia Way
Oceanside, CA 92056-7400

Attention: Leslie Jantz, Resident
1207 Countrywood Lane
Vista, CA 92083

Attention: Ron Sea, Resident
6423 Merlin Drive
Carlsbad, CA 92009

Attention: Brad Lund, Resident
6708 Lonicera
Carlsbad, CA 92008

Attention: Tom Foster, Resident
2289 Bryant Drive
Carlsbad, CA 92008

Attention: Francis Bonner, Resident
6503 Friendly Place
Carlsbad, CA 92009

Attention: Robert Pat, Resident
2770 Sunny Creek Road
Carlsbad, CA 92008

Attention: Terence A. Davies, Resident
1021 Goldeneye View
Carlsbad, CA 92009

Attention: James R. Wright
Ocean Hills Country Club
6017 Piros Way
Oceanside, CA 92056-7266

Attention: Lee Baldridge, Resident
1139 Cabot Court
Vista, CA 92083

Attention: Principal
Aviara Oaks Elementary School
6900 Ambrosia Lane
Carlsbad, CA 92008

Attention: Principal
Aviara Oaks Middle School
6880 Ambrosia Lane
Carlsbad, CA 92008

Attention: Principal
Buena Vista Elementary School
1330 Buena Vista Way
Carlsbad, CA 92008

Attention: Principal
Carlsbad High School
3557 Monroe St.
Carlsbad, CA 92008

Attention: Superintendent
Carlsbad School District
801 Pine Avenue
Carlsbad, CA 92008

Attention: Superintendent
Carlsbad Unified School District
3556 Monroe Street
Carlsbad, CA 92008

Attention: Principal
Carrillo Elementary School
2875 Pointsettia Avenue
Carlsbad, CA 92008

Attention: Principal
Hope Elementary School
3010 Tamarack Avenue
Carlsbad, CA 92008

Attention: Principal
Jefferson Elementary School
3743 Jefferson Street
Carlsbad, CA 92008

Attention: Principal
Kelly Elementary School
4885 Kelly Drive
Carlsbad, CA 92008

Attention: Principal
La Costa Heights Elementary School
3035 Levante Street
Carlsbad, CA 92008

Attention: Principal
Magnolia Elementary School
1905 Magnolia Avenue
Carlsbad, CA 92008

Attention: Principal
Pacific Rim Elementary School
1100 Camino De Las Ondas
Carlsbad, CA 92008

Attention: Principal
Pine Elementary School
3333 Harding Street
Carlsbad, CA 92008

Attention: Principal
Valley Middle School
1645 Magnolia Avenue
Carlsbad, CA 92008

Attention: Principal
Capri Elementary School
941 Capri Road
Encinitas, CA 92024

Attention: Principal
Diegueno Junior High School
2150 Village Park Way
Encinitas, CA 92024

Attention: Superintendent
Encinitas School District
101 S. Rancho Santa Fe Road
Encinitas, CA 92024

Attention: Principal
Oak Crest Junior High School
675 Balour Drive
Encinitas, CA 92024

Attention: Principal
Pacific View Elementary School
608 3rd Street
Encinitas, CA 92024

Attention: Principal
Park Dale Lane Elementary School
2050 Park Dale Lane
Encinitas, CA 92024

Attention: Principal
Paul Ecke Central Elementary School
185 Union Street
Encinitas, CA 92024

Attention: Principal
San Dieguito High School
800 Santa Fe Drive
Encinitas, CA 92024

Attention: Superintendent
San Dieguito School District
710 Encinitas Blvd.
Encinitas, CA 92024

Attention: Principal
Sunset High School
684 Requeza Street
Encinitas, CA 92024

Attention: Principal
Alamosa Park Elementary School
5130 Alamosa Park Drive
Oceanside, CA 92057

Attention: Principal
Del Rio Elementary School
5207 E Parker Street
Oceanside, CA 92057

Attention: Principal
Ditmar Elementary School
1125 S Ditmar Street
Oceanside, CA 92057

Attention: Principal
E. G. Garrison Elementary School
333 Garrison Street
Oceanside, CA 92057

Attention: Principal
El Camino High School
400 Rancho Del Oro Drive
Oceanside, CA 92057

Attention: Principal
Empresa Elementary School
4850 Avenida Empressa
Oceanside, CA 92057

Attention: Principal
Futures Tutoring
2204 S El Camino Real, #310
Oceanside, CA 92057

Attention: Principal
Ivey Ranch Elementary School
4275 Via Rancho Road
Oceanside, CA 92057

Attention: Principal
Jefferson Middle School
823 Acacia Avenue
Oceanside, CA 92057

Attention: Principal
King Middle School
1290 Ivey Ranch Road
Oceanside, CA 92057

Attention: Principal
Lake Elementary School
4950 Lake Blvd.
Oceanside, CA 92057

Attention: Principal
Laurel Elementary School
1410 Laurel Street
Oceanside, CA 92057

Attention: Principal
Libby Elementary School
423 W. Redondo Drive
Oceanside, CA 92057

Attention: Principal
Lincoln Middle School
2000 California Street
Oceanside, CA 92057

Attention: Principal
Madison Middle School
4930 Lake Blvd.
Oceanside, CA 92057

Attention: Principal
Mary Fay Pendleton Elementary School
110 Marine Drive
Oceanside, CA 92057

Attention: Principal
Mc Auliffe Elementary School
3701 Kelton Drive
Oceanside, CA 92057

Attention: Principal
Mission Elementary School
2100 Mission Avenue
Oceanside, CA 92057

Attention: Principal
Mission Meadows Elementary School
5657 Spur Avenue
Oceanside, CA 92057

Attention: Principal
North Terrace Elementary School
940 Capistrano Drive
Oceanside, CA 92057

Attention: Principal
Ocean Shores High School
3131 Oceanside Blvd
Oceanside, CA 92057

Attention: Principal
Oceanside High School
100 S. Horne Street
Oceanside, CA 92057

Attention: Superintendent
Oceanside Unified School District
2111 Mission Avenue
Oceanside, CA 92057

Attention: Superintendent
Oceanside Unified School District
2070 Mission Avenue
Oceanside, CA 92057

Attention: Principal
Pacific View Charter School
3355 Mission Avenue, #139
Oceanside, CA 92057

Attention: Principal
Pacifica Elementary School
4991 Macario Drive
Oceanside, CA 92057

Attention: Principal
Palmquist Elementary School
1999 California Street
Oceanside, CA 92057

Attention: Principal
Reynolds Elementary School
4575 Douglas Drive
Oceanside, CA 92057

Attention: Principal
Roosevelt Middle School
850 Sagewood Drive
Oceanside, CA 92057

Attention: Principal
ROTC Oceanside High School
1st and Horne
Oceanside, CA 92057

Attention: Principal
San Luis Rey Elementary School
3535 Hacienda Drive
Oceanside, CA 92057

Attention: Principal
San Rafael Elementary School
1616 San Rafael Drive
Oceanside, CA 92057

Attention: Principal
Santa Margarita Elementary School
1 Carnes Road
Oceanside, CA 92057

Attention: Principal
South Oceanside Elementary School
1806 S. Horne Street
Oceanside, CA 92057

Attention: Principal
Stuart Mesa Elementary School
100 Yamanako Way
Oceanside, CA 92057

Attention: Principal
Discovery Elementary School
730 Applewilde Drive
San Marcos, CA 92069

Attention: Principal
Foothills High School
158 Cassou Road
San Marcos, CA 92069

Attention: Principal
Knob Hill Elementary School
1825 Knob Hill Road
San Marcos, CA 92069

Attention: Principal
Paloma Elementary School
660 Camino Magnifico
San Marcos, CA 92069

Attention: Principal
Richland Elementary School
910 Borden Road
San Marcos, CA 92069

Attention: Principal
San Marcos Academy
300 W. San Marcos Blvd.
San Marcos, CA 92069

Attention: Principal
San Marcos High School
1615 W. San Marcos Blvd.
San Marcos, CA 92069

Attention: Principal
San Marcos Middle School
650 W. Mission Road
San Marcos, CA 92069

Attention: Superintendent
San Marcos School District
1 Civic Center Drive, #300
San Marcos, CA 92069

Attention: Principal
Twin Oaks Elementary School
1 Cassou Road
San Marcos, CA 92069

Attention: Principal
Twin Oaks High School
158 Cassou Road
San Marcos, CA 92069

Attention: Principal
Woodland Park Middle School
1270 Rock Springs Road
San Marcos, CA 92069

Attention: Principal
Alta Vista Continuation High
1575 Bonair Road
Vista, CA 92084

Attention: Principal
Beaumont Elementary School
550 Beaumont Drive
Vista, CA 92084

Attention: Principal
Bobier Elementary School
220 W. Bobier Drive
Vista, CA 92084

Attention: Principal
Breeze Hill Elementary School
1111 Melrose Way
Vista, CA 92084

Attention: Principal
California Avenue School
215 W. California Avenue
Vista, CA 92084

Attention: Principal
Casita Elementary School
260 Cedar Road
Vista, CA 92084

Attention: Principal
Crestview Elementary School
510 Sunset Drive
Vista, CA 92084

Attention: Principal
Grapevine Elementary School
630 Grapevine Road
Vista, CA 92084

Attention: Principal
Guajome Park Academy
2000 N. Santa Fe Aveune
Vista, CA 92084

Attention: Principal
Lincoln Middle School
151 Escondido Avenue
Vista, CA 92084

Attention: Principal
Monte Vista Elementary School
1720 Monte Vista Drive
Vista, CA 92084

Attention: Principal
Olive Elementary School
836 Olive Avenue
Vista, CA 92084

Attention: Principal
Palomar High School
1401 Palomar Place
Vista, CA 92084

Attention: Principal
Rancho Buena Vista High School
1601 Longhorn Drive
Vista, CA 92084

Attention: Principal
Sierra Vista High School
325 E. Bobier Drive
Vista, CA 92084

Attention: Principal
Vista High School
1 Panther Way
Vista, CA 92084

Attention: Superintendent
Vista Unified School District
1234 Arcadia Avenue
Vista, CA 92084

Attention: Principal
Washington Middle School
740 Olive Avenue
Vista, CA 92084

Attention: Library Manager
Carlsbad City Library
1775 Dove Lane
Carlsbad, CA 92009

Attention: Library Manager
Carlsbad Library
3333 Harding St., #11
Carlsbad, CA 92009

Attention: Library Manager
Oceanside Mission Branch Library
3861 Mission Ave., #B1
Oceanside, CA 92054

B. Butler
3467 Don Lorenzo
Carlsbad, CA 92008

Diane Warner
3484 Don Alberto Drive
Carlsbad, CA 92008

Joe Corwin
3479 Don Alberto Drive
Carlsbad, CA 92008

Mary Fischer
5228 Don Valdez Drive
Carlsbad, CA 92008

Nancy Lee Rickert
5336 Don Ricardo Drive
Carlsbad, CA 92008

Garry Foster
3553 Don Carlos Drive
Carlsbad, CA 92008

Joyce F. Boyle
3441 Don Ortega Drive
Carlsbad, CA 92008

Reed Harris
5268 Don Valdez Drive
Carlsbad, CA 92008

Donald L Willson
3427 Don Alvarez Drive
Carlsbad, CA 92008

Joe H. & Adele F. Glasson
3461 Don Carlos Drive
Carlsbad, CA 92008

W.A. & Jean Heifrich
5376 Don Ricardo Drive
Carlsbad, CA 92008

Mary Anna Williams
3450 Don Ortega Drive
Carlsbad, CA 92008

Bunny Thurman
3496 Don Alberto Drive
Carlsbad, CA 92008

Olive Lieberman
3346 Don Quixote Drive
Carlsbad, CA 92008

Mr. & Mrs. Melvin Curtis
3450 Don Jose Drive
Carlsbad, CA 92008

Jean M. Simmons
3473 Don Parfirio Drive
Carlsbad, CA 92008

Louis and Hellen Carrara
3450 Don Carlos Drive
Carlsbad, CA 92008

Mildred W. and James T. Danley
3302 Don Diablo Drive
Carlsbad, CA 92008

Gretchen Merritt
3434 Don Carlos Drive
Carlsbad, CA 92008

Marilyn D. Knutson
5255 Don Ricardo Drive
Carlsbad, CA 92008

Hildegard S. Smith
5362 Don Miguel Drive
Carlsbad, CA 92008

Rita Auer
3301 Don Pablo Drive
Carlsbad, CA 92008

Mr. & Mrs. Julian P. Phillips
5321 Don Ricardo Drive
Carlsbad, CA 92008

Kenneth B. Smith
5362 Don Miguel Drive
Carlsbad, CA 92008

Babette W. Gilbert
3555 Don Juan Drive
Carlsbad, CA 92008

George Hill
5348 Don Ricardo Drive
Carlsbad, CA 92008

Irwin Goldstein
5135 Don Ricardo Drive
Carlsbad, CA 92008

Floyd M. Schenk
3467 Don Ortega Drive, #376
Carlsbad, CA 92008

David C. & Dolores M. Burwell
3423 Don Jose Drive
Carlsbad, CA 92008

E.C. Robinson
5117 Don Rodolfo Drive
Carlsbad, CA 92008

Minnie Thurman
3496 Don Alberto Drive
Carlsbad, CA 92008

Bill Arnold
3432 Don Ortega Drive
Carlsbad, CA 92008

Bruce Enigenburg
5163 Don Mata Drive
Carlsbad, CA 92008

Lora Olt
5209 Don Valdez Drive
Carlsbad, CA 92008

John Bertoldi
2253 Masters Road
Carlsbad, CA 92008

Dorothy Ricci
3457 Don Carlos Drive
Carlsbad, CA 92108

Alan Cruise, President,
Oceanside Airport Association
P.O. Box 172
Oceanside, CA 92049-0172

Greg Chornak
6400 El Pato Court
Carlsbad, CA 92009-4309

Clarence Magnusen
4683 Majorca Way
Oceanside, CA 92056

Attention: Library Manager
Oceanside City Library
321 N. Nevada St.
Oceanside, CA 92054

Attention: Library Manager
Oceanside Public Library
330 N. Coast Highway
Oceanside, CA 92054

Attention: Library Manager
Encinitas Public Library
540 Cornish Drive
Encinitas, CA 92024

Sign In Sheets

McClellan-Palomar Airport

Part 150 Noise Compatibility Study

Public Meeting #2 Sign in Sheet

Monday, March 29, 2004

Name (Please Print)	Address	Phone	E-Mail	Member of an HOA? If yes, please note name and contact information
Terry Kemp	6097 Paseo Carreta	760-431-9755		Rancho Carrillo
Andy Hansen	5122 Via Madrid	8025102	ahansen@lusaroi.com	N/A
Ron Cozad	3918 Valle Del Sol Bonsall	760-716-1025	cozadlaw@sbcglobal.net (Contact me)	
Pat Bauer	4961 Poseidon Way Oceanside	760-940-9431	pjb@aaahawk.com	Ocean Hills Country Club
RJ Palmer	"	"		"
Robert Mats	6748 Lemon Leaf Dr.	760-804-1799	RCMRG@AOL.COM	Mariners Point
Harvey King	1564 Summit Ave Carlsbad 92007	7607533335	SKYKING@PACBELL.NET	
Rick Baker	7789 Paseo La Julia	760.522.3950	RBaker68X@hotmail.com	yes "On The Park"

McClellan-Palomar Airport
Part 150 Noise Compatibility Study
Public Meeting #2 Sign in Sheet
Monday, March 29, 2004

Name (Please Print)	Address	Phone	E-Mail	Member of an HOA? If yes, please note name and contact information
Roberta Feher	1166 CALLE DE LOS Serranos, San Marcos, CA 92069	760-761-3614		
Dewey Altenhofen	6434 Torreyanna Circle, Carlsbad 92009	760-438-2370		
JIM MACKY	1671 HAWKVIEW DR ENCINITAS CA 92024	760-505-6012		
LARRY RODEKOHR	1283 OCEAN BREEZE ST SAN MARCOS, CA 92069	760 597 0005		
Wayne Thomas	43188 Bassano Drive Temecula CA 92592	(909) 303-9842		
TIM HUTTER	939 BEGONIA CT CARLSBAD CA 92009	760-510-2289	timhutter@sbcglobal.net	NO
Frederic Koolhof	3425 Don Carlos Dr., Carlsbad CA	(760) 438 3364		Rancho Carlsbad Country club Estates.
Howard Williams	1443 Alga Ct Vista 92081	760-598-7225		Lido & Shadowridge HOA

McClellan-Palomar Airport

Part 150 Noise Compatibility Study

Public Meeting #2 Sign in Sheet

Monday, March 29, 2004

Name (Please Print)	Address	Phone	E-Mail	Member of an HOA? If yes, please note name and contact information
CODY OSBURN	3740 CUMETTE WY SAN MARCOS	729.3518		
PAUL CHAMPLIN	1161 CALLE DE LOS SERRANOS		YOPKEY@ADELPHIA.NET	
KATHY NORRIS	6430 TORREYANNA CIRCLE	431-7655		SHOREPOINTE HOA
Diane Martin	981 Hermes Ave Encinitas 92024	634-2905	rdcmartin@yahoo.com	
C. WAYNE DAUBER	28117 PAR VIEW CT ESCONDIDO, CA 92026	760-749-6085	60flyguy@cox.net	
Mike Grim	1635 Faraday Av.	760-602-4623	mgrim@ci.carlsbad.ca.us	
Greg Chornak	6400 EL Pato Court	760 586-3466	gr656nak@yahoo.com	
Martha Greenlaw	442 Rancho La Mirada	760-438-7603	magellanav@sbcglobal.net	

McClellan-Palomar Airport
Part 150 Noise Compatibility Study
Public Meeting #2 Sign in Sheet
Monday, March 29, 2004

Name (Please Print)	Address	Phone	E-Mail	Member of an HOA? If yes, please note name and contact information
DON BRANDT	4722 ARGOSY LN CB			
HERB ANDERSEN	4956 PYLOS WAY OCEANSIDE			
CANDISE TU	127 CALLE HUERTO			
[illegible]	6377 Ebb Tide			
Michael Gibbs	26521 Jacinto Drive Mission Viejo CA	949-364-8964		
PETE OLSON	4573-40 COVE DR., CARLSBAD			
Kurt Mihalco	2934 Dorset, CARLSBAD			
DAVID LOWTHER	609 WALM DR, OCEANSIDE CA 92054	760-435-1440	DAVIDL@WWDB.ORG	WANIS HOA

Attendee List

March 29, 2004 Second Public Meeting Attendees

Name	Organization	Address	City	State	Zip	Phone	E-Mail	HOA
Ginna Reyes	PAAC	2210 Palomar Airport Rd.	Carlsbad	CA		760-438-6800	ginna@westernflight.com	
Martha Greenlaw		2006 Palomar Airport Rd.	Carlsbad	CA		760-438-7603	magellanav@sbcglobal.net	
Tim Hutter	PAAC	939 Begonia Ct.	Carlsbad	CA		760-431-9151	thutter@mac.com	
Olivier Brackett		1537 Spring Creek Lane		CA		760-806-8258	bracoe@cox.net	Yes
Rick Baker		7789 Paseo La Jolla		CA		760-635-3661	RBaker68x@hotmail.com	Yes
Janet & Bruce Abrams		1019 Turnstone Rd.		CA		760-804-0594	brucea@nethere.com	Seabright
Jon & Jean Broome		1930-33 W. San Marcos Blvd.		CA		760-727-1790		Palomar Estates West
Sherry Miller	Acting Airports Dire	County of San Diego	San Diego	CA				
David Key		6025 Piros Way	Oceanside	CA	92056	760-726-4032	dlkey@mindspring.com	Ocean Hills Country Club
Chris & Ken Smoczynski		1414 Coral Way	Carlsbad	CA	92009	760-602-4220	chris_ENHLS@yahoo.com	
Rol & Mary Agnes Madden		245 Chinquapin Ave.	Carlsbad	CA	92008	760-434-1545	aggiemad@yahoo.com	
Colleen & Andrew Boud		1415 Coral Way	Carlsbad	CA	92009	760-476-9837		
Howard Williams	PAAC	1443 Alqa Court	Vista	CA		760-598-7725		Lido & Shadowridge
Nan Valerio	SANDAG	401 B Street, #800	San Diego	CA	92101	619-595-5365	nva@sandag.org	
Bob Billmeyer		1566 Maritime Dr.	Carlsbad	CA	92009	760-476-0074		Cantamar (BOD member)
John Lonley		P.O. Box 1988	Vista	CA	92085	760-639-6100		
K. Kirk		6836 Briarwood		CA		760-602-0506		
R. Griffiths	Airport Staff	2198 Palomar Airport Rd.	Carlsbad	CA		760-431-4646		
Terry Davies		1021 Goldeneye View				760-918-9536		
J. Ahen		7304 Melodia Terrace	Carlsbad	CA		760-918-0051		
Jack Jaffe		5144 Don Rodolfo Dr.				760-931-8002	JacJaf@cs.com	Rancho Carlsbad
Renata Breisacker-Mulry		7010 Nutmeg Way		CA		760-929-0609	bexenpress@compuserve.	Pacifica (contact)
Brenda Sonneborn		5073 Nighthawk Way	Oceanside	CA		760-631-3807	mymiata@cox.net	Ocean Terrace & Spinnaker F
Palmer Bochow		2333 Masters Road		CA		760-603-0933		
Tom Foster		2289 Bryant Dr.	Carlsbad	CA	92008	760-438-0683		Camino Hills 760-438-0683
John Christensen		200 N. El Camino Real	Oceanside	CA	92054	760-754-7079		
Ramona Finnila	Mayor Pro Tem		Carlsbad	CA				
Raam Wong	Coast News	740 Nardo						
Rassoul Ketabian		6735 Follette St.	Carlsbad	CA	92009	760-476-1902	rketabian@aol.com	
Steve Fiedler	URS	1815 Glasgow Ave.	Cardiff	CA	92007			
Ron Sea		2918 Austin Terrace	Carlsbad	CA		760-434-4359	rgsea@aol.com	Pacific View Estates
Mike Grim	Senior Planner	City of Carlsbad	Carlsbad	CA	92008	760-602-4623	mgrim@ci.carlsbad.ca.us	
Gordon Sieler		5082 Dassia Way	Oceanside	CA	92056	760-945-9622	gmsieler@cox.net	Ocean Hills Country Club
James R. Wright		6017 Piros Way	Oceanside	CA	92056		jrwright@adnc.com	Ocean Hills Country Club
Hala Aryan	San Diego Union-T	5130 Avenida Encinas	Carlsbad	CA	92008		hala.aryan@uniontrib.com	
John Bertoldi		2253 Masters Road		CA		760-929-9759		Evans Point
Ellen Rice		850 Bluebell Court		CA		760-931-0389		Yes
Mary Clarke		1529 El Paseo Dr.	ake San Marc	CA		760-510-9684		Lions Gate
E.W. "Bill" Dominguez		4378 Adams St.	Carlsbad	CA		760-434-4931		

Presentation

Welcome to the 2nd Part 150 meeting!

- Open House begins at 6 pm
- Presentation at 6:30 pm
- Presentation Board Review & Break at 7:20 pm
- Your Comments on draft Noise Exposure Maps and Input on Noise Compatibility Program beginning at 7:45 pm

URS

McClellan-Palomar Airport Part 150 Noise Compatibility Study Update

2nd Public Meeting – Draft Noise Exposure Maps
March 29, 2004

URS

Your Comments on NEMs and Input on NCP

- Tonight
  - Verbal
  - Public Input form
- Prior to April 14, 2004:
  - Public Input form
  - Letter to URS Corporation
  - Fax 619-293-7920 (Attention Jeff Fuller)
  - Email sdo@urscorp.com
- www.co.san-diego.ca.us/dpw/airports

"I recommend that…."

end

URS

Project Team

URS Corporation
- Deborah Murphy – Project Director
- Jeff Fuller – Project Manager
- Joe Czech – Project Engineer

- Katz & Associates – Public Involvement
  - Patricia Tennyson
  - Jennifer Dill

URS

Presentation Outline

- Study Definition, Goals and Requirements
- Process and Progress
- Analysis and Noise Exposure Maps
- Schedule for Remainder of Study Update

URS

What is a Part 150 Study?

A Part 150 Study is a voluntary effort by an airport to achieve the greatest possible compatibility between an airport and its surrounding communities.

URS

Why conduct a Part 150 Study?

- To help facilitate the best possible relationship between the airport and surrounding communities
- Update the previous study (14 years old)
- Utilize FAA funding to help implement a noise compatibility program

URS

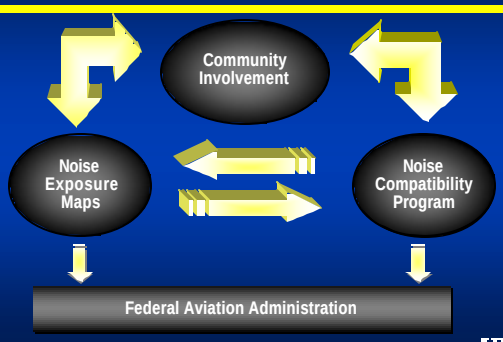
McClellan-Palomar Part 150 Goals

Facilitate the best possible relationship between the airport and surrounding communities by:

- Reducing aircraft noise exposure
- Achieving land use compatibility through corrective and preventive mitigation measures

URS

Part 150 Requirements



URS

Process and Progress

- Conducted Kick-off Meeting (March 2003)
- Airport website and monthly PAAC meetings
- Data Collection and Analysis (ongoing)
- Forecast Approval (November 2003)
- Develop draft Noise Exposure Maps (NEM)
- NEM Review and Acceptance
- Develop Noise Compatibility Program (NCP)
- Prepare Draft NCP
- NCP Review and Approval

YOU ARE HERE

www.co.san-diego.ca.us/dpw/airports

URS

Representative Flight Operations (CY2002)

- Contacted Operators/Tenants
- Analyzed Tower counts & GEMS data

Category	Total	Percentage
Air Carrier	-	0%
Air Taxi	*13,140*	6%
GA IFR	*45,410*	22%
GA VFR	*143,641*	71%
Military	*1,964*	1%
Total	**204,155**	100%

URS

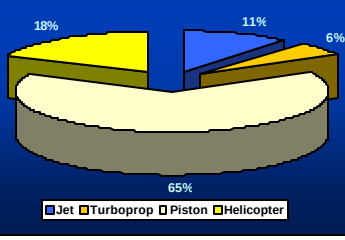
Modeled Average Daily Flight Operations for CY2004

Operation Type	Period	Modeled Average Daily Flight Operations for 2004				
		Jet	Turboprop	Piston	Helicopter	Total
Departure	Daytime	29.3	11.7	118.9	23.1	183.0
	Evening	1.3	2.2	5.1	1.0	9.6
	Nighttime	0.9	0.7	3.8	0.7	6.1
Arrival	Daytime	28.3	11.6	115.1	22.4	177.4
	Evening	2.3	1.9	9.0	1.7	14.9
	Nighttime	1.0	1.1	3.8	0.7	6.6
Missed Approach (Military only)	Daytime	0.4	0.4	0.0	1.4	2.2
	Evening	0.2	0.2	0.0	0.6	1.0
	Nighttime	0.0	0.0	0.0	0.0	0.0
Training (Touch and Go)	Daytime	0.0	0.8	100.3	43.0	144.1
	Evening	0.0	0.4	7.7	3.3	11.4
	Nighttime	0.0	0.0	2.2	0.9	3.1
SUMMARY						
Departure		31.5	14.6	127.8	24.8	198.7
Arrival		31.6	14.6	127.9	24.8	198.9
Missed Approach		0.6	0.6	0.0	2.0	3.2
Training (Touch and Go)		0.0	1.2	110.2	47.2	158.6
Grand Total		63.7	31.0	365.9	98.8	559.4

Notes:
1) Daytime = 7am - 7pm; Evening = 7pm - 10pm; Nighttime = 10pm - 7am
2) Each Missed Approach counted as two operations
3) Each Touch and Go counted as two operations

URS

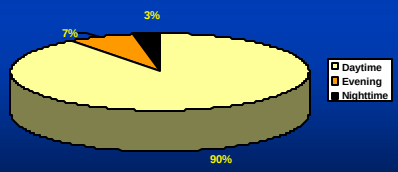
Fleet Mix for CY2004



URS

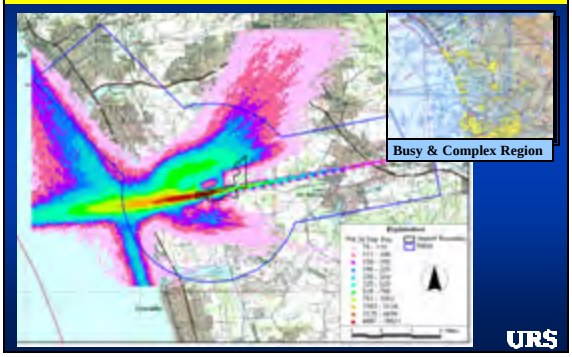
Runway Utilization by Period

Runway	Daytime	Evening	Nighttime	Overall
06	3%	3%	12%	3%
24	97%	97%	88%	97%
Total	100%	100%	100%	100%



URS

Flight Track Development & Utilization



URS

Modeled Departure Flight Tracks

URS

Modeled Arrival & Missed Approach Flight Tracks

URS

Modeled Training Flight Tracks

URS

Other Factors

- FAA-approved flight profiles
- Run-ups
  - Hold Short areas
  - Props
- Weather
  - 61° Fahrenheit
  - 71% RH
  - Wind: 212 deg at 4 kts
- Terrain

URS

Community Noise Equivalent Level (CNEL)

- Expressed in A-weighted decibels
- Accounts for noise from single specific aircraft type events
- Penalizes evening and nighttime events
- Utilizes annual average daily operations
- Contours of overall aircraft sound exposure
- Specified by and consistent with California Code of Regulations Titles 21 and 24

URS

Draft Noise Exposure Map for 2004

CNEL (dBA)	Residential Population*	Housing Units
60-64	217	78
65-69	0	0
70-74	0	0
Within 75	0	0
Within 65 dB CNEL	0	0

* based on SANDAG data for 2005

URS

Comparison with 1990

CNEL (dBA)	Residential Population*		Housing Units*	
	1989	2004	1989	2004
60-64	270	217	101	78
65-69	0	0	0	0
70-74	0	0	0	0
Within 75	0	0	0	0
Within 65 dB CNEL	0	0	0	0

* based on SANDAG data for 2005

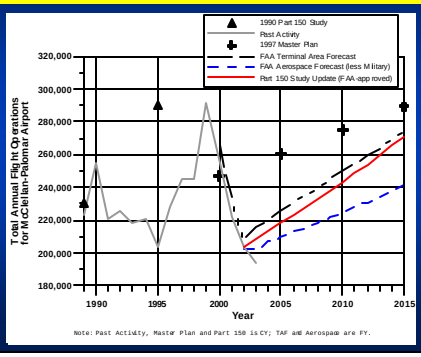
URS

Forecasting Flight Operations

- Recent Events
- Forecast Methods
  - Trend
  - Market Share
  - Professional Judgment
  - Separate Commercial and General Aviation
- FAA Approval

URS

Forecast Comparison



URS

Fleet Mix Forecast Traits

- Commercial
  - No changes documented
  - Runway length constraint
- General Aviation
  - No changes for fixed-wing fleet
  - Minor changes in helicopter fleet
- Military
  - No changes

URS

Draft Noise Exposure Map for 2009

CNEL (dBA)	Residential Population*	Housing Units
60-64	316	117
65-69	0	0
70-74	0	0
Within 75	0	0
Within 65 dB CNEL	0	0

* based on SANDAG data for 2010

URS

Draft Noise Exposure Map for 2014

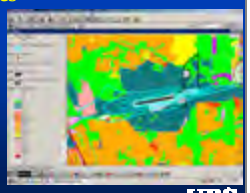
CNEL (dBA)	Residential Population*	Housing Units
60-64	382	143
65-69	0	0
70-74	0	0
Within 75	0	0
Within 65 dB CNEL	0	0

* based on SANDAG data for 2010

URS

Next Step: Develop Noise Compatibility Program

- Operational Noise Abatement Measures
  - Review Existing Procedures
  - Identify Alternatives
- Land Use Mitigation Measures
  - Corrective
  - Preventive
- Program Management Measures
- Consider PAR 2000 Recommendations and the 1990 Part 150 Study



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Schedule

- Comments on NEMs – April 14, 2005
- NEM Report to FAA – May
- FAA estimated 60-day review period and Federal Register notice of compliance
- Draft NCP to PAAC – August
- FAA Preliminary Review of NCP – September
- Third Public Meeting (NCP review) – January 2005
- NCP to FAA – February 2005
- 180-Day FAA Formal Review Period

URS

Presentation Board Review & Break

- Please take a quick break and review the boards that are on display.

URS

Your Comments on NEMs and Input on NCP

- **Tonight**
  - Verbal
  - Public Input form
- **Prior to April 14, 2004:**
  - Public Input form
  - Letter to URS Corporation
  - Fax 619-293-7920 (Attention Jeff Fuller)
  - Email sdo@urscorp.com
- **www.co.san-diego.ca.us/dpw/airports**

"I recommend that…."

end

URS

Photos

Public Input
McClellan-Palomar Airport
Noise Compatibility Study

McClellan-Palomar Airport
Noise Compatibility Study
Public Meeting

WELCOME

WELCOME
McClellan-Palomar Airport
Noise Compatibility Study
Public Meeting
Open House 6 p.m.
Presentation 6:30 p.m.
Presentation Board Review & Brief 7:20 p.m.
Public Input 7:45 p.m.

WELCOME

2nd Public Meeting - Draft Noise Exposure Maps
March 29, 2004
URS

Your Comments on NEMs and Input on NCP
Tonight
Verbal
Public Input form
Prior to April 14, 2004:
Public Input form
Letter to URS Corporation
Fax 619-293-7920 (Attention Jeff Fuller)
Email
www.co.san-diego.ca.us/dpw/airports
"I recommend that…."
URS

URS

Summary of Meeting

MEETING SUMMARY

McClellan-Palomar Airport
FAR Part 150 Noise Compatibility Study Public Meeting #2

Date/Time: Monday, March 29, 2004, 6 to 9 p.m.

Location: City of Carlsbad, Faraday Center
1635 Faraday Avenue, Carlsbad, CA 92008

Facilitator: Patricia Tennyson

Number of public attendees: 32

Participants:

Ramona Finnila, Mayor Pro Tem of Carlsbad and Palomar Airport Advisory Committee Member, Chair
Jeff Fuller, Project Manager, URS
Deborah Murphy, Project Director, URS
Joe Czech, Project Engineer, URS
Beth Famiglietti, URS
Peter Drinkwater, McClellan-Palomar Airport
Floyd Best, Airport Manager, McClellan-Palomar Airport
Roger Griffiths, McClellan-Palomar Airport
Olivier Brackett, McClellan-Palomar Airport
Patricia Tennyson, Katz & Associates
Dior Brown, Katz & Associates
Jennifer Dill, Katz & Associates

Introductions and Meeting Agenda Review

P. Tennyson started the meeting with introductions, a review of the agenda and a mention of the aerial map at the sign-in table. Meeting attendees were encouraged to place a pin in the map corresponding to where they live so the project team is aware of the reach of aviation noise impacts. She also stated that the purpose of the meeting was to allow the attendees to review the noise exposure maps and provide comments accordingly. R. Finnila welcomed the public and made opening remarks that provided an overview of the study.

Presentation

J. Fuller, D. Murphy and J. Czech provided background on the study and the development of the noise exposure maps with a PowerPoint presentation, answering questions afterwards. Questions and comments were recorded by Katz & Associates for future consideration by the project team and are included below.

Questions/Comments

- Do the Noise Exposure Maps contain operating data from the airport? If so, can it be assumed that aircraft maintain the appropriate altitude?
- I hear the airplanes all the time and it is not bothersome.
- The older planes are the ones that make the most noise. How is McClellan-Palomar Airport addressing the flight patterns of older planes?
- Is there a document that states how noisy an aircraft can be?
- How often is Stage 3 checked?
- The homes that have noise complaints should advocate to add an addendum to the county's CLUP that precludes development in noise impacted areas.
- If the Cessna pilots throttle back on the downwind leg of the approach pattern, it would make a difference to residents.
- As a pilot, I am interested in how I can fly quietly.
- New airplanes make the same noise as older planes.
- The noise overlay is in a non-residential zone.
- Will runway 06 have the same noise footprint as runway 24, and will it impact those who live/work on the east side of the field?
- The NEMS do not reflect noise impacts on the east side of the airport.
- How does the McClellan-Palomar Airport Part 150 Study impact residential zoning?
- Is there any legal document that residents have to sign stating that they acknowledge they are living under the flight path?
- Please explain weighted averages of noise frequency and operations.
- The McClellan-Palomar Airport Part 150 Study is presenting two types of data which are not weighted averages, so the data cannot be compared.
- Did you collect two weeks of "strips" from the FAA? Is two weeks of data representative of airport use over time?
- In the California Airport Federal Land Use Handbook, chapter seven refers to 55 and 60 dB, but your charts only say 60.
- Are the noise operations data accurate?

- A major problem is with the helicopters; there is no control over them. They fly very low. Is there an altitude and flight pattern limit for helicopters?
- I suggest eliminating "touch and goes" and training flights. This will reduce daily activity and noise.
- According to all of the charts, Leucadia is not affected – but this is not true. Please make planes fly at higher altitudes.
- From a Civic/Pacific Helicopters owner: My suggestion is to identify the helicopters in violation and report them. I have not gotten a single complaint, but want to know if instructors or people who rent the helicopters are in violation.
- Air traffic has become intolerable in Vista during the past two years. I spend 95 percent of my waking hours hearing high pitched sounds. When I do complain, I am only told: "Sorry." I am seriously considering selling my home.
- The noise has increased since last year.
- The flight schools use the pattern over our subdivision quite often. I would like to see the flight schools regulated.
- The attendance at this meeting is quite low compared to last year, and I am concerned about how this meeting was advertised to the public.
- What are the Noise Control Officer's duties and accessibility?
- Flight pattern 24/06 is directly over our area, Aviara, and it is very noisy.
- There is constant noise in Leucadia. I only get 20 seconds of quiet between flights.
- This noise causes stress which causes health problems.
- When will curfews be addressed? I think we need a mandatory curfew for planes.
- The 65 dB line shown on the 1989 map is larger then the observed dB line. What percent of the airport is quieter than it was in 1990?
- The addition of 498 homes in the area is a concern. The cutout in the southeast corner has no regulation. What efforts has the city taken to gain control over the cutout area before these homes are built?
- Is the city requiring an avigation easement?
- I question the assertion that the airport is an asset to the community. I think the flights are a nuisance to the community.
- I think that the Part 150 study should look at quieter planes.

- What is the regulation for flight altitude, and what do you do when planes do not comply?
- If you know a plane's tail numbers, you can track it.
- The homeowners need to get organized.
- Recommendations regarding McClellan-Palomar Airport were made to the FAA previously. The community needs information on how many of those recommendations were accepted.

Conclusion

P. Tennyson concluded the meeting by informing attendees that project representatives would be available to discuss further questions for a short while until 9 p.m. She also urged those present to take public comment forms with them to fill out and send in, should they have more questions in the future.

Written Comments

McClellan- Palomar Airport
Part 150 Airport Noise Compatibility Study
Public Meeting # 2
Public Input Form

Please record your comments concerning the McClellan-Palomar Airport Part 150 Noise Compatibility Study on this form. Please include your name, address and telephone number. You may submit this form by:

1) placing it in the comment box at tonight's meeting
2) mailing it to Jeff Fuller, Manager, Noise and Vibration, URS Corporation
   1615 Murray Canyon Road Ste. 1000
   San Diego, CA 92108
3) faxing it to (619) 293-7920
4) e-mailing sdo@urscorp.com

All comments must be received no later than April 14, 2004.

Name: TOM FOSTER

Address: 2289 BRYANT DR. CARLSBAD, CA. 92008

E-mail:

Phone: 760 438 0683

Comments:

1- Since Palomar utilizes a non-standard traffic pattern, those of us to the north experience the fly over noise from the touch and go traffic.

2. Those on the south side get some touch and go traffic but their biggest concern is jet take off noise especially from the stage I jets.

3. Downwind traffic noise could be significantly reduced if the pilots would just throttle back to a safe minimum signal once they obtain their proper altitude.

4. All the time and money spent on this issue will change virtually nothing for downwind noise sufferers. Throttling back is cheap, cost effective and a superway to greatly enhance airport noise compatibility.

You may use the back of this sheet to record additional comments or attach additional paper.

(over)

5. Noise exposure maps don't include that area of touch and go flyovers which contributes the bulk of air traffic noise to homeowners.
6. Noise abatement procedures should be mandatory.
7. Prohibit flight training at Palomar.
8. Prohibit touch and go traffic.

McClellan- Palomar Airport
Part 150 Airport Noise Compatibility Study
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All comments must be received no later than April 14, 2004.

Name: Peggy Thompson

Address: peggythompson@novocon.net

E-mail: 1850 Lilac Ct (@ Manzanita)

Phone: 931-9506

Comments: Noise level has been ~~[illegible]~~ tolerable the past 3 months ± - but before that it would make my windows rattle on occasion + wake me up. I did a little research + believe it was the blue + white (medical) helicopter - (Sharp Memorial??) - they would fly very low - right over my house. Intolerable

You may use the back of this sheet to record additional comments or attach additional paper.

McClellan- Palomar Airport
Part 150 Airport Noise Compatibility Study
Public Meeting # 2
Public Input Forms

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4) e-mailing sdo@urscorp.com

All comments must be received no later than April 14, 2004.

Name: ROBERT GATES

Address: 6748 LEMON LEAF DRIVE, CARLSBAD

E-mail: RCGRG @ AOL. COM

Phone: 760-804-1799

Comments: IN YOUR ANALYSIS OF NOISE COMPATIBILITY, PLEASE CONSIDER EACH OF THE PAL 2000 RECOMMENDATIONS AND EITHER AGREE WITH EACH OR PROVIDE A REASON WHY IT IS NOT RECOMMENDED AS A PART OF THIS STUDY.

You may use the back of this sheet to record additional comments or attach additional paper.

McClellan- Palomar Airport
Part 150 Airport Noise Compatibility Study
Public Meeting # 2
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All comments must be received no later than April 14, 2004.

Name: Pat Bauer

Address: 4961 Poseidon Way - Oceanside

E-mail: pjb@aaahawk.com

Phone: 760-940-9431

Comments: ① planes aren't checked for sound - this needs to be done.
② This should be noted to someone buying a house - NOT that we are near an airport BUT how much traffic they can expect.
③ Eliminate schools touch & go's. - not right for residential areas!
④ Many complaints are not shown in the areas as shown on your charts. There is a disconnect between your "numbers" and reality

You may use the back of this sheet to record additional comments or attach additional paper.

McClellan- Palomar Airport
Part 150 Airport Noise Compatibility Study
Public Meeting # 2
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All comments must be received no later than April 14, 2004.

Name: Anita Dwyer

Address: 1756 Whitehall Rd. Encinitas, Ca 92024

E-mail: anita11@cox.net

Phone: 760-436-5446

Comments: None of the graphs, charts or drawings included where we live, yet we are unbelievably impacted by noise from low-flying aircraft. We are daily subjected to small planes & tourist planes (the hi-wing based at Palomar) buzzing our neighborhood & the beach in front of us. But the greatest offenders are the helicopters which cross directly over us 15 to 20 times a day, some as low as 250 feet. They have shaken the dishes on my table at times & make it impossible to enjoy sitting on my patio. Why aren't they directed to fly out over the ocean like the military helicopters do? And why are they allowed to fly so low? Why aren't they fined? Who also to be enforcement of the rules they're supposed to follow? Please see attached for just a small sampling of our problem.

You may use the back of this sheet to record additional comments or attach additional paper.

Unacceptable low/noisy air traffic observed from 1756 Whitehall Rd, Encinitas, Ca.

3-27-04

*5:45 pm – small helicopter below roofline

3-28-04

From mid-morning on, constant criss-crossing of red biwing plane

1:05 pm - Dark colored single engine plane, south to north

Red bi-wing plane, south to north

*1:10 pm - White single engine plane, south to north, only 150 to 200'feet about beach/water at waterline

1:16 pm - Something very loud, couldn't see because of roofline

*2:05 pm - Blue/white helicopter, medium sized, south to North. Very Low, immediately overhead. 300-350 feet

2:09 pm – Blue/white helicopter, medium sized, north to south.

3:23 pm – Red biplane, south to north

3:53 White single engine plane, south to north

3-29-04

*7:55 am – large white helicopter with light blue horizontal stripe. Directly overhead. Very low. 300-350 feet

1:36 pm – white and dark blue or black helicopter – south to north.

I wasn't at home for most of the time during the above three days, and the incidents listed above are only a smattering of the number of low-flying planes and helicopters that flew over us. On Sunday, 3-28-03, there were literally dozens of planes and helicopters which violated the 1000 foot rule above our community and the heavily-populated beach.

McClellan- Palomar Airport
Part 150 Airport Noise Compatibility Study
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All comments must be received no later than April 14, 2004.

Name: ANDREW & COLLEEN BOUD
Address: 1415 CORAL WAY, CARLSBAD, CA 92009
E-mail: andyboud@pacbell.net
Phone: 760-476-9837

Comments: We have lived at this address for almost four years. In the last year or so we have noticed more and more of the prop planes turning immediately after take off over our neighborhood, instead of climbing out towards the ocean and turning. In addition, over the last year helicopters are regularly taking off and flying low over the neighborhood and they make much more noise than the prop planes. Jets are sometimes taking off in the middle of the

You may use the back of this sheet to record additional comments or attach additional paper.

night despite the curfew. We have been woken up at 1:30 am and 4 a.m. several times.

We fly regularly out of the airport on United Express and they and America West, without exception, are hardly noticeable when they take off. I'm sure that all other pilots taking off from the airport can follow their example.

McClellan- Palomar Airport
Part 150 Airport Noise Compatibility Study
Public Meeting # 2
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4) e-mailing sdo@urscorp.com

All comments must be received no later than April 14, 2004.

Name: KENNETH J. SMOCZYNSKI
Address: 1414 CORAL WAY - CARLSBAD, CA
E-mail: SMOCZYN@ADELPHIA.NET
Phone: 760-602-4222

Comments: AS THIS AREA KEEP GETTING MORE RESIDENTIAL, PILOTS AT PALOMAR MUST BECOME GOOD NEIGHBORS: SOME SUGGESTIONS:

1 — DO NOT OVER-FLY HOUSES ON TAKE-OFF. GO TO THE OCEAN & TURN.

2 — LIMIT TOUCH & GO PRACTICING.

3 — QUIET HOURS, SAY 11:00 PM TO 6:00 AM

OBSERVING THESE WOULD BE A GOOD START TO LIMITING NOISE AS MORE & MORE HOUSES ARE BUILT. OTHERWISE ONLY MORE PROBLEMS CAN BE EXPECTED.

You may use the back of this sheet to record additional comments or attach additional paper.

ANITA DWYER
1756 WHITEHALL ROAD
ENCINITAS, CA. 92024

760 436-5446

via fax 619 293-7920– 3 pages total

April 7, 2004

Mr. Jeff Fuller, Manager, Noise and Vibration
URS Corporation
1615 Murray Canyon Road, Suite 1000
San Diego, Ca. 92108

Dear Mr. Fuller,

Last week after attending the public meeting on noise at Palomar Airport, I sent in a comment along with a list of a few of the planes which had violated the 1000 foot rule near or above my home that weekend, March 27-29-04.

This last weekend, April 2-4, 2004, it was more of the same, but far worse.
Lst Saturday there was scarcely five continuous minutes during the daylight hours when we were not inundated with aircraft noise from low-flying planes and helicopters. I guess because of the nice weather, there were large numbers of private planes, more so than helicopters, buzzing us as they went about their sightseeing. See attached details for some (certainly not all) of the ones that were below 1000 feet.

These people are continuously violating the law and subjecting us to unacceptable levels of noise. Who is in charge of enforcing these laws and why aren't they doing so? I would appreciate a response as to what your corporation can do to help, and also what can be done by our community to alleviate the situation.

Sincerely,

Anita Dwyer

Dwyer 89 2

Friday, 4-2-04

7:12 am – white single engine plane, north to south

8:25 am – sounded like single engine plane. Too low to see (behind roofline of two story house to west of me)

1:15 pm – single engine plane, white or light grey, north to south

1:20 pm - single engine plane, south to north.

1:25 pm – Bi-wing, south to north

Saturday, 4-3-04

8:50 am – white single engine plane, diagonally south to north (toward Palomar airport)

10:25 am – white single engine plane, north to south

10:26 am– white single engine plane, south to north

10:47 am – Dark grey or black helicopter, medium sized. Very low, 300-400 feet, over Tattenham and Parliament (street to west of Whitehall)

1:20 pm – large dark blue helicopter, fat single boom, twin tail, north to south,then south to north in large circle at approximately 500 feet

1:55 pm – white single engine plane , angle of northwest to southeast

1:56 pm - single engine plane, white with red wing tips – angle of southwest to northeast

2:00 pm White single engine plane, north to south, directly overhead

2:20 pm white single engine plane, north to south, directly overhead

2;25 pm White single plane, south to north, directly overhead (think it was same plane as previous one at 2:20 pm.)

2:27 pm – very small 'pusher-prop' and helicopter prop aircraft, north to south, very low

2:33 pm – White helicopter, single boom, south to north, over Highway 101 & Bishopsgate. 500 feet

3:00 pm – wingle engine plane, white with red trim. North to south at an angle – 500 feet.

Dwyer P93

3:25 pm – two biplanes flying loosely together, orange and blue Travelaires, circlular off-white oval on side. North to south on a southwest angle, directly overhead at about 600 feet.

3:57 pm – white medium sized helicopter, blue on under back part of body. Directly overhead at about 500 feet.

4:40 pm – Red biplane, directly overhead on angle of southwest to northeast , 500 to 600 feet.

5:00 pm – White single engine plane, north to south, 500 feet over surfline and beach

5:10 pm – white single engine plane, south to north

6:50 pm – Helicopter going south to north over beach and surfline at no more than 300 feet.

Sunday, 4-4-04

1:20 pm – single engine plane, south to north

1:22 pm – Red biplane, south to north

1:24 pm - single engine plane, north to south (same plane as at 1:20 pm)

3:28 pm – White single engine plane, south to northeast

Monday, 4-5-04

7:50 am – 2-engine plane, from north, curving south then west directly overheat at about 400 feet.

8:15 am – large dark helicopter at about 400 to 500 feet, over la Costa Blvd and Highway 101, north to south

Karen & Pat Kelly
<kranch@pacbell.net>
03/30/2004 01:10 PM

To: sdo@urscorp.com
cc:
Subject: Attention Jeff Fuller

Mr. Pat Kelly
2770 Sunny Creek Rd.
Carlsbad, CA 92008
760 438 3890

Re. Palomar Airport Part 150 Noise Compatibility Study
Attention Jeff Fuller

March 29, 2004

Dear Mr. Fuller,

My wife and I are lifelong local residents. My family has been here since 1850 and my house is among the oldest in San Diego County and probably the oldest privately owned home in North County, obviously predating McClellan-Palomar Airport, in fact, predating airplanes by over half a century. I recognize and appreciate the importance of the airport but I have also seen an astonishing transformation since its inception and have been dramatically impacted by these changes, particularly in recent years.

I was Co-Chairman of PAR 2000, the Palomar Airport Roundtable that united local citizens, airport staff, and City of Carlsbad officials in an attempt to address concerns related to the airport, it's operation, noise abatement, and safety. The citizens action group, along with government and airport officials, spent over a year tirelessly and systematically working to address these issues and to formulate a comprehensive plan to present to the County of San Diego. Many questions were raised. There was considerably dissention as the group was broadly representative of the entire community, pro and anti airport alike. After months of discussion, including research reports and expert testimony, compromises were reached and informed decisions were made. The final report was thoughtful, well grounded, practical, and serviceable. And I believe, despite our diligence, that it was also just an exercise in futility.

This morning, four years after PAR 2000, my wife and I were awakened by an airplane departing Palomar Airport at 4:30 AM. This is not unusual. It is, in fact, quite typical. The Roundtable unanimously supported a noise abatement plan with " Quiet Hours" from 10 PM to 7 AM daily. Immediately after submitting our report, and flying in the face of our strident recommendations, the County of San Diego actually extended the operating hours for commercial aircraft. Airport claims to the contrary, we have seen no improvement in noise abatement in the years following PAR 2000.

It is my considered opinion that our hard work and dedication was in vain and that the very real and valid complaints and concerns of the local citizenry regarding McClellan-Palomar Airport have fallen on deaf ears and, regrettably, will continue to go unheard.

Sincerely, Pat Kelly

Rwoelffer@aol.com

03/30/2004 10:52 AM

To: sdo@urscorp.com
cc:
Subject: Palomar Airport Noise Study - Jeff Fuller

Jeff: Sorry I missed last nights public meeting regarding noise issues at McClellan Palomar Airport. My name is Robert Woelffer, I live at 6138 Paseo Monona in the Rancho Carrillo HOA, Carlsbad. Our community is located east of Palomar Airport, south of Palomar Airport Road, and south of the normal flight path from the East into the airport. Since about February, I have reported 4 or 5 private jets flying low over our house and community to the Palomar Airport Noise reporting telephone number. I have also gone to the airport to talk to Oliver Brackett and airport manager Floyd Best about this situation.
Our situation is, since January of this year we have experienced quite a few low flying jets coming from the Southwest, turning over our community and heading back east in their approach to the Palomar Airport. I have lived in Rancho Carrillo for over 2 1/2 years and rarely in that time have jets cut in low across our community until January of this year. The three mile noise abatement zone east of the airport begins east of Business Park Road, which is east of our community. The planes that are cutting across our community in their approach are not abiding by the Noise Abatement Procedures which request that jets fly a slightly high approach and start their approach alignment 3 miles east of the airport. I was told by Mr. Brackett and Mr. Best that the control tower directs the flights approaching the airport. I requested that Mr. Best request the control tower to direct incoming jet flights from the South to extend their downwind to turn to base 3 miles out. Mr. Best indicated that he would look into the reasons for the high number of incoming jet flights from the South in the first part of 04 and talk to the tower to see if they could route the fights out to the 3 mile approach pattern that would comply with the Noise Abatement Procedures. Since my discussion with Mr. Best, I have not experienced any low flying jets coming across our community.
With regard to other over flights of our community, I have not heard complaints regarding these flights. The helicopters, which make the most noise, usually do not fly low over the houses in the community and often keep their approach pattern to and from the airport over the canyon that runs through the center of our community so they are not directly over homes. There have been times when helicopters have flown low over the houses of our community and we would request that they refrain from doing that. With the jets and the helicopters, it is startling when the noise of them passing overhead suddenly engulfs our homes. And, I am sure the noise levels we are talking about far exceed 65 db.
Thank you for allowing me to address my issues even after I missed the meeting last night.

Sincerely, Robert Woelffer

<bargus1@adelphia.net>

03/30/2004 10:11 AM

To: <sdo@URSCorp.com>
cc:
Subject: Palomar Airport Noise Study

I read in the North County Times today that you are studying the noise concerns related to Palomar Airport. I very much appreciate the fact that you are asking the public for comments.

My husband and I live in south Carlsbad, near Rancho Santa Fe and Olivenhain streets. We hear plane and helicopter noise frequently. It is bothersome and disturbing and, frankly, surprising that residential areas have this problem.

About 3 years ago, I called the person who responds to noise complaints at Palomar. I told him my main concern was the lack of consideration the pilots of the helicopters, bi-planes, and other small craft have about flying over residential neighborhoods. Although the man I spoke to was very nice, he basically said there are minimal limitations put on small craft by the FAA and that they have the right to fly over residential areas. He did say that we were in a "noise sensitive" area and that he would put up a reminder of that for pilots. The bi-planes have reduced some, but the helicopters and other craft are just as bad, if not worse. Some actually circle over and over again, and one plane - just last weekend - was practicing "diving", no kidding. It went on for a long time and was very irritating.

The helicopters are quite a problem of their own - they come and go at all hours and fly low - there are some that are long and white with a dark colored end to them - they are the noisiest and most frequent. I called Camp Pendleton once, thinking they were military craft but was told they are not. There are also a number of small helicopters that cut right across our neighborhood.

So, in summary, our issue is not take off and landing noise, but rather the continual flying overhead of our residential area. Many of our neighbors feel the same concerns. Some who move here from other States are surprised at the heavy air traffic that is permitted in residential locations. Pilots need to understand that their one craft can disturb many people. If your study could recommend that small craft fly over the ocean, or over freeways, or some other path of compromise, it would be greatly appreciated.

Thanks for listening,
Barbara Irani
3250 Avenida Del Alba
Carlsbad, CA 92009

760-634-7935

P.S. As I sit here and type this e-mail, I can hear an airplane flying over our house!

<eruby@adelphia.net>

03/30/2004 08:04 AM

To: <sdo@urscorp.com>
cc:
Subject: Palomar McClellan Airport Noise Study

Attn: Jeff Fuller

Thank you for the opportunity to comment on the noise study prepared for Palomar McClellan Airport. Can you direct me to a website where I can obtain a complete copy of the study ? My family and I live in the Marbrisa community located southwest of the airport and experience aircraft noise from Palomr Airport on almost a constant basis. I also fly out of Palomar Airport on a frequest basis and understand the importance of the airport to the regional transportation system and local economic development and commerce.

The existing private jet and commuter flight operations are almost a non-issue in terms of noise impact, as most of the private jets and commuter airlines are very quiet and the duration of associated noise is rather brief. By far, the most significant noise problem are the low flying, single engine propeller driven aircraft and helicopters. Many of these pilots go out of their way to fly directly over existing neighborhoods at low altitude and trim the aircrafts propellers for maximum noise generation. The airport has been in place for a lot longer than the surrounding residential developments, but something needs to be done about the inconsiderate pilots who fly the single engine private aircraft.

I suggest that the report contain a recommendation / requirement for all aircraft departing to the west to fly due west until they intersect with the coastline and then make required north/south turns. This will minimize direct,low altitude residential neighborhood flyover noise and also reduce the probability of residential related crash hazards.

Thank you for the opportunity to comment on the Palomar McClellan Airport Noise Study.

Eric J. Ruby
6436 Amethyst Way
Carlsbad, CA 92009
eruby@adelphia.net

"Held, J Tim (EFDSW)" <HeldJT@efdsw.navfac.navy.mil>

03/31/2004 11:49 AM

To: "'PALOMAR AIRPORT NOISE STUDY'" <sdo@urscorp.com>
cc:
Subject: PALOMAR AIRPORT NOISE STUDY

Jeff Fuller/Consultants:

I reside in the Rancho Carrillo community at 2803 Via Conquistador in Carlsbad. I enjoy the propeller-driven airplanes flying over head except for an occasional low flying plane with a load exhaust. The helicopters seem to use the Carrillo valley as an air corridor. They need to be flying at a higher altitude.

If I could ask you to fix one airport item it would be the loud jet that roars off the runway at different times. Sometimes its 5 AM or 6 PM. The last time I heard it was last Sunday morning (April 28) about 1100 AM. If you're outside, it is the only thing you can hear. It must roar over the whole area around the airport for miles. I don't know the decibel level but it gets your attention. I wish I could give you the exact times and dates and noise levels of when this jet or jets make these roaring takeoffs but I'm sure you know which one I'm referring to.

Good Luck

Tim Held
(760) 725-8999 (work#)
Held JT@efdsw.navfac.navy.mil

Robert L Carroll
<gncarroll@sbcglobal.net>

04/07/2004 10:36 AM

To: sdo@urscorp.com
cc:
Subject: Airport Noise

I am a concerned citizen about the increasing noise by aircraft flying over neighborhoods with increasing frequency and noise. I would like to become educated and participate in the efforts to control the adverse effects on the beautiful city of Carlsbad.

Items of note from observation:

Airplanes may not be taking required roots during take off and landing, based on what we were advised of when purchasing our home.

Airplanes fly at very early and late hours, with many middle of the night takeoffs.

In particular, we have noticed several weekend biplanes (two white and tow red) that seem to derive pleasure at low flying over residential areas.

Video cameras could be used to track noise and plane identifications to fine violators.

I would like to be included in your meetings and am willing to participate as a community representative

McClellan- Palomar Airport
Part 150 Airport Noise Compatibility Study
Public Meeting # 2
Public Input Forms

Please record your comments concerning the McClellan-Palomar Airport Part 150 Noise Compatibility Study on this form. Please include your name, address and telephone number. You may submit this form by:

1) placing it in the comment box at tonight's meeting
2) mailing it to Jeff Fuller, Manager, Noise and Vibration, URS Corporation
   1615 Murray Canyon Road Ste. 1000
   San Diego, CA 92108
3) faxing it to (619) 293-7920
4) e-mailing sdo@urscorp.com

All comments must be received no later than April 14, 2004.

Name: Duane Martin

Address: 981 Hermes Ave. Encinitas CA 92024

E-mail: rdcmartin@yahoo.com

Phone: 760/634-2905

Comments:

PLEASE SEE ATTACHED

You may use the back of this sheet to record additional comments or attach additional paper.

Diane Martin
981 Hermes Ave.
Encinitas, CA 92024

April 8, 2004

I live about ten miles southwest of McClellan-Palomar Airport in the fairly quiet community of Leucadia. Two things I value most are my privacy and quiet. It would seem that living ten miles from the airport would not cause a problem. Unfortunately, because of the high volume of small aircraft, I have neither privacy nor quiet. Apparently, I am not alone. I attended the Public Meeting #2, and I heard many others expressing their frustration over the amount of noise created by these aircraft. I would assume that there is a myriad of others not attending the meeting who have similar complaints. I would also assume that the percentage of people living in the community who fly small aircraft is low. Therefore, the rights of the majority to privacy and peace and quiet are being trampled by the small percentage of people who do fly.

Problem: Noise

While the airplane noise is bad throughout the week, the problem is unbearable on weekends. On weekends, the air traffic begins early in the morning and continues all day long. I tried keeping a log for a couple of hours one Saturday to monitor how many airplanes flew over or near my house (within my hearing range). It was impossible. Before one aircraft left the area another would come and another and another and this continued for hours at a time. After a couple of hours of continuous airplane noise there would be about 20 seconds of silence, and then it started up again.

Solution 1: Limit the number of small aircraft taking off from the airport. There are too many planes overhead.

Solution 2: Increase the minimum altitude of ALL small aircraft.

Solution 3: If possible require small aircraft to have noise abatement devices installed. If not possible require small aircraft without noise abatement devices to fly at a much higher altitude than aircraft with noise abatement devices.

Solution 4: Vary the flight paths so that the same neighborhood isn't disproportionately affected by the noise.

Problem: Low-flying aircraft

Regardless of minimum altitudes, there will always be those pilots who think that the rules do not apply to them and fly too low. I've been advised by employees of the airport to identify low-flying aircraft and call the airport with identifying information and times of violations. Frankly, I do not want to spend my time doing this, and I shouldn't have to. I already resent having to hear the planes. I don't want to stop what I'm doing to write down a lot of information and then make a report. Besides, this could be a huge task since the problem is so severe.

Solution 1: Someone from the airport should be policing the sky. The community is telling the airport that there is a problem. It's time for the airport officials to take these complaints seriously and come out to our communities and see for themselves.

Solution 2: Randomly select a number of aircraft every day and look at the data relating to altitude. Those in violation of altitude rules should be subject to heavy fines and/or lose their pilot license.

Solution 3: With modern technology, it seems like it may be possible to program a computer to identify low-flying aircraft.

Problem: The pilots' attitude

Perhaps the pilots are not aware of how bad the problem is for the communities they fly over. Or perhaps they don't care. One gentleman at the meeting said that the planes do not bother him, and he said that those who are bothered by the noise "let it bother them." So his logic is, if it doesn't bother me, it shouldn't bother others. The fallacy of this type of logic needs to be addressed.

Solution 1: There needs to be a campaign to educate pilots. The pilots need to be aware that there are a lot of real human beings on the ground who value peace and quiet, and they need to know how their activities affect us. There are some pilots who fly in a circle around the same area two, three, four times or more. While there may not be regulations prohibiting it, this practice is inexcusable.

I have listed several problems and possible solutions to the problems posed by a high volume of small aircraft. I trust that these problems will be seriously considered and dealt with.

Sincerely,

Diane Martin

Diane Martin

McClellan- Palomar Airport
Part 150 Airport Noise Compatibility Study
Public Meeting # 2
Public Input Form

Please record your comments concerning the McClellan-Palomar Airport Part 150 Noise Compatibility Study on this form. Please include your name, address and telephone number. You may submit this form by:

1) placing it in the comment box at tonight's meeting
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   1615 Murray Canyon Road Ste. 1000
   San Diego, CA 92108
3) faxing it to (619) 293-7920
4) e-mailing sdo@urscorp.com

All comments must be received no later than April 14, 2004.

Name: Drs. Dennis & Connie Penn

Address: 2526 La Golondrina St., Carlsbad, CA 92009

E-mail: drconniepenn@abac.com

Phone: (760) 929-8528

Comments: There has been a significant increase in noise. Our small children like to play in the back yard. This noise impacts our quality of life. Please have flight path above ocean. Please keep all jets out of Palomar and decrease private plane traffic.

Thank you.

You may use the back of this sheet to record additional comments or attach additional paper.

"Linda Sinclair" <Lsinclair@gordonrees.com>

04/08/2004 04:03 PM

To: <sdo@urscorp.com>
cc:
Subject: Palomar Airport Noise Study

My name is Linda Sinclair. I live at 6122 Paseo Monona, Carlsbad, CA 92002. My home is in the Rancho Carrillo master planned development that lies east of Palomar Airport, south of Palomar Airport Road, and straddles Melrose. Our community is south of what is supposed to be the normal flight path into the airport from the east.

Since early this year, jets have been flying low over our community, cutting well short of the normal approach for planes preparing to land at the airport. The three mile noise abatement zone for the approach end of the airport (east of the airport) starts east of Business Park Road, northeast of our community. The planes cutting across our community in their approaches are failing to abide by the established noise abatement procedures, instead, taking what appears to be a "short cut" across our homes at low approach levels. Jets are supposed to have higher approaches and they are supposed to start their approach alignments 3 miles east of the airport. The established noise abatement procedures are being ignored.

Please note that I lived in Point Loma under the Lindberg flight path for several years, so I am not a person who is extraordinarily or hypersensitive to aircraft noise. I knew Palomar airport was near my home when I bought it. However, I also understood that noise abatement procedures were in effect that were to minimize aircraft noise over my community and home, especially noise from jet planes. I simply want to see those procedures enforced.

Thank you.

Linda J. Sinclair

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GORDON & REES, LLP
http://www.gordonrees.com

Joanne G
<jgrue@yahoo.com>
04/08/2004 05:30 PM

To: sdo@urscorp.com
cc:
Subject: airplane noise

I understand that you have been made aware of a noise problem from airplanes in the Rancho Carrillo development.

I became aware of the noise again today just before 4PM. I could not see the plane to identify it as I was working in the garage at the time.

I hope you will make the air traffic controller aware of this.

Joanne Grueskin
6182 Paseo Palero
Carlsbad, CA 92009

Do you Yahoo!?
Yahoo! Small Business $15K Web Design Giveaway - Enter today

"Brackett, Olivier" <Olivier.Brackett@sdcounty.ca.gov>

04/12/2004 08:54 AM

To: <sdo@URSCorp.com>
cc:
Subject: FW: Noise Problem Report

Jeff Fuller,

Please include the following comments in the CRQ Part 150 study,

Thank you, ob

-----Original Message-----
From: Plus Plan [mailto:sdcdpwca@sdcdpw.org]
Sent: Thursday, April 01, 2004 9:30 AM
Subject: Noise Problem Report

****
*

Name:	james sanseverino
Street:	1269 veronica ct
City:	carlsbad
Zip:	92009
Phone:	760-476-3465
email:	sansev@msn.com
Airport:	McClellan-Palomar
date:	daily
time:	throughout the day
Type:	Prop
Engines:	Unknown
NNumber:	
Color:	
Remote Name:	65.146.251.184
Remote User:	
HTTP User Agent:	Mozilla/4.0 (compatible; MSIE 6.0; MSNIA; Windows 98; .NET CLR 1.1.4322)

Comments:

my home is 352 ft elev. and i am increasingly concerned from a safety and noise standpoint about small craft passing over my home at low alttitudes. this is particulally alarming when these planes are circling the area repeatedly, such as from possible touch and go.

"Robin Gartman"
<RGartman@sandiego.gov>

04/12/2004 11:14 AM

To: sdo@urscorp.com
cc:
Subject: Part 150 study

Thank you for the presentation on March 29.

Here are the items that comes to mind in relation to your Mc Clellan- Palomar Airport Part 150 study presentation on Monday, March 29, 2004.

1) Weighted data should never be considered the same or equivalent to non-weighted data. See Sokal & Rohlf 3rd. edition, page 42. Is this how you came up with your weighted values? If so, then all 3 time periods should have been weighted.
2) It was not clear that the two types of data presented were from the same source (aircraft in flight).
3) How much error was in your data?
4) Your summarized data gave a nice presentation; however, it only met the needs of the regulations and did not approach the noise complaints of reality.
a. Could you show some noise comparisons
i. Lawn mower, hedge trimmer, weed whacker & leaf blowers.
ii. The parent/child noise from sports game (soccer, base ball).
iii. The white noise from the freeways and a heavy traffic area like Palomar Airport Rd.
iv. Automobiles and motorcycles engine noise in general.
iiv Playing ones own stereo in the home vs the car.
5) I would like to see graphics that depict the outliers.
6) I would like to see a graphic that shows the white noise that disturbs the surrounding public. That is AC noise that is below the regulator requirements.
7) Can you show if there is a correlation between the economic success of the airport and the increase in noise?
8) Could you display the noise levels as non-weighted data in a bar graph on your maps? I have seen this type of presentation done with environmental data. You already have designated areas that make up the airport environment. Now display in a dialog box that is attached to the area by a line. Show the bar graphs with standard deviation or error bars. Each point associated with a data box would represent a specific size area. This might better cover the white noise or the noise under the regulations that seems to be most troubling to the local residents. Stacked bars could display above and below the regulator limits.
9) With chemistry, minimum detectable levels (MDL) are used as a bench mark to demonstrate when something has reached a level of detection that can be accurate be analyzed with confidence. Maybe a scale similar to this would help show the regulators that the noise not considered is might be more detrimental in the long run.
10) How about showing a time line that corresponds to changes in the airport environment and noise level.
a. Increased large aircraft traffic.
b. Implementation of the noise abatement procedures.
c. Upgrade to all jet engines (Lears & Citations).
d. Increased pattern altitude and instrument approach angle.
e. Removal of the NDB system.
11) How dose changing the topography (for development) surrounding the airport effect the noise level? This raw vegetation vs building, roads and homes. Basically, how much absorptions of noise is lost by filling the surrounding area outside the airport environment with other than vegetation - ?

12) Have you ever thought of using GIS to show the noise by altitude layers?

13) Does noise travel the same as wing tip vortices? or Does noise travel as a component of the vortices? How is the travel range and duration of the vortices effected the local terrain (vegetation vs homes and vegetation mixed in with homes).

Robin Gartman
2725 Anta Court
Carlsbad, Ca. 92009
760-931-0546

"Brackett, Olivier" <Olivier.Brackett@sdcounty.ca.gov>

04/01/2004 12:30 PM

To: <sdo@urscorp.com>
cc:
Subject: FW: Noise Problem Report

Jeff Fuller:

Jeff,

Please include this in the public comment for out Part 150 study,

Thanks, ob

-----Original Message-----
From: Plus Plan [mailto:sdcdpwca@sdcdpw.org]
Sent: Thursday, April 01, 2004 8:56 AM
Subject: Noise Problem Report

****
*

Name:	Donna de Julien
Street:	1014 Daisy Court
City:	Carlsbad
Zip:	92009
Phone:	760-929-8188
email:	ddejulien@hotmail.com
Airport:	McClellan-Palomar
date:	regular-daily
time:	always
Type:	Unknown
Engines:	Unknown
NNumber:	
Color:	
Remote Name:	209.66.200.3
Remote User:	
HTTP User Agent:	Mozilla/4.0 (compatible; MSIE 6.0; Windows NT 5.0)

Comments:

Dear FCC:
I am responding to an article in the San Diego Union Tribune of March 31, 2004. As a resident of Carlsbad living in the proximity of the McClellan-Palomar Airport for the past 8 years, I would like to forward my observations in hopes that they may aissist the FCC and the airport to curtail noice from this airport to the appropriate noise impact area.

When I bought my home, I was shown a map of the area and the proximity of the airport to my home. I was imformed at that time, as a disclosure, that noise from the airposrt was to be expected;however, I was also shown the required flight paths, or flight corridors, that pilots are to follow, and I determined that the noise from these corridors wouldn't disturb me. I still believe this to be true. The problem is that the pilots, especially those who fly routes regularly from San Diego to Carlsbad, north into McClellan-Palomar Airport, depart from the prescribed corridor -- Interstate 5 north to Palomar Airport Road east to the airport --and cut a line as the bee flies from Interstate 5

and Batiquitos Lagoon north east to the airport. This departure from the flight corridor takes the planes directly over my home. I am not knowledgeable, but I also think some of the planes are flying much lower than is allowed over residential areas.

From my point of view, the airport is an important transportation serive, and I am happy we host an airport in Carlsbad. I think it is a nuisance to all the residents, though, who are impacted by noise, because the noise impact area is much-expanded defacto by pilots veering from the flight corridors outlined by codes. Unwitting home buyters like me, trust the information they receive about noise disclosures from the airport, so I think it is a breach of law and faith that the pilots abuse the off limits airspace by taking shortcuts lke this.

I have an idead that I would like to submit at this time, because I realize that complaints without constructive suggestions to reolve issues do not help reach resolution in most cases. Here it is:

Install cameras to photograph offending planes. As with cameras that photograph drivers who ignore the redlights at freeway merging on-ramps are photographed and subsequently ticketed by mial, I think this would be a way to accurately document instances such as this. The offender would be consistently documented and ticketed in order to be directly accountalbe for breaking the law and disturbing the peace beyond the noise impact area. I would be pleased to offer my yard as a point of installation for a camera for this purpose.

Thank you for forwarding my comments and concerns to the FCC.

Yours,
Donna de Julien, resident
1014 Daisy Court
Carlsbad, CA 92009-4846

McClellan - Palomar Airport
Part 150 Airport Noise Compatibility Study
Public Meeting #2
Public Input Form

Please record your comments concerning the McClellan-Palomar Airport Part 150 Noise Compatibility Study on this form. Please include your name, address and telephone number. You may submit this form by:

1) placing it in the comment box at tonight's meeting
2) mailing it to Jeff Fuller, Manager, Noise and Vibration, URS Corporation
   1615 Murray Canyon Road, Ste. 1000
   San Diego, CA 92108
3) faxing it to (619) 293-7920
4) e-mailing sdo@urscorp.com

All comments must be received no later than April 14, 2004

Name: Greg Chornak

Address: 6400 El Pato Court, Carlsbad, CA 92009

Email: gr656nak@yahoo.com

Phone: (760) 586-3466

Comments:

1. Recommend implementation of mandatory noise abatement procedures for all types of aircraft. Existing voluntary noise abatement procedures are futile since there is no dedicated enforcement of non-compliance or penalties to violators. Safety should be the only exception to the mandatory noise abatement policy. Mandatory requirements must include penalties for violators of any noise abatement guidelines with more substantial penalties for violations during "Quiet Hours".

2. Recommend elimination or relocation of touch-and-go training flight patterns (possibly over the ocean). URS data indicates touch-and-go flights equate to 40 percent of GA VFR flights. This represents a large number and significant percentage of total flights and NOISE at McClellan-Palomar airport. Training flights are of no value to the community but are a very significant source of noise.

3. Recommend minimum altitude requirements for planes within 2 miles of airport. Terrain in area within 2 miles of airport has many areas with bluffs and hilltops. Consequently, homes on top are subject to excessive noise from planes flying lower due to lack of altitude requirements during short approaches into the airport. In addition, scenic tour flights like those done by Barnstorming Adventures generate excessive noise due to age of planes and constant use of short approaches to the airport from the south.

4. Recommend some Part 150 funding of the $250,000.00 be allocated to a Committee of Community Members to hire their our own independent Noise Specialist(s) to review, compare and validate URS and Palomar Airport Staff's noise exposure data. Community should be afforded equal rights to test accuracy and monitor noise microphones in various areas around the airport to compare with Noise Exposure results provided by URS and Airport Officials.

5. Recommend banning or implementing mandatory flight restrictions of all helicopters in and out of the airport to maintain a minimum altitude of at least 1500-2000' over major roads until entering 1.5 miles of airport. Only exceptions are flights responding directly to emergency Police of Life Flight flights. Large percentage of existing helicopter flights in and out of airport fly too low directly over our homes 2 miles southeast of the runway.

6. Recommend implementation of comprehensive noise abatement program with annual requirements to phase out older, louder planes by requiring them to install hush kits or retire noisy aircraft. Many vintage, experimental, acrobatic and other recreational aircraft are excessively noisy. Stage 3 requirement deadline was in 1999. Possibly time start thinking about new, quieter requirements.

7. Recommend mandatory flight patterns using the north approach and departure, minimum altitudes within 2 miles of the airport for recreational, experimental and vintage aircraft. Every other reereational vehicle has restrictions on areas of usage, recreational aircraft should also have designated areas away from residential areas.

8. Recommend flight restrictions, quieter planes or higher airport fees for companies such as Barnstorming Adventures Ltd. These sightseeing flights in loud, low-flying vintage aircraft need to be better regulated for noise. Types of planes, high frequency of flights and routine low-flying flight patterns of these flights is disruptive to our communities. Control Tower should require majority of these flights to use north flight patterns instead of allowing them to continually approach airport from south.

9. Recommend changing daily morning scheduled commercial departures of America West flight that departs at 6:45 am to after 7 am and change departure of United Flight 6031 that uses 06 (east) runway to runway 24 (west) departure. In accordance with "Voluntary" Noise abatement procedures.

10. Recommend the FAA consider airports having Citizen Advisory Committees to provide equitable representation regarding airport issues. Community currently has no representation on issues pertaining to the airport. Palomar Airport Advisory Committee is comprised only of airport proponents appointed by Supervisor Horn.

11. Recommend FAA use its political lobby pressure to push through Congress the Bill to reestablish the Office of Noise Abatement and Control in the Environmental Protection Agency. Acting as a self-governing agency, with obvious conflicts of interest, the FAA is unable to conduct fair, unbiased Part 150 Noise studies. As FAA spokesman Mike Fergus was quoted in the Seattle Times last year, "If they (aircraft) are not doing anything that violates safety, there's nothing we can do". Consequently, why is the FAA conducting and spending millions of taxpayer dollars on Part 150 Noise studies?

To:

Beth A. Famiglietti

Senior Environmental Analyst

URS Corporation

RE: URS, Part-150 Noise Compatibility Study CRQ Meeting #2

1615 Murray Canyon Road, Suite 1000

San Diego, CA 92108

Phone: 619.294.9400

Fax: 619.293.7920

beth_famiglietti@urscorp.com
<http://groups.yahoo.com/group/palomarairportassociation/post?postID=mSdoZcQflth5R7HpU-QFUBn4hFpTaM-WbMfZSP8hyxtN4yACAb8wDjBaitTx5khBZTSctqJZ9U0-LHARgnA6SasJ7FE>

sdo@urscorp.com
<http://groups.yahoo.com/group/palomarairportassociation/post?postID=abjXMGjooRPbpGDpMety9yugK_1XRq74EwO_-SL6aQuMHNUHq2k0efxCMFGTW000CyFQ1qH-_h1W>

Dear Beth,

Thank you for your time discussing these crucial recommendations. My other email account bounced this back so I am sending from a work account. Please confirm receipt of 1 microsoft word document and a zip file.

Best Regards,

--Rick Baker,

<<part150-mtg2-rfc-resp-v1.0.doc>>

<<Part150RecommenationDocs.zip>>

From:

Rick Baker,

Founder and Member, Palomar Airport Association 501(C)(3) subchapter of California Pilots Association

Mailing address: P.O. Box 130476 - Carlsbad, CA 92013

Home Address: 7789 Paseo La Jolla, Carlsbad, CA 92009

Email: carlsbadairport@hotmail.com
<mailto:carlsbadairport@hotmail.com>

Phone: 760.607.0844

Date: April 14, 2004

Subject: Requests for recommendations, Part 150 Meeting #2

<<Part150RecommenationDocs.zip>>

To:

Beth A. Famiglietti
Senior Environmental Analyst
URS Corporation
RE: URS, Part-150 Noise Compatibility Study CRQ Meeting #2
1615 Murray Canyon Road, Suite 1000
San Diego, CA 92108
Phone: 619.294.9400
Fax: 619.293.7920
beth_famiglietti@urscorp.com
sdo@urscorp.com

From:
Rick Baker,
Founder and Member, Palomar Airport Association 501(C)(3)
subchapter of California Pilots Association
Mailing address: P.O. Box 130476 - Carlsbad, CA 92013
Home Address: 7789 Paseo La Jolla, Carlsbad, CA 92009
Email: carlsbadairport@hotmail.com
Phone: 760.607.0844

Date: April 14, 2004

Subject: Requests for recommendations, Part 150 Meeting #2

Dear URS:

RESPONSE
Please add the following requests and recommendations to the public record for the Part 150 Study in progress for CRQ airport in response to your request for comment at the meeting of March 29, 2004, 6pm at Carlsbad Faraday Center. I also reference also the presentation overheads at:
http://www.co.san-diego.ca.us/dpw/airports/powerpoints/2ndPublicMtgPart150.ppt

PURPOSE
I am an airport user and concerned resident of Carlsbad. Below is a list requests and recommendations I have collected from the airport user community. These requests and recommendations are being made to the study and other agencies in the public interest to:

. Protect existing CRQ airport operations/users and the City/County from future homebuyers in new residential areas that are encroaching on the airport and directly under its traffic pattern and uncomfortable with continuous aircraft noise or a high volume of higher-risk aviation activities over their homes.

. Improve disclosure for future residents for informed buying decisions

. Improve public awareness of aviation and land use issues/facts/guidelines

. Get all possible mitigations implemented now for areas that are 1 mile from the airport do not yet physically have homes

Users make the following recommendations and escalations to this Study team and others copied on this notice. Time is of the essence.

GENERAL REQUEST
Users would like to make a request here that the following additional full disclosure statements and recommendations be put into the public record, be acted upon, be attached to the Part 150 study for general public distribution ASAP, be carried with, and easily available throughout the study to the general public, and be published as part of the study package.

REASON
This study is the only active, publicly funded, technical evaluation of airport operations that has public-involvement at this time. This is crucial because the CRQ CLUP is obsolete, and has an obvious fatal flaw in the Airport Influence Area map SE of the airport that will not be updated in time to enforce proper oversight for that area, disclose important information to and implement mitigations for new residential developments, e.g. Bressi Ranch Residential by Lennar Communities, currently in the grading phase but not yet with final approvals. This SE area “cutout” in the 1994 CLUP Airport Influence Area carried over from 1973 is keeping a new moderate to high intensity residential area from being appropriately reviewed by regulatory agencies responsible for aviation related air and ground safety, health and welfare of the public and pilots. I also ask that these recommendations be forwarded

by the URS Study, no later than the end of this month, to the San Diego Regional Airport Authority, the City of Carlsbad Clerk, City Attorney, City Council, City Planning Dept., FAA and California Division of Aeronautics, and any other department or organization concerned with Health and Welfare of the community and development in and around Carlsbad California.

REQUESTS AND RECOMMENDATIONS
Users ask that you please submit these recommendations in their entirety attached to a Request For Comment or Request for Review from the California Division of Aeronautics and the Federal Aviation Administration. Time is of the essence.

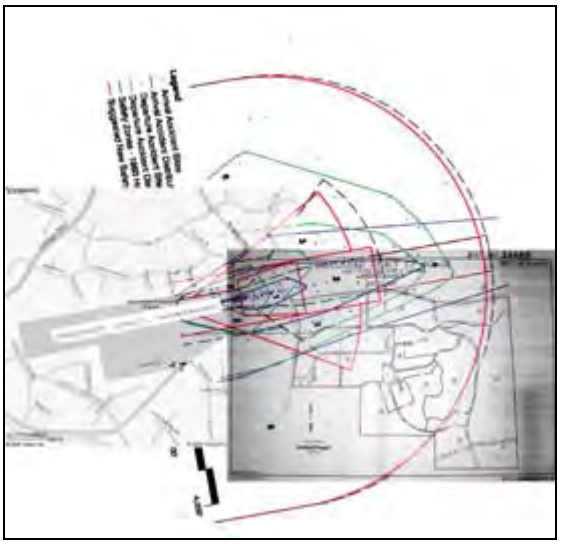
1. Add to Study for Full Disclosure: This study does not address safety. Safety is not considered in the scope of the part 150 Study.

2. Add to Study for Full Disclosure: The Study's formal CNEL noise contours are not intended, nor practical for a layperson to use to determine levels, frequency and types of Single Event noise contour Lines (SEL) persons will experience living under the CRQ traffic pattern.

3. Recommend no new noise abatement procedures: Please do not recommend alteration of current traffic routing, tracks and airspace-use from the Bressi Ranch area because of future expected noise concerns or complaints from that area. Do not recommend to FAA or any other agency/group to attempt to implement avoidance of aviating in this area as CRQ is very busy and runs simultaneous left-hand and right-hand pattern turns for aircraft spacing and maintaining capacity. Any attempts to implement noise abatement restrictions or even promotion of a voluntary program in an attempt to appease the new Bressi Ranch development residents could compromise aircraft safety/separation and/or reduce airport capacity. CRQ experienced a 3-fatality mid-air collision in 2002 in the Rwy 24 crosswind to downwind turn area.

4. Add to Study for Full Disclosure: There was a fatal mid-air collision that occurred in the CRQ runway 24 crosswind to downwind traffic pattern. (Reference NTSB Identification: LAX02FA288A and LAX02FA288B; 14 CFR Part 91: General Aviation; Accident occurred Tuesday, September 17, 2002 in Carlsbad, CA. Aircraft: Mooney M-20E, registration: N7199U; And Beech BE-76, registration: N1828A Injuries: 3 Fatal.) Luckily there was no on-ground off-airport catastrophe because there were no homes or people in the area where the aircraft fell to the ground. Bressi Ranch is under the Rwy 06 crosswind to downwind traffic pattern area, which is the same type of area as the Rwy 24 area where the impact occurred. Aircraft ground-impact maps in the 2000 California Airport Land Use Planning Handbook also show this area as being in a safety zone and area of increased risk where homes are not appropriate. This area will not be contained in any formal Part 150 noise contours and will not have any aviation safety oversight. Buyer beware.

Figure 1 below: CA ALUPH Safety Zones overlaid cover almost all of Bressi Ranch



5. Add to Study for Full Disclosure: CLUP incorrect. Since the 1994 CLUP will be updated by the SDRAA and they will be using both FAA guidelines AND California guidelines, there will most likely be a redefinition of area SE of airport from Noise Impact Notification Area to Airport Influence Area. Property in this area should have special disclosure language attached to the deed that discloses this probable reclassification to prospective owners.

6. Add to Study for Full Disclosure: To the prospective new residents of homes located within one mile of the airport, e.g. Bressi Ranch Residential: the formal results of this noise study should not be interpreted by prospective home buyers that if this area is determined "compatible" by formal Part 150 noise contour lines/standards, this does not mean it is recommended, compatible or safe by state or federal guidelines for the planned Bressi Residential development.

7. Add to Study for Full Disclosure: this study does not validate the planning or building of residences within one mile of the airport. Please see appropriate planning guidelines from the California Division of Aeronautics for planning and safety guideline information. The California State document that sets standards for health, welfare and safety for the building of new homes next to airports in California is the following document:
The 2002 California Airport Land Use Planning Handbook, published by the California Division of Aeronautics.
http://www.dot.ca.gov/hq/planning/aeronaut/documents/ALUPHComplete-7-02rev.pdf. Your new residence may very well not be consistent with these guidelines. Please refer to this document if you are concerned about aircraft overflight, noise and safety. Here is a map overlay of the Bressi Ranch Residential Area with the California safety zones:

8. Add to Study for Full Disclosure: FAA considers development of homes within one mile of an existing airport to be incompatible. Preference the following outline in red for an FAA comment on a similar situation at another SD airport. The FAA has not been given a request for comment (RFC), such as the RFC response below, for the Bressi Ranch area because the obsolete CRQ CLUP has incorrectly defined the area to not

be part of the Airport Influence Area. Include the following information in the disclosure.

Figure 2 Below: Statement by FAA that a new residential development 1 mile from airport is not considered to be compatible.

"It is the FAA's doctrine to promote compatible land uses around airports through the adoption of local zoning laws by municipalities that restrict the use of adjacent airport lands or that within the immediate vicinity to activities and purposes that are compatible with normal airport/aircraft operations. Development of homes in this location is not considered by FAA to be a compatible use knowing the existence of an airport being less than 1 mile away. It should be noted to residents who will be purchasing these homes that there will be departing and approaching aircraft noise within close proximity. It is in the best interest of everyone that land uses such as residential housing NOT BE located near an airport."

Source: Aeronautical Study No. 2003-AWP-3219-OE issued October 9, 2003.

County of San Diego Airports Division

9. Add to Study for Full Disclosure: Airport users are making desperate attempts to inform the public and public agencies about inappropriate residences and encroachment and have appropriate agencies assert their oversight and mitigations. Airport supporters, in an effort to prevent future noise and safety complaints that will probably affect airport operations and new communities, are circulating the following petition and other efforts will continue to be increased upon public service agencies until sufficient oversight and mechanisms are in place:

"PETITION

PROTECT CARLSBAD FROM GERRYMANDERED AIRPORT INFLUENCE AREA BOUNDARIES AND INCOMPATIBLE LAND USE.
I am opposed to new residences being built at Bressi Ranch—all within one mile from McClellan-Palomar Airport and directly beneath its arrival and departure pathways. McClellan-Palomar Airport is one of the busiest single runway airports in the United States and purchasers of the proposed homes would be subjected to significant noise from hundreds of propeller, jet and rotorcraft approaches, departures and full power run-ups at the airport each day and night. Even worse, the planned housing tracts are directly below areas known for high-risk aviation activities and normally considered inappropriate for homes, meeting areas and schools. In addition, the 1994 Comprehensive Land Use Plan (CLUP) is wrong. It is out of date and contains an obvious and fatal flaw. Somehow, the boundary lines of the "Airport Influence Area" were "gerrymandered" from accepted standards to exclude the residential portions of Bressi Ranch from regulatory review by the San Diego County Regional Airport Authority. I ask that appropriate regulatory agencies assert responsibility over these plans and have the common sense to avoid years of noise complaints and litigation and the potential for a catastrophic accident by zoning all of Bressi Ranch commercial and industrial—not residential."

Figure 3 below: Picture of Bressi Ranch Residential inside Carlsbad Tract CT 00-06:

10. Request Mitigations: Because the City and Airport already have a large amount of noise complaints from areas well outside of established guidelines for airport zones and the Airport Influence Areas, the building of approximately 500 new homes in Bressi Ranch Residential area, even though this area falls outside of Part 150 noise contour lines, will expose the City and airport operators/users to community complaints, health & welfare and legal problems unless Avigation or Overflight Easements are required to be awarded by Bressi residents to the City and county/Airport. Recommend Avigation or Overflight Easements, not disclosures, as a mitigation, ASAP. Bressi Ranch Residential does not yet have final approvals and it is practical to implement this now. The requiring of Easements of this type at this time does not meet the standard of Inverse Condemnation, as the new development will still be financially viable for the developer (See CA ALUPH discussions). But, time is of the essence.

11. Add to Study for Full Disclosure: Add 55dB, 50dB and 45dB noise contours to all the charts to better inform the public and improve disclosure to and for those people sensitive to aircraft noise so they can consider these facts as part of an informed buying decision before purchasing and moving into the area. Noise mitigations methods and various building regulations make references to a 45dB indoor sound level; this does not address noise levels outdoors in one’s back yard. Adding contour lines down to 45dB will help in full disclosure.

12. Add to Study for Full Disclosure: Add an overlay map/picture that shows helicopter arrival-departure paths as these aircraft fly very low, slow, have an increasing amount of activity, are on the SE side, and have special noise-vibration characteristics, such as blade-slap.

13. Add to Study for Full Disclosure: Helicopter blade-slap noise and vibration will probably be a main complaint SE of the airport in the future Bressi Ranch Residential area based on the helicopter base and training areas.

14. Add to Study for Full Disclosure: People moving into the area concerned with needing a certain level of “Periods of Quiet” and no/little “single event noise” should not look to the formal Part 150 study for answers to their concerns. There are residents currently complaining of continuous aircraft noise, noise with no pause, so I request you provide data and pictures for these people by adding the CNEL contours down to 45dB as requested above.

15. Add to Study for Full Disclosure: It was confirmed by City Council Member Finnila at the study public meeting that Avigation easements would need to be awarded for Bressi Ranch “all around”. Airport users fully support this and are requesting they be involved in the development of the easement language. Time is of the essence.

16. Add to Study for Full Disclosure: The California Pilots Association submitted a letter to the City and other agencies to request the appropriate guidelines be used to determine whether or not homes should be built in Bressi Ranch. See appendix.

17. Reduce noise contour inaccuracy: Please use “Wind 245 at 8kts” for your noise model if you are unable to use actual hour-by-hour statistical winds in your model. Almost all aircraft activity is during the day when the prevailing winds are from the runway heading and faster than 4kts. Please do not use Wind 212 at 4kts, as this has the effect of reducing the contour lines at the SE end of the airport, which can mislead the perception of those residing South and Southeast of the airport.

18. Reduce noise contour inaccuracy: One of the future outlook/aircraft activity forecasting statements made at the meeting referenced “Minor Changes in Helicopter Fleet” may no longer be true. Mr. Tu, the operator of the flight school Civic Helicopters, has unexpectedly sold the school to a large operator and the school may be expanding operations. Recommend URS directly interview the new operators and update the noise model’s estimate.

19. Reduce noise contour inaccuracy: Recommend review and ensure helicopter tracks are as close to actual as possible, as they are not part of the fixed wing pattern. Especially ensure the arrival-departure paths from the Civic Helicopter pads to and from the southeast are correct. Prospective buyers in encroaching residential areas to the SE need to be advised on a map of blade-slap levels and frequency.

20. Improve future activity estimates: It is a fact that CRQ has experienced operational loads of up to 292,000 per year. That was a year in which it was reported there were 4 flight schools. There are now 5 flight schools and two flying clubs which members use for personal training. All schools seem to be increasing capacity. Users would like to request that operations estimates be challenged, as users believe they are too low.

21. Increase public awareness: Make a “daytime rough-order-of-magnitude (ROM) Runway 24 in-use” overlay picture map available to the public with noise contours all the way down to the 45dB level using Winds from 240 deg, wind speed 10 kts and relative humidity of 50%.

22. Increase public awareness: Make a “daytime rough-order-of-magnitude (ROM) Runway 06 in-use” overlay picture map available to the public with noise contours all the way down to the 45dB level using Winds from 060 deg (runway heading) and wind speed 10 kts and relative humidity of 20%.

23. Recommendation: For the study and recommendations more closely coordinate in a more one-on-one fashion for technical discussions with representatives the local user groups by networking through the 1. Aircraft Owners and Pilots Association, Airport Support Network Volunteer--the ASN Representative for CRQ is Rick Baker. 2. Carlsbad Airport Association LLC http://www.palomarairport.org 3. Palomar Airport Association www.palomarairportassociation.com public benefit 501(c)(3). These channels coordinate with many if not most airport users.

Attachments:

Appendix A: California Pilots Association Letter to City and ALUC, Feb 26, 2004

Appendix B: Petition to the ALUC, March 8, 2004
petition-aluc-crq-clup-update-cozad.pdf

Appendix C: Avigation easements, March 30, 2004
rc-20040330-LTRFinnilareAvigationEasements.pdf

Appendix D: Draft CLUP for SLO airport, encourages industrial development around airport, not residential.
See SLO_ALUP_1_04a_tefft_draft.pdf

Appendix A

CALIFORNIA PILOTS ASSOCIATION
P. O. Box 6868
San Carlos, CA 94070
Tel. 650-594-9300
E-mail: jaywhite@astreet.com
FAX TRANSMISSION

February 26, 2004
San Diego County Regional Airport Authority
Attn: Mr. Ted Anasis, AICP
P.O. Box 82777
San Diego, CA 92138-2776

Re: Carlsbad/Palomar Airport

Dear Sirs/Mmes:

The California Pilots Association assists cities and counties in preserving their public airports. Each public airport is an on ramp and off ramp to the nation's aerial highways. The Carlsbad/Palomar Airport serves that very important business and personal transportation purpose for the region.

Our members are concerned that the proposed Bressi Ranch residential development under the traffic pattern for Carlsbad/Palomar Airport would adversely affect and jeopardize the airport's future. The airport must be preserved if future generations of the region are to enjoy an effective air transportation facility.

Compatibility of the proposed Bressi Ranch Development must be judged by guidelines contained in the Caltrans Airport Land Use Planning Handbook and any current Airport Land Use Plan. If the existing Airport land Use Plan is not current, the San Diego County Regional Airport Authority as the responsible agency is mandated to review and update the plan.

An updated airport land use plan must incorporate guidelines contained in the Caltrans Handbook. A plan can be updated with a resolution by your Authority that incorporates by reference the Handbook guidelines into the updated plan. It is the suggestion of our Association that your Authority adopt a resolution updating the Carlsbad/Palomar Airport Land Use Plan before evaluating the Bressi Ranch Development project for compatibility.

Thank you for the opportunity to comment on this very important issue.

Yours truly,

Jay C. White, President

CC: City of Carlsbad Planning Dept.
Caltrans Division of Aeronautics
Carlsbad Airport Association
Lennar Communities

CARLSBAD AIRPORT ASSOCIATION, LLC

MAGELLAN AVIATION BUILDING * McCLELLAN-PALOMAR AIRPORT

2006 Palomar Airport Road, Suite 214
Carlsbad, CA 92008

Telephone (760) 431-8200
Facsimile (760) 431-1244

Ronald J. Cozad, Managing Member & General Counsel
cozadlaw@sbcglobal.net

March 8, 2004

SAN DIEGO COUNTY REGIONAL AIRPORT AUTHORITY
Airport Land Use Commission
P.O. Box 82776
San Diego, CA 92138-2776

By Personal Delivery
San Diego International Airport
Commuter Terminal, 3rd Floor - Wright Bros. Conference Room
3225 N. Harbor Dr. - San Diego, CA 92101
March 8, 2004 Time: 10:00 am

Re: **Petition for Review and Update of CRQ CLUP**
CRQ – Bressi Ranch ALUC Item 17-March 1, 2004

Dear Commissioners:

The CAA represents light aircraft owners, pilots, businesses and users of McClellan-Palomar Airport. The CAA is a member of the San Diego Area Aviation Council, which is composed of similar user organizations from each general aviation airport throughout the county. I am also writing on behalf of the Palomar Airport Association, a public benefit group currently in formation and affiliated with California Pilots.

Last Monday, we attended the ALUC meeting believing that item 17 would include consideration of roughly 500 residences planned for construction in the Bressi Ranch development. When we learned at the last minute the submission had been limited to the industrial-only portions along Palomar Airport Drive and that no residences were under consideration, several persons, including myself chose not to speak. When we attempted to determine when the Commission would consider the residential parcels, it became apparent that the development's proponents may argue the Commission lacks authority based on the **outdated ten year old CLUP currently in effect.**

Upon further investigation, we determined that at least as far back as 1984, a large and conspicuous portion of the development was "carved out" of the "Airport Influence Area", as shown in SANDAG'S 1994 CLUP, and arguably no longer within your control. For your reference, we attach a copy of the CRQ Land Use Plan showing the "carve out" directly over the residential portion of the tract. If we are correct, it appears you will not have the tools to fulfill your statutory mandate:

> "…to **protect public health, safety, and welfare** by ensuring the orderly expansion of airports and the adoption of land use measures that minimize the public's exposure to **excessive noise** and **safety hazards** within **areas around public airports** to the extent that these areas are not already devoted to incompatible uses." *California Public Utilities Code 21670(a)(2).*

In support of this Petition, we attach appropriate references to this Commission's grant of authority and to references from California Department of Transportation establishing the following:

1. This Commission has the authority and duty to prepare and adopt a CLUP for airports within its geographical jurisdiction.
2. The CLUP shall be reviewed as often as necessary in order to accomplish its purposes. ***A periodic reexamination of the entire plan is strongly encouraged as a means of keeping it up to date with changes in state laws, local land uses, airport development and activity, and current concepts for achieving noise and safety compatibility. Depending upon the rapidity with which these changes occur, a thorough review is appropriate every five to ten years. The CLUP itself provides for updates every 5 years or sooner as needs arise.***
3. This Commission is not bound by prior action or inaction of SANDAG.

Therefore, for myself, for our members and for the welfare of the community and the potential families who may purchase homes within Bressi Ranch, we request that this Honorable Commission order a review and update of the CRQ CLUP, to update anticipated uses, to assert review authority and to determine whether the proposed residential uses within 1 mile of the country's busiest single runway airport are consistent with current planning models, such as the *California Airport Land Use Planning Handbook*. We believe that once this Commission conducts the proper oversight of this project, it will necessarily find the proposed residential use as "inconsistent" and will appropriately limit building to commercial and light industrial uses within a properly defined Airport Influence Area.

Sincerely,

Ronald J. Cozad

Copies

A. Shafer-Payne
Vice President, Strategic Planning

Peter Drinkwater
(Peter.drinkwater@sdcounty.ca.gov)
COUNTY OF SAN DIEGO
Department of Airports
1660 Joe Crosson Drive, MS S-119
El Cajon, CA 92020

Floyd A. Best
(floyd.best@sdcounty.ca.gov)
McClellan-Palomar, Airport
Palomar Airport Drive
Carlsbad, CA 92008

REFERENCES

SAN DIEGO COUNTY REGIONAL AIRPORT AUTHORITY POLICIES
ARTICLE 8 - GENERAL OPERATIONS
PART 8.3 - STRATEGY AND PLANNING
SECTION 8.30 - AIRPORT LAND USE COMMISSION

POLICY STATEMENT:

(1) General Provisions.

****

(b) Authority. The San Diego County Regional Airport Authority (the "Authority"), is acting in its capacity as the Airport Land Use Commission ("ALUC") for the County, as provided by Section 21670.3 of the California Public Utilities Code. The Authority has adopted this policy in recognition of its governmental obligations under the laws of the State of California, which designate the Authority as the proper Local Agency in the County **to protect public health, safety and welfare** by ensuring the orderly expansion of Airports and **the adoption of land use measures that minimize the public's exposure to excessive noise and safety hazards** within areas **around public airports**, to the extent that these areas are not already devoted to incompatible uses consistent with Section 21670.3 of the California Public Utilities Code.

****

(c) Powers and Duties. The Authority has the following powers and duties, subject to the limitations upon its jurisdiction as set forth in Section 21676 of the California Public Utilities Code:

(i) To assist Local Agencies in ensuring compatible land uses in the vicinity of all new Airports and in the vicinity of existing Airports to the extent that the land in the vicinity of those Airports is not already devoted to incompatible uses;

(ii) To coordinate planning at the state, regional and local levels, so as to provide for the orderly development of air transportation, **while at the same time protecting the public health, safety and welfare;**

(iii) To **prepare and adopt a CLUP** for the County on or before June 30, 2005, pursuant to the requirements of California Public Utilities Code Sections 21670.3 and 21675. Any CLUP developed pursuant to Section 21675 and adopted pursuant to Section 21675.1 by the San Diego Association of Governments shall remain in effect until June 30, 2005, unless the Authority adopts a CLUP prior to that date; and

(iv) **To review the plans, regulations and other actions of Local Agencies** and Airport Operators pursuant to the requirements of California Public Utilities Code Sections 21670.3 and 21676.

****

(h) No Waiver or Creation of Implied Policy of Enforcement. Neither any (i) failure of the Authority to take any act or action in strict enforcement of this policy, inadvertent or otherwise, nor (ii) affirmative waiver of enforcement of this policy by the Authority in a specific instance after consideration of special requests or circumstances, shall be deemed to constitute the establishment of any express or implied policy of the Authority in the enforcement or non-enforcement of this policy, and shall not be relied upon by any person in making any determination, or taking any action, in violation of any provision of this policy.

(2) Comprehensive Land Use Plan.

(a) <u>Purpose of Comprehensive Land Use Plan</u>. The CLUP is the fundamental tool used by the Authority in fulfilling its purpose of promoting Airport land use compatibility. Specifically, compatibility plans have two purposes: (i) to provide for the orderly growth of each Airport and the area surrounding each Airport within the jurisdiction of the Authority; and (ii) to **safeguard the general welfare of the inhabitants within the vicinity of each Airport** within the jurisdiction of the Authority and the public in general.

(b) <u>Preparation of Comprehensive Land Use Plan</u>. The **Authority shall be responsible** for the **preparation of a CLUP** on or before June 30, 2005. The CLUP shall provide for the orderly growth of each Airport and the area surrounding each Airport within the Authority's jurisdiction, and shall provide policies to safeguard the general welfare of the inhabitants within the vicinity of each Airport and the public in general, as required by Section 21675 of the California Public Utilities Code. The CLUP that is adopted by the Authority shall include and shall be based on a long-range Master Plan or an Airport Layout Plan, where available, that reflects the anticipated growth of such Airport during at least the next twenty (20) years. …

(c) <u>Amendments to Comprehensive Land Use Plan</u>. ***The CLUP shall be reviewed as often as necessary in order to accomplish its purposes,*** but shall not be amended more than once in any calendar year. For a CLUP that pertains to more than one Airport in the County, this limitation allows separate amendments for the portion dealing with each individual Airport. Any policies applicable to all Airports in the Authority's jurisdiction shall be amended only once during a calendar year. Coordination with local jurisdictions shall be conducted prior to the approval of any CLUP amendments. ***A periodic review of the CLUP shall be conducted in order to keep the CLUP up to date with changes in state laws, local land uses, Airport development and activity, and current concepts for achieving noise and safety compatibility.***

(d) <u>Adoption of Comprehensive Land Use Plan and Amendments</u>. The CLUP and any amendments shall be approved and adopted by the Authority, and shall constitute the Authority's recommendation to the Local Agency for compatible land uses within the Airport Influence Area. Prior to adopting each CLUP or amendment, the Authority shall hold a public hearing consistent with this policy.

(3) Authority Review of Local Actions.

(a) <u>Overview</u>. One of the fundamental responsibilities of the Authority is the review of Local Agencies' land use plans, Airport plans and certain other land use projects and actions for compliance with the criteria and policies set forth in the applicable CLUP. The process that the Authority shall follow for this review process depends upon the following three (3) factors:

(i) the type of local action involved;
(ii) whether a compatibility plan exists for the Airport; and
(iii) what action the Local Agency has taken with regard to making its general plan consistent with the Authority's CLUP.

(b) <u>Authority Review Requirements</u>. Local Agencies must refer certain actions to the Authority for review. Referral of other local actions, primarily individual development projects, is required in some instances, but voluntary in others.
****

(i) <u>Actions For Which Authority Review Is Mandatory</u>.

(A) General Plans and Specific Plans. **Any proposal by a Local Agency to adopt a general plan or specific plan shall be referred to the Authority for review**, if the boundaries of the plan are within the Airport Influence Area of an Airport, irrespective of whether a CLUP has been adopted for the Airport. If a CLUP has not been adopted, then the Airport Influence Area is defined to mean the study area for such plan or the land within two (2) miles of the Airport boundary pursuant to Section 21675.1(b) of the California Public Utilities Code. Amendments to such plans also shall be referred to the Authority, if the change affects locations within an Airport Influence Area. In such instances, referral shall take place prior to the Local Agency's action to adopt or amend the plan consistent with the requirements of Section 21676(b) of the California Public Utilities Code. The requirement for submittal of general plans and specific plans exists regardless of whether a proposal is initiated by the Local Agency to adopt or amend a general or specific plan or whether a proposal is initiated based upon the requirement for the Local Agency's plans to be reviewed for consistency with a CLUP that is newly adopted or amended by the Authority. California Government Code Section 65302.3 requires Local Agencies to either amend their general plans and any affected specific plan to be consistent with the Authority's CLUP within one-hundred eighty (180) days of when the Authority adopted or amended its CLUP, or take the steps necessary to overrule the Authority.

(B) Ordinances and Regulations. Authority review of Local Agency proposals to adopt or amend Zoning, building, and other land use ordinances and regulations shall be required in instances where those ordinances and regulations have implications for Airport land use noise or safety compatibility pursuant to the requirements of Section 21676(b) of the California Public Utilities Code.

APPENDIX A
DEFINITIONS

"Airport Influence Area" means a planning area designated by the Authority around each Public-Use Airport which is, **or reasonably may become, affected by Airport operations including, but not limited to noise, fumes, or other influence**, or which is, or reasonably may become, a site for a hazard to aerial navigation. If a CLUP has not been adopted, then the Airport Influence Area means the land within two (2) miles of the Airport boundary. See California Public Utilities Code Section 21675.1(b).

"Comprehensive Land Use Plan" or **"CLUP"** means the compatibility plan that presents the areas currently impacted **or likely to be impacted by noise levels and flight activities associated with aircraft operations** of one or more Airports. A CLUP usually presents in narrative and graphic form the noise, safety and other criteria that will enable Local Agencies to compatibly plan and develop the land within the Airport Influence Area.

California Airport Land Use Planning Handbook

State of California Department of Transportation Division of Aeronautics

p. 2-16

Plan Amendments

State law (Section 21675(a)) limits amendment of a compatibility plan to no more than once per calendar year. For compatibility plans which pertain to more than one airport, this limitation can be interpreted as allowing separate amendments for the portion dealing with each individual airport. Any policies applicable to all airports in the ALUC's jurisdiction can be amended only once during a year. This same section of the law also states that a compatibility plan "shall be reviewed as often as necessary in order to accomplish its purpose." ***A periodic reexamination of the entire plan is strongly encouraged as a means of keeping it up to date with changes in state laws, local land uses, airport development and activity, and current concepts for achieving noise and safety compatibility. Depending upon the rapidity with which these changes occur, a thorough review is appropriate every five to ten years.*** The review and amendment process should follow essentially the same steps as noted above for the original adoption process. Certain steps generally can be simplified if the changes to the plan are relatively minor. Coordination with local jurisdictions is nevertheless still important, particularly if the changes involve influence area boundary changes or affect the consistency with local general plans.

COMPREHENSIVE LAND USE PLAN McCLELLAN-PALOMAR AIRPORT CARLSBAD, CALIFORNIA

Adopted April, 1994

San Diego
ASSOCIATION OF GOVERNMENTS

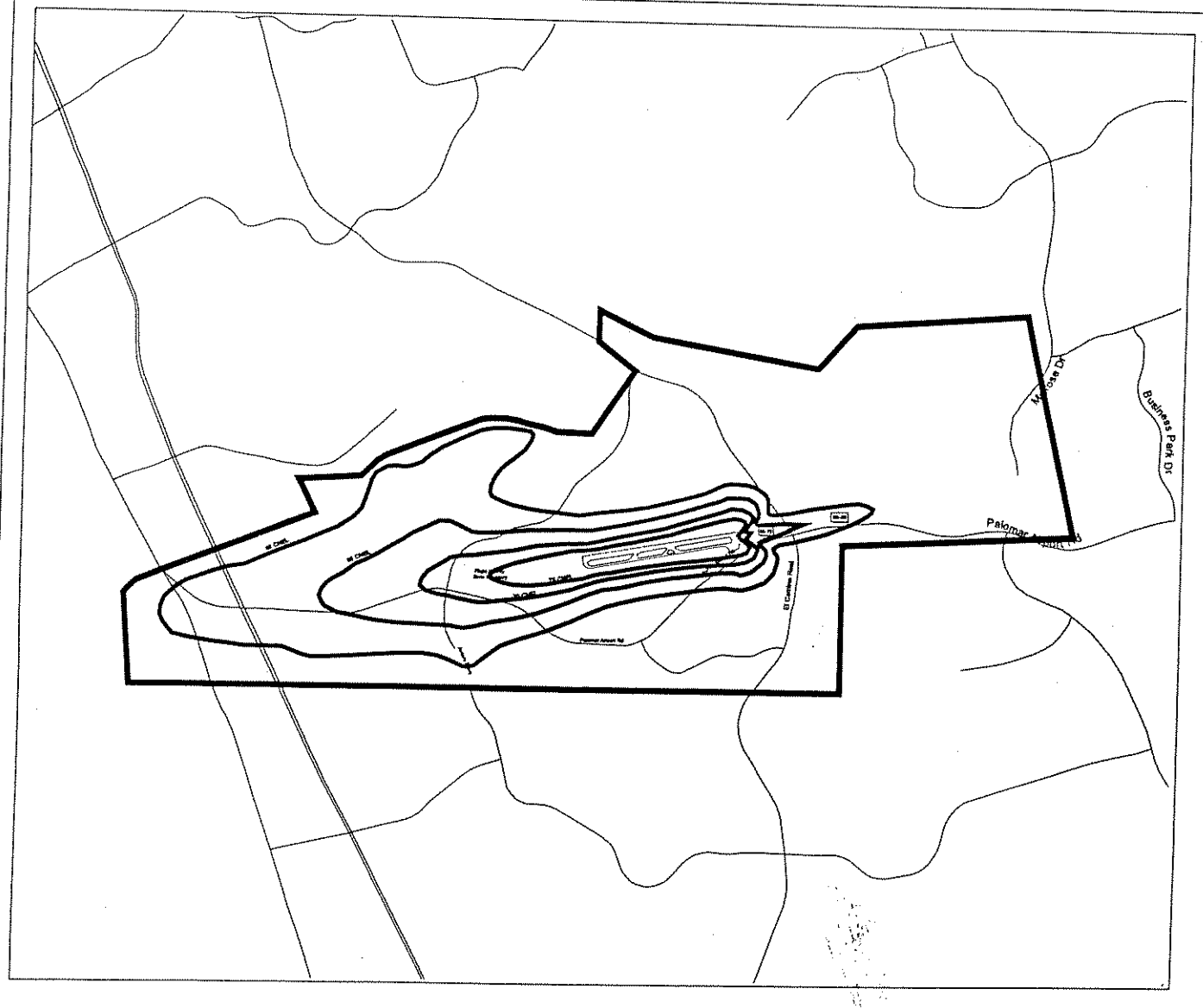
401 B Street • Suite 800
San Diego, CA 92101

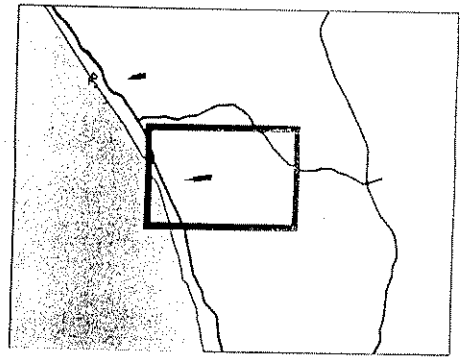
(619) 595-5300

This report was financed with SANDAG local funds.

MEMBER AGENCIES: Cities of Carlsbad, Chula Vista, Coronado, Del Mar, El Cajon, Encinitas, Escondido, Imperial Beach, La Mesa, Lemon Grove, National City, Oceanside, Poway, San Diego, San Marcos, Santee, Solana Beach, Vista, and County of San Diego.
ADVISORY/LIAISON MEMBERS: California Department of Transportation, U.S. Department of Defense, and Tijuana/Baja California.

Palomar Airport - Adopted CNEL





Runway
Adopted CNEL
Pal_aia
Majorrds

SANDAG
San Diego's Regional Planning Agency

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N W E S

December, 2002

APPENDIX B

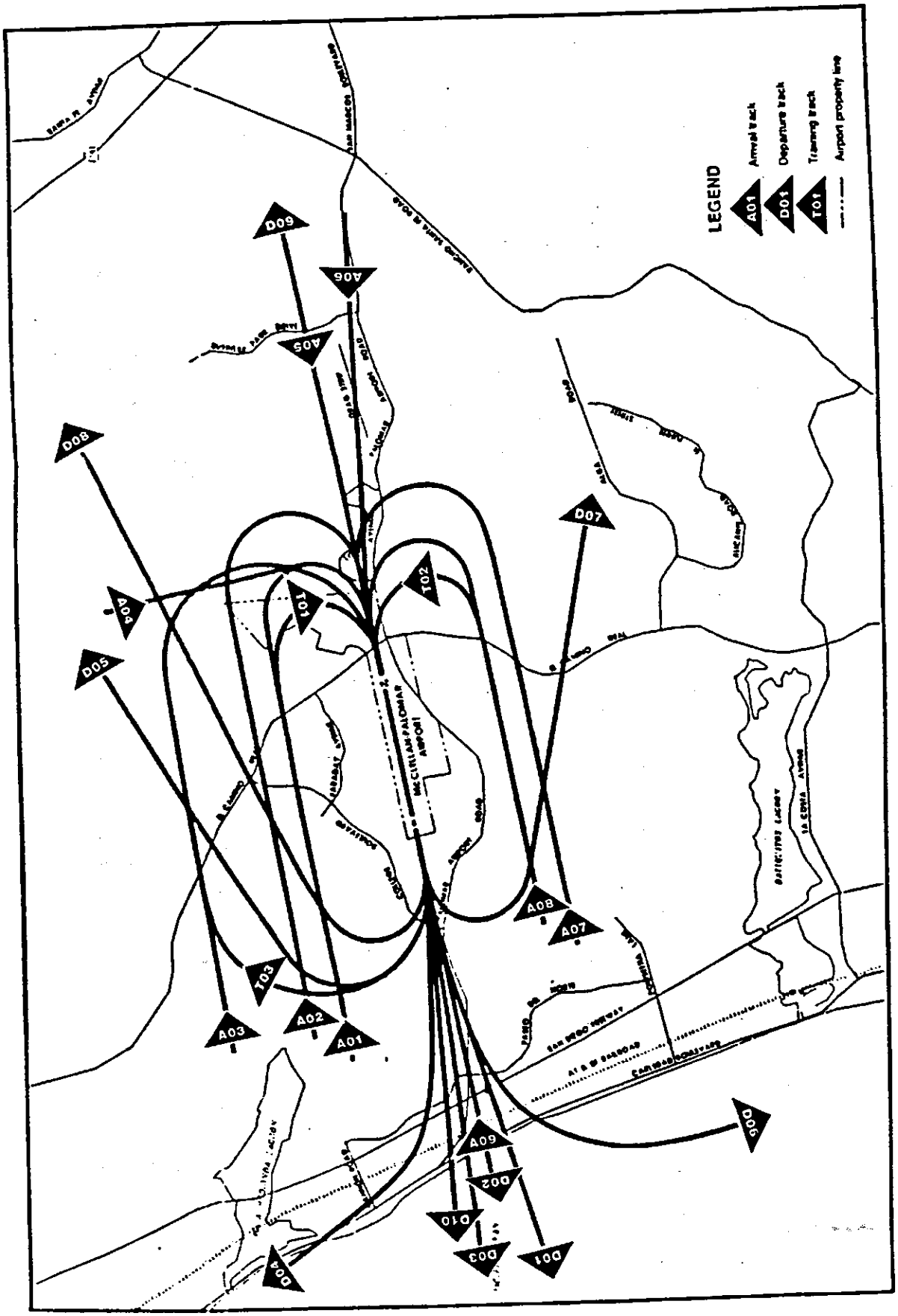

Exhibit L

AVERAGE FLIGHT TRACKS

Noise Exposure Maps
McClellan-Palomar Airport
KPMG Peat Marwick

May 1990

CARLSBAD AIRPORT ASSOCIATION, LLC

MAGELLAN AVIATION BUILDING * McCLELLAN-PALOMAR AIRPORT

2006 Palomar Airport Road, Suite 214
Carlsbad, CA 92008

Telephone (760) 431-8200
Facsimile (760) 431-1244

Ronald J. Cozad, Managing Member & General Counsel
cozadlaw@sbcglobal.net

March 30, 2004

Mayor Pro Tem Ramona Finnila
CITY OF CARLSBAD
1200 Carlsbad Village Drive
Carlsbad, CA 92008

Re: Bressi Ranch Avigation Easements

Dear Mayor Pro Tem Finnila:

The Carlsbad Airport Association wishes to thank you for your efforts in presenting the Part 150 Noise Study last night at the Faraday Center. Thanks also for confirming that the City is requiring avigation easements be executed covering the entire project. Given the unusual history and placement of the parcel we think your insistence on the easements reflects sound pragmatic judgment.

Sincerely,

Copies
P. Drinkwater
F. Best
C. Lewis

SAN DIEGO AREA AVIATION COUNCIL

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cozadlaw@sbcglobal.net

AGUA CALENTE
BORREGO VALLEY
BROWN
FALLBROOK
FRENCH VALLEY
GILLESPIE FIELD
JACUMBA
MONTGOMERY FIELD
OCEANSIDE
OCOTILLO WELLS
MCCLELLAN-PALOMAR
RAMONA

APRIL 5, 2004

EXHIBITS

BEFORE THE
SAN DIEGO COUNTY REGIONAL AIRPORT AUTHORITY
ITEM 13

SAN DIEGO AREA AVIATION COUNCIL

PROMOTING AVIATION AND PROTECTING AIRPORTS THROUGHOUT AND NEAR SAN DIEGO COUNTY

The SDAAC promotes the proper use of land near airports to achieve harmonious relations between airport users and residents through responsible zoning and building controls. The SDAAC is composed of members from airport organizations from each San Diego area public airport, including McClellan-Palomar, French Valley, Borrego Valley, Fallbrook Airpark, Agua Caliente, Jacumba, Ocotillo Wells, Montgomery Field, Oceanside, Ramona, San Diego, Brown and Gillespie Fields.

Each member is nominated by airport volunteer groups. Each member has extensive knowledge of airport land use principles and works in coordination with the umbrella organization. The SDAAC draws from the expertise and knowledge of the Federal Aviation Administration and California Department of Transportation, as well as from each member organization, the California Pilots Association and the Aircraft Owners and Pilots Association. The SDAAC is a resource to Southern California government, the press, residents, pilots, non-pilots, local Commissions and Committees.

In year 2004 the SDAAC's top issues include the inappropriate adherence by municipalities to outdated and ineffective Comprehensive Land Use Plans (CLUPs), zoning contrary to accepted guidelines and the irresponsible placement of homes in high-risk aircraft operation zones and in noise sensitive areas near airports.

SAN DIEGO COUNTY REGIONAL AIRPORT AUTHORITY **STAFF REPORT**	**ITEM NO.** 13
SUBJECT: AIRPORT LAND USE COMMISSION: CONSISTENCY DETERMINATION GILLESPIE FIELD AIRPORT COMPREHENSIVE LAND USE PLAN – GENERAL PLAN AMENDMENT, ZONE RECLASSIFICATION AND CONSTRUCTION OF THE BUCK'S LANDING PROJECT, 1900 WELD BOULEVARD, CITY OF EL CAJON	**MEETING DATE:** April 5, 2004

The Staff Report fails to mention the CLUP is required to be updated every five years or sooner as required. This CLUP is FIFTEEN YEARS OLD and out of date.

1. Gillespie Field Comprehensive Land Use Plan (CLUP)

A CLUP was originally adopted for Gillespie Field in 1974 and amended in July 1989. This CLUP provides a land use plan for the areas surrounding Gillespie Field based upon noise impact zones and runway protection zones. In addition, the CLUP describes the actions necessary to help ensure compatible land use planning surrounding Gillespie Field, which is operated by the County of San Diego Department of Public Works, Airports.

The Staff Report focuses on the FAA's "no hazard" determination but minimizes its blatant criticism of the project as a whole.

3. Information Received from FAA and County of San Diego Airports Division

Determination of No Hazard To Air Navigation from FAA

Consistent with CLUP requirements, the project developer submitted the proposed project to the FAA for a hazard to air navigation determination pursuant to the FAR Part 77 requirements. The FAA prepared an aeronautical study that determined that the proposed project would not be a hazard to air navigation. In addition to this "no hazard" determination, however, the FAA included additional information in its aeronautical study as follows:

> "It is the FAA's doctrine to promote compatible land uses around airports through the adoption of local zoning laws by municipalities that restrict the use of adjacent airport lands or that within the immediate vicinity to activities and purposes that are compatible with normal airport/aircraft operations. Development of homes in this location is not considered by FAA to be a compatible use knowing the existence of an airport being less than 1 mile away. It should be noted to residents who will be purchasing these homes that there will be departing and approaching aircraft noise within close proximity. It is in the best interest of everyone that land uses such as residential housing NOT BE located near an airport."

Source: Aeronautical Study No. 2003-AWP-3219-OE issued October 9, 2003.

County of San Diego Airports Division

This statement in the Staff Report,

> ***"…A number of persons also spoke in opposition to the proposed consistency determination…"***

should have more accurately been written as follows:

> ***"More than one hundred members of the public appeared and many spoke of their public safety concerns. All but the developer voiced strong opposition to the Application."***

A preliminary ALUC public hearing regarding the proposed project was held on January 5, 2004. At that hearing, the County of San Diego indicated that it was in the process of preparing an updated narrative Airport Layout Plan (ALP) for Gillespie Field, and presented information regarding the updated activity forecasts, new noise contours and new safety zones that were being developed by the County in connection with the ALP update process. Additional information regarding the County ALP update process is provided in Section 3, below.

In addition to the County of San Diego presentation, the project developer and applicant to the City of El Cajon provided information to the ALUC regarding the residential project. A number of persons also spoke in opposition to the proposed consistency determination.

The Staff Report also neglects to state that the County Director of Airports, Peter Drinkwater, and Principal Airport Specialist, Sherry Miller, appeared and voiced the County's opposition based on unmistakable public safety concerns.

This Commission embraces "best-in-class" governance principles and its members are fully empowered to exercise their respective business judgment to act in what they reasonably believe is in the best interest of the Authority's constituents and the public.

SAN DIEGO COUNTY REGIONAL AIRPORT AUTHORITY

POLICIES

ARTICLE 1 - ADMINISTRATION AND GOVERNANCE
PART 1.5 - GOVERNANCE
SECTION 1.50 - GOVERNANCE

PURPOSE: To establish the principles and practices for the governance of the San Diego County Regional Airport Authority (the "**Authority**").

POLICY STATEMENT:

(1) Establishment of Governance Principles and Practices. The Authority is committed to being and operating as a world-class organization, and to that end shall adopt, implement and maintain best-in-class governance principles and practices.

(2) Adoption of Governance Policy. It is in the best interests of the Authority and the public that it serves to adopt this policy to supplement the San Diego County Regional Airport Authority Act, as amended (the "**Authority Act**"), to delineate the respective roles, duties and responsibilities of:

- The Board of Directors (the "**Board**");
- The Board's Executive Committee (the "**Executive Committee**"); and
- The President/CEO (the "**President/CEO**").

(3) Considerations. This policy has been developed based on the following considerations:

- Review of best-in-class governance principles and practices that have been developed and tested in practice by respected airport authorities and other governmental entities;
- A desire to meet the needs of the public that the Authority serves, and the individuals and businesses that use the Authority's facilities or deal with the Authority; and

(8) General Principles of Governance. The Board and the Executive Committee, in discharging their respective powers, duties and responsibilities under this policy and under any other applicable laws, Policies or Codes, shall act in accordance with the following:

(a) exercise their respective business judgment to act in what they reasonably believe to be in the best interests of the Authority's constituents and the public that the Authority serves;

DRAFT REVISED
AIRPORT LAND USE PLAN
FOR THE
SAN LUIS OBISPO COUNTY REGIONAL AIRPORT

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SAN LUIS OBISPO COUNTY REGIONAL AIRPORT

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SECTION 1

INTRODUCTION

1.1 THE SAN LUIS OBISPO COUNTY AIRPORT LAND USE COMMISSION

The San Luis Obispo County Airport Land Use Commission (ALUC) is an independent body of seven members which has been created in response to the mandates of The State Aeronautics Act, first enacted in 1967. Under this statute, it is the duty of the ALUC

> "to assist local agencies in ensuring compatible land uses in the vicinity of all new airports and in the vicinity of existing airports to the extent that the land in the vicinity is not already devoted to incompatible uses"
>
> "to coordinate planning at the state, regional, and local levels so as to provide for the orderly development of air transportation, while at the same time protecting the public health, safety, and welfare"; and
>
> "to provide for the orderly development of the area surrounding the San Luis Obispo County Regional Airport (Airport) so that new developments are not likely ultimately to cause restrictions to be placed on flight operations to or from the airport."

As the means of fulfilling these basic obligations, the ALUC has two basic duties under the Public Utilities Code:

> **To Prepare Airport Compatibility Plans (Airport Land Use Plans) –** The Commission is required to prepare and adopt an Airport Land Use Plan (ALUP) for each of the airports within its jurisdiction. In the case of San Luis Obispo County, this requirement applies to the Airport (McChesney Field), the Oceano Airport, and the Paso Robles Municipal Airport.
>
> **To Review Referring Agency Actions and Airport Plans –** In addition to formulating ALUPs, the ALUC is required to review certain types of action by local counties and cities which affect the land use in the vicinity of airports to ensure that the action proposed by the referring agency is consistent with the ALUP.

Although the ALUC, by law, receives technical support from the County of San Luis Obispo, it is an autonomous body and is not part of any local governmental structure.

1.2 THE ALUP FOR THE SAN LUIS OBISPO COUNTY REGIONAL AIRPORT: BACKGROUND

The ALUP for the Airport was initially adopted by the ALUC in 1973. The plan was subsequently amended in 1974, 1977, and 2003. The current document represents a further amendment in response to revised state guidelines published in the Department of Transportation's Airport Land Use Handbook (ALUP Handbook) in January, 2002.

SECTION 2

SCOPE OF THE AIRPORT LAND USE PLAN

2.1 PURPOSES

The purposes for which this ALUP is prepared and adopted are:

to protect the long term economic viability of the Airport by ensuring compatible land uses in the vicinity of the airport to the extent that lands in the airport area are not already devoted to incompatible uses;

to promote the safety and well being of the public by ensuring adoption of land use regulations which minimize exposure of persons to hazards associated with the operation of the Airport;

to provide a set of policies and criteria to assist the ALUC in evaluating the compatibility of proposed local actions on the part of referring agencies with the Airport and in determining the consistency of the proposed local action with the ALUP; and

to provide guidance to local agencies in presenting proposed local actions to the ALUC for review.

2.2 AUTHORITIES

The ALUP for the Airport is prepared and adopted in accordance with:

Sections 21670 to 21679.5 of the California Public Utilities Code;

The ALUP Handbook, December, 1993; and

Federal Aviation Regulations, Parts 77 and 150.

It is the desire and intent of the ALUC that the ALUP conform, to the greatest extent possible, with the standards and recommendations set forth in these documents, while reflecting the unique preferences and requirements of the San Luis Obispo area.

2.3 GEOGRAPHIC COVERAGE

The geographic area encompassed by the ALUP is termed the Airport Land Use Planning Area (Planning Area). The dimensions of this area were defined in 1977 and have not changed.

In general terms, the Planning Area is an irregular oval, which is aligned with its long axis in a northwest-southeast direction, parallel to the centerline of Runway 11-29 at the Airport. The dimensions of the oval are approximately 31,600 feet by 20,850 feet.

The Planning Area extends from a point approximately 1/2 mile southeast of the community of Edna on the southeast to West Oceanaire Drive in the Laguna Lake Subdivision on the northwest. To the north of the Airport,

the Planning Area extends to Sinsheimer School and Edgewood Drive in the City of San Luis Obispo. To the southeast and east, the boundary of the Planning Area is close to the ridgeline of the high terrain.

2.4 JURISDICTIONS AFFECTED BY THE ALUP

The ALUP for the Airport includes areas within the jurisdictions of the County of San Luis Obispo and the incorporated city of San Luis Obispo.

2.5 ACTIONS REVIEWED BY THE ALUC

2.5.1 Mandatory ALUC Review

2.5.1.1 Construction Plans for New Airports – No application for the construction of a new airport within San Luis Obispo County may be submitted to any local, state, regional, or federal agency unless that plan has been submitted to and approved by the ALUC.

2.5.1.2 Airport Expansions – No application for the expansion of the Airport which entails an amendment of the Airport Permit may be submitted to any local, state, regional, or federal agency unless that plan has been submitted to and approved by the ALUC.

Airport expansion is defined to include:

a. construction of any new runway

b. extension or realignment of an existing runway

c. acquisition of runway protection zones or any interest in land for the purposes above

2.5.1.3 Airport Master Plans – The County of San Luis Obispo or any succeeding owner of the Airport shall, prior to modification of its master plan, refer such proposed changes to the ALUC.

2.5.1.4 Actions by Referring Agencies – The County of San Luis Obispo and the City of San Luis Obispo must, prior to enacting certain ordinances and actions that affect lands within the Airport Planning Area refer such actions to the ALUC. Those local actions include:

a. general plans and general plan amendments

b. specific plans and specific plan amendments

c. zoning ordinances & zoning ordinance amendments

d. building regulations and modifications thereof

2.5.1.5 Individual Development Projects in Areas Under Jurisdiction of the County of San Luis Obispo – The Public Utilities Code does not mandate review by the ALUC of individual development projects when such projects do not require adoption of or amendments to a general or specific plan, zoning ordinance, or building regulation. The ALUC may, however, review individual development projects when they have been referred by a local agency or under the terms of an agreement with a local agency. In the unincorporated areas of San Luis Obispo County the General Plan and supporting planning instruments do not incorporate detailed provisions for land use or development in the vicinity of the San Luis Obispo County Regional Airport, but rather state that such development be consistent with the Airport Land Use Plan. Since, under the provisions of State law, no body other than an Airport Land Use Commission is empowered to make a determination of consistency with respect to

an adopted ALUP, it follows that all individual projects within portions of the Airport Planning Area which are under the jurisdiction of the County of San Luis Obispo require review by the ALUC. The county's General Plan also provides that a determination of consistency rendered by the ALUC shall be final unless the Board of Supervisors shall overrule the decision by a four-fifths majority vote.

2.5.2 Optional ALUC Review

2.5.2.1 Review of Specific Proposed Development Projects in Areas Under Jurisdiction of the City of San Luis Obispo – In accordance with the recommendations of the Airport Land Use Planning Handbook of the California Department of Transportation, it shall be the policy of the ALUC to seek, encourage, negotiate, and enter into agreements with the City of San Luis Obispo to require voluntary review of proposed major individual development projects within the airport planning area which entail:

a. expansion of the sphere of influence of the City within the Airport Planning Area

b. residential development, including land divisions, consisting of five or more dwelling units or individual parcels

c. certain requests for variances from a referring agency's height limitation ordinances, when the allowable height of improvements prior to any variance would extend to within 50 feet of any civil airport imaginary surface

d. major capital improvements (e.g., water, sewer, roads) that would promote urban development

e. certain proposed land acquisitions by the City (including acquisition of sites intended for schools, hospitals, jails or prisons, lakes, ponds, wetlands, or sewer treatment ponds)

f. any proposal for construction or alteration of a structure (including antennae) taller than 200 feet above the ground at any location within the City

g. any other proposed land use action, as determined by the local planning agency, involving a question of compatibility with airport activities

In the case of individual project reviews undertaken as a result of these agreements, the comments, suggestions, and recommendations made by the ALUC will be presumed to be advisory in nature, unless specified otherwise in the agreement.

It is of note, however, should the ALUC determine that a general or specific plan has not been made consistent with the ALUP and when a referring agency has not adopted a general or specific plan by overriding the ALUC, the ALUC may require that the referring agency submit all subsequent actions, regulations, and permits to the ALUC for review.

2.6 APPLICABILITY OF ALUP DEVELOPMENT STANDARDS TO PROJECTS NOT REFERRED TO THE ALUC

As noted above, ALUC review of individual development projects within the City of San Luis Obispo is not mandated unless such projects require adoption of or amendments to a general or specific plan, zoning ordinance, or building regulation. The California Public Utilities Code, however, does require that the City of San Luis Obispo, prior to granting permits for the renovation or remodeling of an existing building, structure, or facility and before the construction of a new building, the City shall be guided by:

> "*the height, use, noise, safety, and density criteria that are compatible with airport operations, as established by this article* [i.e., P. U. C. Sections 21670 through 21679.5],

and referred to as the Airport Land Use Planning Handbook, published by the division [of Aeronautics], *and any applicable federal aviation regulations, including, but not limited to, Part 77 (commencing with Section 77.1) of Title 14 of the Federal Code of Regulations, to the extent that the criteria has been incorporated into the plan prepared by a commission pursuant to Section 21675."*

As this ALUP is, in fact, a plan prepared in accord with P. U. C. Section 21675, the height, use, noise, safety, and density criteria established herein must, by State law, be adhered to in approving or denying any individual project, whether or not such project is refeerred to the ALUC for a determination of consistency.

2.7 ALUC ACTION CHOICES

In its consideration of any proposed local action referred to the ALUC, the ALUC shall make one of the following determinations:

a. the proposed local action is consistent with the ALUP of the Airport; or

b. the proposed local action is inconsistent with the ALUP of the Airport.

In addition, the ALUC may, but is not required to, make such additional comments, suggestions, or declarations with respect to the proposed local action as it shall deem fit and appropriate, and may, in particular, indicate to the referring agency, modifications in the proposed local action that would be likely to lead to a finding of consistency by the ALUC. Under no circumstances are such comments, suggestions, or declarations to be interpreted as a "conditional" or other finding of consistency. The referring agency, however, may choose, at its discretion, to amend the proposed local action in accord with the ALUC's comments and resubmit it to the ALUC for consideration.

State law makes no provision for "exceptions" or "waivers" with regard to any determination of consistency made by the ALUC or of any provision, condition, or requirement of an ALUP. Neither the ALUC, its staff, nor the governing body, any subsidiary body, or staff of any referring agency may grant such exception or waiver.

2.8 LIMITATIONS OF THE ALUP

2.8.1 Existing Land Use

The ALUP applies only to new development within the Planning Area, and the ALUC has no authority over existing land use, whether or not such uses are compatible with the ALUP.

A land use is considered to be "existing" when one of the following conditions is met:

a vesting tentative map has been approved and all discretionary approvals have been obtained;

substantial construction investments by the landowner make it infeasible for the property to be used for anything other than its proposed use; or,

the land use physically exists.

Existing land uses that are incompatible with the ALUP's Land Use Compatibility Policies will be considered "non-conforming" uses and will be allowed to remain, but shall not expand more than 10% beyond the permitted

project size at the time of the adoption of this amendment. No increase in the number of residential units for existing residential development will be allowed. If a non-conforming use is either abandoned or substantially destroyed (as defined by Chapter 22.09 of the San Luis Obispo County Land Use Ordinance or by the City of San Luis Obispo Municipal Code/Zoning Regulation Chapters 17.10 and 17.14), the Airport Land Use Commission must review the specific situation and determine whether continuation of the use would be consistent or inconsistent with the Airport Land Use Plan. If an owner wishes to retain an abandoned or retained use, the planning agency or governing body must first determine that, in the particular case, the private benefit is more important than the public objectives of the Airport Land Use Plan and the Airport Land Use Commission must determine that such use is compatible with airport operations.

The limitation on ALUC authority over existing land uses is not applicable when redevelopment or land use conversion is proposed. The fact that the land area associated with the project is already occupied by existing development either compatible or incompatible with the Airport becomes irrelevant when that land use will be replaced by a new development or use.

2.8.2 Airport Operations

Except for its authority to review airport master plans or modifications thereof, applications for airport expansion, and construction plans for new airports, the ALUC shall have no jurisdiction over the normal operation of the Airport.

SECTION 3

AIRPORT INFORMATION

For a general description of the Airport, see Appendix A. For the Airport Layout Plan, see Appendix B.

Tables 1, 2, and 3 have been constructed from data and projections presented in the 1998 Airport Master Plan and its associated EA/EIR and from activity records supplied by Airport Administration. Data for the year 2025 are extrapolated by extending Master Plan projections.

TABLE 1: PROJECTED ANNUAL OPERATIONS BY TYPE OF OPERATION: 1995 – 2025

	1995[a]	2000[b]	2005[b]	2015[b]	2025[c]
Commuter Airlines	23,931	24,800	27,800	32,000	36,200
Cargo Airlines	2,456	3,000	3,600	5,400	7,200
Air Taxi	2,000	2,280	2,370	2,560	2,750
General Aviation	72,743	82,940	86,240	92,840	99,440
Military	599	1,000	1,000	1,000	1,000
Total	101,729	114,020	121,010	133,800	146,590

[a] *Reported tower operations. Total operations actually exceed these figures due to limited hours of tower operation.*
[b] *Projections from 1998 Airport Master Plan*
[c] *Extrapolation from data presented in 1998 Airport Master Plan*

TABLE 2: PROJECTED ANNUAL OPERATIONS BY AIRCRAFT TYPE: 1997 – 2025

	1997[a]	2002[b]	2015[b]	2025[c]
Regional Jet	0	0	3,200	5,660
Commuter 40-59 Seats	0	2,340	9,600	15,180
Commuter 20-39 Seats	15,469	19,500	16,000	13,310
Commuter Less than 20 Seats	72,743	82,940	92,840	99,440
Business Jet	354	730	1,630	2,320
Twin Engine Turboprop	3,898	4,910	5,940	6,730
Twin Engine Piston	8,253	8,750	10,470	11,590
Single Engine Piston	74,080	74,060	81,020	86,320
Helicopter	1,949	2,370	2,740	3,020
Total	101,872	116,820	133,800	146,590

[a] *Reported tower operations. Total operations actually exceed these figures due to limited hours of tower operation.*
[b] *Projections from 1998 Airport Master Plan*
[c] *Extrapolation from data presented in 1998 Airport Master Plan*

TABLE 3: PROJECTED ANNUAL OPERATIONS BY AIRCRAFT TYPE AND TIME OF DAY: 1997 – 2025

	1997	2002[a]	2015[a]	2025[b]
Commuter/Air Taxi				
Arrivals				
Daytime (7 am – 7 pm)	6,160	8,320	10,240	12,160
Evening (7 pm – 10 pm)	1,930	2,600	3,200	3,800
Night (10 pm – 7 am)	1,550	2,080	2,560	3,040
Departures				
Daytime (7 am – 7 pm)	6,960	9,360	11,520	13,680
Evening (7 pm – 10 pm)	1,160	1,560	1,920	2,280
Night (10 pm – 7 am)	1,550	2,080	2,560	3,040
Twin Engine Prop				
Arrivals				
Daytime (7 am – 7 pm)	4,310	4,850	5,830	6,800
Evening (7 pm – 10 pm)	1,280	1,430	1,720	2,010
Night (10 pm – 7 am)	490	546	660	770
Departures				
Daytime (7 am – 7 pm)	4,310	4,850	5,830	6,800
Evening (7 pm – 10 pm)	1,280	1,430	1,720	2,010
Night (10 pm – 7 am)	490	546	660	770
Single Engine Prop				
Arrivals				
Daytime (7 am – 7 pm)	31,480	31,480	34,430	37,390
Evening (7 pm – 10 pm)	4,070	4,070	4,460	4,840
Night (10 pm – 7 am)	1,480	1,480	1,620	1,760

[a] *Projections from Airport Master Plan EA/EIR, 1998*
[b] *Extrapolation from data presented in Airport Master Plan EA/EIR, 1998*

TABLE 3: PROJECTED ANNUAL OPERATIONS BY AIRCRAFT TYPE AND TIME OF DAY: 1997 – 2025 (CONTINUED)

	1997	2002[a]	2015[a]	2025[b]
Single Engine Prop (continued)				
Departures				
Daytime (7 am – 7 pm)	31,480	31,480	34,430	37,390
Evening (7 pm – 10 pm)	4,070	4,070	4,460	4,840
Night (10 pm – 7 am)	1,480	1,480	1,620	1,760
General Aviation Jet				
Arrivals				
Daytime (7 am – 7 pm)	159	329	734	1,140
Evening (7 pm – 10 pm)	18	37	82	127
Night (10 pm – 7 am)	0	0	0	0
Departures				
Daytime (7 am – 7 pm)	159	329	734	1,140
Evening (7 pm – 10 pm)	18	37	82	127
Night (10 pm – 7 am)	0	0	0	0
Helicopter				
Arrivals				
Daytime (7 am – 7 pm)	779	950	1,100	1,240
Evening (7 pm – 10 pm)	195	237	274	311
Night (10 pm – 7 am)	0	0	0	0
Departures				
Daytime (7 am – 7 pm)	779	950	1,100	1,240
Evening (7 pm – 10 pm)	195	237	274	311
Night (10 pm – 7 am)	0	0	0	0

[a] *Projections from Airport Master Plan EA/EIR, 1998*
[b] *Extrapolation from data presented in Airport Master Plan EA/EIR, 1998*

SECTION 4

LAND USE POLICIES

4.1 INTENDED USE

This section of the ALUP is intended to apply to determination of consistency by the ALUC of the following proposed local actions:

a. General plans or general plan amendments

b. Specific plans or specific plan amendments

c. Zoning ordinances & zoning ordinance amendments

d. Modifications of building regulations

e. Individual development proposals

The Land Use Policies may also be of use to local agencies or private individuals in anticipating determinations which are likely to be made by the ALUC.

4.2 GENERAL LAND USE POLICIES

a. **Policy G-1:** Notwithstanding any other provision of this ALUP, a proposed project or local action will be determined to be inconsistent with the ALUP if the information required for review of the proposed local action is not provided by the referring agency

b. **Policy G-2:** Notwithstanding any other provision of this ALUP, a proposed project or local action will be determined to be inconsistent with the ALUP if the proposal would, in the considered opinion of ALUC, present specific incompatibilities to the continued economic vitality and efficient operation of the Airport with respect to safety, noise, overflight or obstacle clearance.

c. **Policy G-3:** Except as provided in Policy G-4, a proposed project or local action will be determined to be inconsistent with the ALUP if the proposal is not in conformance with all applicable Specific Land Use Policies. In the event that the site affected by a proposed project or local action is located in more than one noise exposure area or aviation safety area, the standards for each such area will be applied separately to the land area lying within each noise or safety zone.

d. **Policy G-4:** When the site affected by a proposed project or local action is located in more than one noise exposure area or aviation safety area, the Airport Land Use Commission may, at its sole discretion, elect not to apply the requirements of Policy G-3 if:

   i. the total gross area(s) within the more restrictive area(s) is 2 acres or less, and

   ii. the land area(s) within the more restrictive area(s) is less than 50% of the total gross land area affected by the referred project or local action

   In such instance, the ALUC may elect to apply the policies applicable to the least restrictive noise and/or safety zone to the entire site affected by the project or local action. The ALUC must adopt specific findings that the proposed project or local action, so considered, would not result in the potential development of land uses incompatible with current or future airport operations.

4.3 SPECIFIC LAND USE POLICIES: NOISE

4.3.1 Objective

The objective of the noise policies of this ALUP is to minimize the number of people exposed to frequent and/or high levels of airport noise or to frequent and/or high cumulative noise levels of which airport noise is one component. The basic strategy for achieving noise compatibility is to limit the development of land uses that are particularly sensitive to noise. The most acceptable land uses are ones that either involve few people (especially people engaged in outdoor activities), or generate significant noise levels themselves (such as transportation facilities or industrial uses).

In furtherance of this objective, this ALUP follows the recommendations of the ALUP Handbook in adopting the projected 55 dB CNEL contour as the maximum "acceptable residential noise level." Adoption of 55 dB CNEL as the maximum acceptable residential noise level is supported by substantial authority, including:

- **The Present Character of Properties Adjacent to the Airport** – Despite some pockets of residential and/or light industrial development, the majority of the environment surrounding the Airport is of a "quiet, rural" nature. Page 7-29 of the Caltrans ***Airport Land Use Planning Handbook*** (January, 2002) indicates that 55 dB CNEL or DNL is the most appropriate value for adoption as a residential noise compatibility criterion in such settings.

- **Local Experience -** Existing residential land uses within or even close to the projected 55 dB CNEL contour of the Airport have generated numerous noise complaints and significant opposition to airport expansion. This suggests that the local community may be relatively sensitive to aircraft noise and overflight impacts and validates the concept that residential land uses within this contour would not be compatible with the long term growth and viability of the Airport.

- **The California Public Utilities Code and the California Code of Regulations** – Section 21669 of the California Public Utilities Code requires that state Department of Transportation to "*adopt noise standards governing the operation of aircraft and aircraft engines for airports*" and further indicates that "*The standards shall be based upon the level of noise acceptable to a reasonable person residing in the vicinity of the airport*."

  Title 21 of the California Code of Regulations deals more specifically with this issue and defines the policies of the Department of Transportation, as required by the statute. Title 21 emphasizes that the specific noise levels put forth in this Section are not intended to supplant or supercede the judgment of local authorities or airport land use commissions. Two important sections in this regard are:

  > *"§5002 Liberal Construction*
  > *This subchapter shall be liberally construed and applied to promote its underlying purposes which are to protect the public from noise and to resolve incompatibilities between airports and their surrounding neighbors."*
  >
  > and
  >
  > *"§5002 Provisions Not Exclusive*
  > *....The noise limits specified herein are not intended to prevent any local government to the extent not prohibited by federal law or any airport proprietor from setting more stringent standards."*

  The provisions of Title 21 merely specify maximum levels of airport noise which cannot be exceeded at the local level. The provision is analogous to the situation with the automobile speed limit. Local jurisdictions are free to set speed limits appropriate to their own community, but may not exceed the state-mandated maximum of 65 miles per hour.

With regards to the maximum noise limits permitted by the Department of Transportation, Section 5006 states that:

> *"The level of noise acceptable to a reasonable person residing in the vicinity of an airport is established as a community noise equivalent level (CNEL) value of 65 dB for the purpose of these regulations. This criterion level has been chosen for reasonable persons residing in urban residential areas...." (emphasis added)*

The Department of Transportation, however, recognizes that the 65 dB CNEL level is not appropriate in settings which are other than "urban" in character and that noise levels which are measured in different settings must be adjusted in order to be compared with one another or with suggested standards. This process is described in some detail in the ALUP Handbook (pages 7-23 through 7-28) and is termed "normalization." According to Table 7B of the ALUP Handbook, noise levels in the vicinity of the Airport should be normalized by adding 10 dB to the measured value (or subtracting 10 dB from the maximum acceptable CNEL value). This results in a recommended maximum acceptable residential noise level of 55 dB CNEL, which is in agreement with the provisions of this amendment.

In addition to the above, aircraft overflights have been characterized by some noise experts (Niedzielski, Minnesota Pollution Control Agency) as "impulsive" in nature. Such consideration would require an additional normalization of 5 dB, bringing the state-recommended noise standard to 50 dB CNEL for the San Luis Obispo area.

The process of normalizing sound levels in the vicinity of the Airport, then, requires the addition of 10 to 15 dB to the measured CNEL value. At the 55 dB CNEL contour, the normalized CNEL would be in the range of 65 to 70 dB. In the document NTID 300.3 ***Community Noise***, the U.S. Environmental Protection Agency (EPA) has correlated community reaction to noise with normalized CNEL values, as calculated from documented case histories. At a level of 65 to 70 dB normalized CNEL, widespread complaints and/or a single threat of legal action is to be expected. It is clear, therefore, that the 55 dB CNEL noise standard adopted in this amendment as the maximum acceptable noise level for new residential development is the least restrictive standard which will meet the goal "*to protect the public from noise and to resolve incompatibilities between airports and their surrounding neighbors*" as required in Title 21.

In the case of the current amendment, moreover, it is not necessary to speculate as to whether the specified 55 dB CNEL of maximum noise level for residential and other noise-sensitive development is acceptable under California Department of Transportation guidelines, as the Department of Transportation has specifically reviewed this amendment and has found its residential noise policies to be appropriate.

- **Recommendations of the U.S. EPA** – The U.S. EPA, in its publication ***Information on Levels of Environmental Noise Requisite to Protect Public Health and Welfare with an Adequate Margin of Safety*** (often referred to as the ***Levels Document***), provides specific recommendations concerning the maximum levels of environmental noise which should be permitted. Although U.S. EPA guidelines designate noise exposure levels in Ldn, rather than CNEL, in the case of the Airport, these two measurements are expected to be quite similar.

  U.S. EPA standards suggest that "outdoors in residential areas and farms and other outdoor areas where people spend widely varying amounts of time and other places where quiet is a basis for use," the ambient exterior noise level should be less than 55 dB Ldn. In addition, the U.S. EPA suggests that interior noise levels in residential areas should be less than 45 dB Ldn. Since noise attenuation for typical warm-climate residential construction, with windows open is approximately 12 dB, this interior standard would correspond to an exterior noise level less than 57 dB Ldn.

  The U.S. EPA also addresses the issue of community noise levels. The ***Levels Document*** categorizes communities as Quiet Suburban (QS), Normal Suburban (NS), Urban (U), or Noisy Urban (NU). Ambient noise levels prescribed in each of these settings are 50 dB for Quiet Suburban, 55 dB for

Normal Suburban, 60 dB for Urban, and 65 dB for Noisy Urban. Since virtually all of the undeveloped land within the Planning Area is presently rural or quiet suburban, a maximum acceptable residential noise level of 50 dB would be most consistent with EPA guidelines. Even if these areas are classified according to planned use, rather than present use, they would be of normal suburban character and an exterior residential noise level of 55 dB would be the maximum permissible.

In view of these findings, the present amendment is consistent with or less stringent than noise guidelines specified by the U.S. EPA.

- **Recommendations of the World Health Organization (WHO)** – In March of 1999, a task force of the WHO met in London and reviewed extensively the current literature on the health effects of ambient noise exposure. The document, Guidelines for Community Noise, which resulted from this session, contains the standards for maximum acceptable community noise levels (see Table 4).

TABLE 4: GUIDELINES FOR COMMUNITY NOISE

Environment	Sound Level dB LAeq[a]	Equivalent Exterior Sound Level db LAeq[a]
Outdoor living areas	50 – 55	50 – 55
Indoor dwellings	35	47 – 50[b]
Bedrooms	30	42 – 45[b]
School classrooms	35	47 – 50[b]
School playgrounds, outdoor	55	55
Hospitals, patient rooms	30	42 – 45[b]
Hospitals, treatment/observation rooms	35	47 – 50[b]
Industrial, commercial & traffic areas	70	n/a[c]
Music through earphones	85	n/a[c]
Ceremonies and entertainment	100	n/a[c]

[a] The ear has different sensitivities to different frequencies, being least sensitive to extremely high and extremely low frequencies. Because of this varied sensitivity, the term "A weighting" is used: all the different frequencies, that make up the sound, are assessed to give a sound pressure level. The sound pressure level measured in dB is referred to as "A-weighted" and expressed as dB LAeq.

[b] Range indicates values obtained using average building attenuation figures given by the EPA for warm climates, windows open (12 dB) and for average across the nation (15 dB).

[c] Exterior sound level is not applicable, as the listed use is anticipated to be the primary source of noise exposure.

The 55 dB CNEL standard established by the ALUP as the maximum acceptable averaged noise level for new residential land uses is consistent with WHO recommendations with respect to outdoor living areas and is considerably less restrictive than WHO guidelines with regard to indoor living areas, bedrooms and classrooms.

In addition to recommendations for average noise exposure, the WHO has specified standards for maximum exposure to single noise events (see Table 5).

TABLE 5: GUIDELINES FOR SINGLE NOISE EVENTS

Environment	Sound Level dB LAmax[a]	Equivalent Exterior Sound Level dB LAmax[a]
Outdoor facade of living areas, night	60	60
Bedrooms	45	57 – 60[b]
Hospitals, patient rooms (night)	40	52 – 55[b]
Music through earphones	110	n/a[c]
Ceremonies and entertainment	110	n/a[c]

[a] The expression dB LAmax is the maximum noise level of an individual event. Measurements are to be A-weighted and are to be obtained using a *Fast* response time.

[b] Range indicates values obtained using average building attenuation figures given by the EPA for warm climates, windows open (12 dB) and for average across the nation (15 dB).

[c] Exterior sound level is not applicable, as the listed use is anticipated to be the primary source of noise exposure.

– **Recommendations of the Natural Resources Defense Council (NRDC)** – In 1995, the NRDC undertook a study of noise and land use issues at 125 U.S. airports. The analysis and conclusions of that study were subsequently published in a document entitled ***Flying Off Course: Environmental Impacts of America's Airports***. In this report, the NRDC advocates the use of the 55 dB CNEL contour for all "funding and planning decisions." The provisions of this amendment are consistent with that standard.

  The ALUP recognizes, however, that, within areas already devoted to residential land use within the 55 dB CNEL contour, further development of isolated parcels may not notably increase the degree of incompatibility which currently exists. In consequence, a separate standard of 60 dB projected CNEL is adopted as the maximum "acceptable noise level" for residential infill development.

4.3.2. Definitions

4.3.2.1 Extremely Noise Sensitive Land Uses – land uses for which customary or anticipated activities may be disrupted to a significant degree by aviation noise impacts and for which sufficient mitigation to ensure compatibility with current or future airport operations is not feasible. The usual characteristics of this category of noise sensitive land uses are:

– an expectation by occupants of a quiet or peaceful environment (either continuously or at certain times during the day or night), and

– difficulty in providing sufficient noise mitigation due to structures with openable windows or outdoor activity areas.

Included in the category of Extremely Noise Sensitive Land Uses are:

a. all residential land uses (rural residential, suburban residential, single-family, multifamily, mobilehomes and mobilehome parks, and caretakers quarters)

b. outdoor theatres, amphitheaters, and public assembly areas (does not include sports stadiums, athletic fields, playgrounds, public swimming pools, tennis courts, golf courses, or small picnic areas)

c. restaurants, bars, taverns, food takeouts, wine tasting rooms, and similar business, if such business include outdoor eating or drinking areas

d. campgrounds (with overnight sleeping facilities)

e. bed and breakfast inns, homestay facilities

4.3.2.2 Moderately Noise Sensitive Land Uses – land uses for which customary or anticipated activities may be disrupted to a significant degree by aviation noise impacts, but for which sufficient mitigation to ensure compatibility with current or future airport operations is feasible by the incorporation of special design features and construction techniques. The usual characteristics of this category of noise sensitive land uses are:

– an expectation by occupants of a quiet or peaceful environment (either continuously or at certain times during the day or night) and

– structures associated with the land use will feature fixed windows and central climate control systems

– activities associated with the land use are confined exclusively or almost exclusively to indoor areas.

Included in the category of Moderately Noise Sensitive Land Uses are:

a. hotels and motels

b. restaurants, bars, taverns, food takeouts, wine tasting rooms, and similar business, without outdoor eating or drinking areas

c. temporary sleeping quarters for air crews and other employees in transit

d. offices, office buildings

e. hospitals, nursing homes, residential care facilities and other medical facilities offering 24-hour care

f. churches, synagogues, temples, monasteries and convents

g. mortuaries, funeral parlors

h. indoor theatres, music halls, meeting halls, and other indoor public assembly facilities (but not including facilities utilized exclusively by pilots' organizations, airport or airline employees, or other airport related groups)

i. studios – radio, television, recording, rehearsal, and performance facilities

j. schools and day care centers (but not including flight schools, aviation mechanics training schools, airline orientation facilities or other institutions offering instruction only in aviation-related fields)

k. libraries (excluding aviation-oriented libraries)

l. museums (excluding air museums)

4.3.2.3 Infill development - For purposes of this ALUP, a determination that a particular land use represents infill development shall be made only if all of the following conditions are met:

a. The proposed development area is bounded by uses similar to those proposed, and

b. The proposed development does not extend the perimeter of the area already developed with noise-sensitive uses, and

c. Increased intensity and/or incompatibility of noise-sensitive uses is not permitted through use permits, density transfers or other strategies, and

d. Other applicable development conditions (such as avigation easement dedication, disclosure requirements, and special structural noise attenuation criteria) are met.

4.3.2.4 Projected 55 dB CNEL Contour - For purposes of this ALUP, the term projected 55 dB CNEL contour shall mean the 55 dB CNEL contour defined for airfield capacity conditions by the noise study performed by Brown-Buntin Associates (April, 2001) or such other succeeding noise contour projections as may be accepted and deemed valid by the ALUC and adopted by amendment of this ALUP (see Figure 2).

4.3.2.5 Projected 60 dB CNEL Contour - For purposes of this ALUP, the term projected 60 dB CNEL contour shall mean the 60 dB CNEL contour defined for airfield capacity conditions by the noise study performed by Brown-Buntin Associates (April, 2001) or such other succeeding noise contour projections as may be accepted and deemed valid by the ALUC and adopted by amendment of this ALUP (see Figure 2).

4.3.2.6 Area of Demonstrated Noise Incompatibility - For purposes of this ALUP, the term area of demonstrated noise incompatibility shall be defined to be any community or neighborhood which has shown itself to be affected by airport-related noise concerns by

a. a substantial ongoing pattern of noise complaints received and logged by airport administration from multiple members of the community; or

b. multiple airport noise concerns from the area recorded verbally or in written form on the public records of the ALUC or any referring agency.

4.3.3. Noise Mitigation

A proposed general plan, general plan amendment, specific plan, specific plan amendment, zoning ordinance or zoning ordinance amendments, building regulation modification, or individual development proposal will be deemed to incorporate sufficient requirements for noise mitigation within the 55 dB CNEL airport noise contour only if all of the following conditions are met:

1. The proposed project or local action specifically requires mitigation of aviation-related interior noise impacts to the levels indicated by Table 6 or lower.
2. The proposed project or local action specifically requires attenuation of aviation-related interior noise impacts as indicated by Table 6. For projects or local actions which lie between the single event contours shown in Figure 2, the required degree of noise attenuation may be extrapolated.
3. The proposed action or project either:
    a. specifies the design features and construction techniques necessary to achieve the requisite degree of noise mitigation, or
    b. requires that the design features and construction techniques necessary to achieve the requisite degree of noise attenuation shall be determined by and constructed in accordance with an analysis performed by a person or firm qualified in acoustic design and noise mitigation. The report of such consultant is to be submitted, in its entirety, with the referral.

TABLE 6: MAXIMUM ALLOWABLE INTERIOR NOISE EXPOSURE FROM AVIATION-RELATED NOISE SOURCES

	Single Event[1] Interior Aviation Noise Level	Degree of Noise Attenuation Required (dB) Single Event Noise Contour		
	dB LAmax	85 dB	75 dB	65 dB
Hotels and motels – sleeping rooms	50	35	25	15[2]
Non-sleeping areas	60	25	15[2]	5[2]
Restaurants, bars, taverns, and like uses	60	25	15[2]	5[2]
Temporary sleeping quarters for air crews and other employees in transit	50	35	25	15[2]
Offices, office buildings	60	25	15[2]	5[2]
Hospitals, nursing homes, residential care facilities and other medical facilities offering 24-hour care – sleeping rooms	50	35	25	15[2]
Non-sleeping areas	60	25	15[2]	5[2]
Churches, synagogues, temples, monasteries and convents	60	25	15[2]	5[2]
Mortuaries, funeral parlors	60	25	15[2]	5[2]
Indoor theatres, music halls, meeting halls, and other indoor public assembly facilities[3]	50	35	25	15[2]
Studios – radio, television, recording, rehearsal, and performance facilities	60	25	15[2]	5[2]
Schools and day care centers[4]	60	25	15[2]	5[2]
Libraries (excluding aviation-oriented libraries)	50	35	25	15[2]
Museums (excluding air museums)	50	35	25	15[2]

[1] *The reference event for determination of required single event noise mitigation shall be the straight-in arrival of a regional airline jet landing on Runway 29 and the straight-out departure of a regional airline jet from Runway 29. Measurements are to be of the maximum noise level, are to be A-weighted, and are to be obtained using a Fast response time.*

[2] *Normal construction techniques are assumed to provide adequate noise attenuation.*

[3] *Not including facilities utilized exclusively by pilots' organizations, airport or airline employees, or other airport related groups*

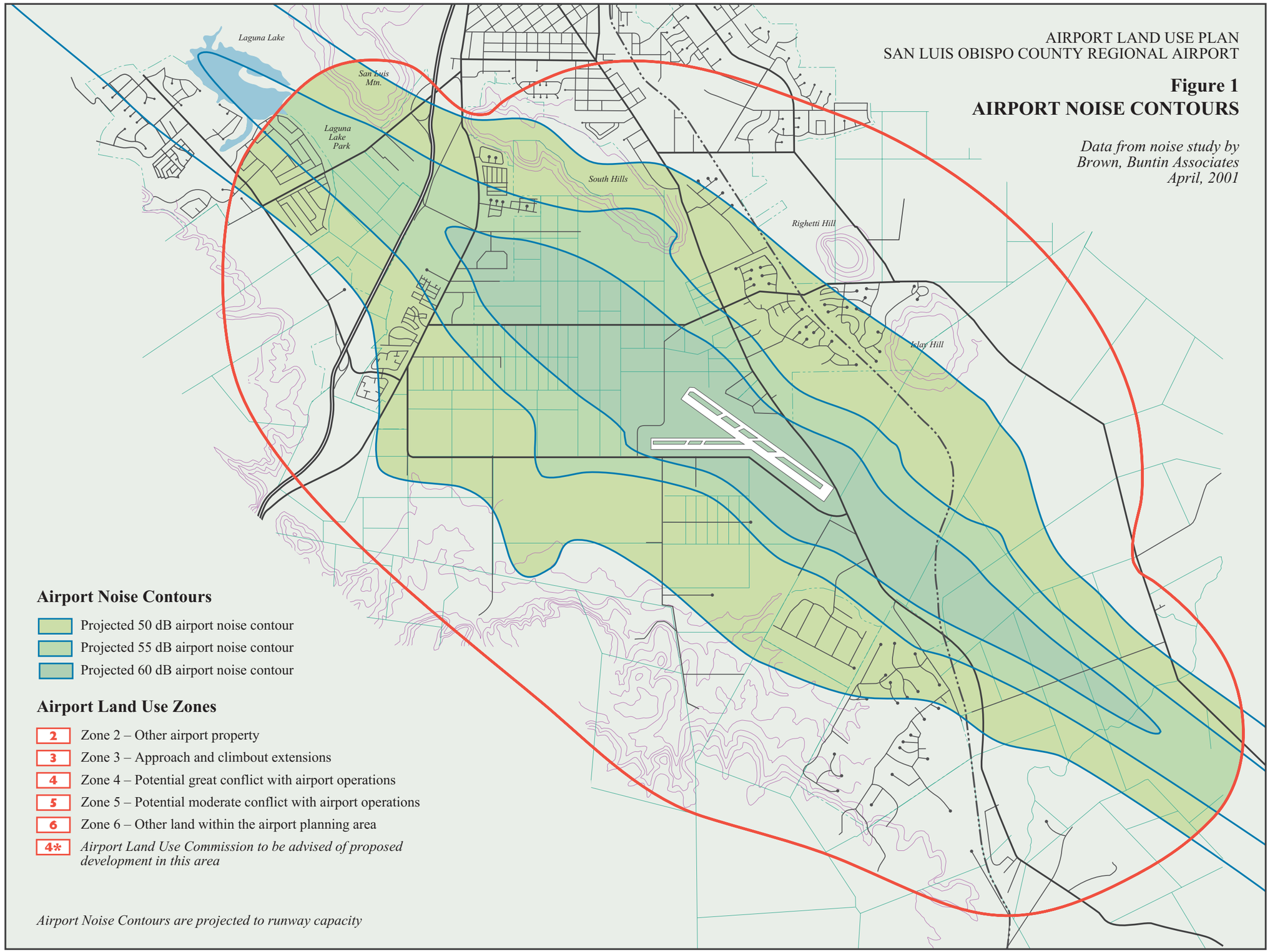
[4] *Not including flight schools, aviation mechanics training schools, airline orientation facilities or other institutions offering instruction only in aviation-related fields*

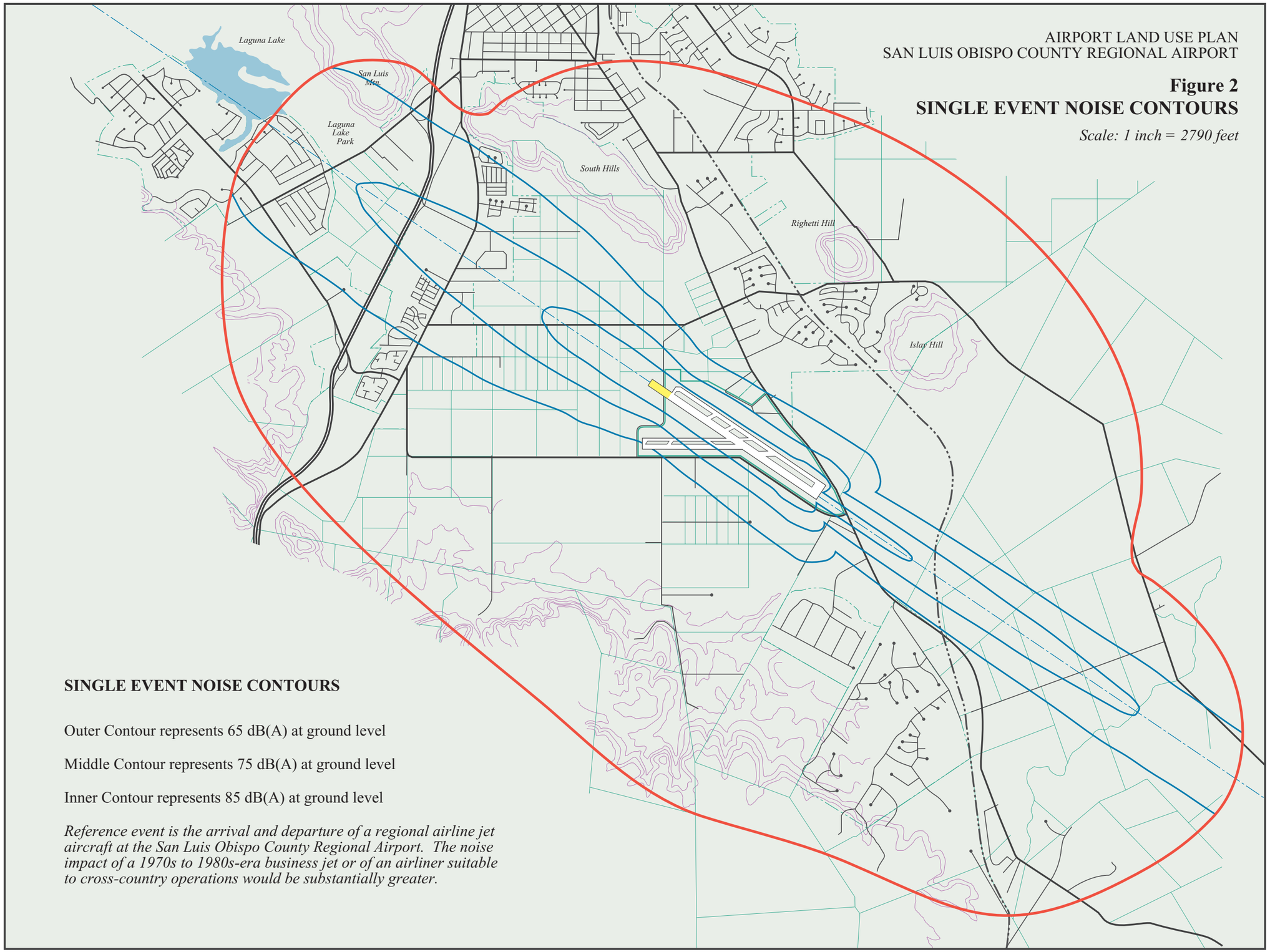
4.3.4. Policies

Notwithstanding any other provision of this ALUP except for the specific provisions set forth in Section 6 (Specific Land Use Provisions for the Margarita Area), a proposed general plan, general plan amendment, specific plan, specific plan amendment, zoning ordinance or zoning ordinance amendments, building regulation modification, or individual development proposal will be determined to be inconsistent with the ALUP if the proposed project or local action:

a. **Policy N-1** – Would permit or fail to sufficiently prohibit establishment within the projected 60-dB CNEL contour of any extremely noise-sensitive land use.

b. **Policy N-2** – Would permit or fail to sufficiently prohibit any extremely noise-sensitive land use within the projected 55-dB CNEL contour, with the exception of developments which meet the criteria delineated in Section 4.3.2.4 for designation as infill.


AIRPORT LAND USE PLAN
SAN LUIS OBISPO COUNTY REGIONAL AIRPORT
Figure 1
AIRPORT NOISE CONTOURS
Data from noise study by
Brown, Buntin Associates
April, 2001
Laguna Lake
San Luis Mtn.
Laguna Lake Park
South Hills
Righetti Hill
Islay Hill
Airport Noise Contours
Projected 50 dB airport noise contour
Projected 55 dB airport noise contour
Projected 60 dB airport noise contour
Airport Land Use Zones
2 Zone 2 – Other airport property
3 Zone 3 – Approach and climbout extensions
4 Zone 4 – Potential great conflict with airport operations
5 Zone 5 – Potential moderate conflict with airport operations
6 Zone 6 – Other land within the airport planning area
4* Airport Land Use Commission to be advised of proposed development in this area
Airport Noise Contours are projected to runway capacity



AIRPORT LAND USE PLAN
SAN LUIS OBISPO COUNTY REGIONAL AIRPORT

Figure 2
SINGLE EVENT NOISE CONTOURS

Scale: 1 inch = 2790 feet

SINGLE EVENT NOISE CONTOURS

Outer Contour represents 65 dB(A) at ground level

Middle Contour represents 75 dB(A) at ground level

Inner Contour represents 85 dB(A) at ground level

Reference event is the arrival and departure of a regional airline jet aircraft at the San Luis Obispo County Regional Airport. The noise impact of a 1970s to 1980s-era business jet or of an airliner suitable to cross-country operations would be substantially greater.

c. **Policy N-3** – Would permit or fail to sufficiently prohibit any moderately noise-sensitive land use within the projected 55-dB CNEL contour, with the exception of developments which meet the requirements for mitigation of interior noise levels specified in Table 6 and in Section 4.3.3.

d. **Policy N-4 –** Would permit or fail to sufficiently prohibit, in any location which is within or adjacent to an area of demonstrated noise incompatibility or in an acoustic environment substantially similar to an area of demonstrated noise incompatibility:

   a. Any new residential or other extremely noise-sensitive development

   b. Any new moderately noise-sensitive development, unless adequate, specific, and detailed provisions are set forth to mitigate noise incompatibility between allowable or proposed noise-sensitive uses (including foreseeable outdoor activities) and airport operations.

TABLE 7: SUMMARY OF COMPATIBILITY OF NOISE SENSITIVE LAND USES WITH PROJECTED CNEL CONTOURS FOR THE SAN LUIS OBISPO COUNTY REGIONAL AIRPORT

CNEL Level	Compatibility	
	Extremely Noise Sensitive Land Uses	**Moderately Noise Sensitive Land Uses**
Inside 60 dB CNEL contour	Prohibited	With mitigation[2]
Between 55 and 60 dB contours	Infill only[1]	With mitigation[2]
Outside 55 dB contour	Allowable	Allowable

[1] *Specific criteria defined by the Airport Land Use Plan for designation as infill development must be met.*

[2] *Mitigation requirements specified by the Airport Land Use Plan must be met.*

4.4.4 SPECIFIC LAND USE POLICIES: SAFETY

4.4.1 Objective

The objective of the safety policies of this ALUP is to minimize the risks to the safety and property of persons on the ground associated with potential aircraft accidents and to enhance the chances for survival of the occupants involved in an accident which takes place beyond the immediate runway environment.

An effective approach to accomplishing this objective must include all of the following elements:

a. identifying areas of aviation safety risk

b. limiting the number of persons on the ground who are exposed to aviation safety hazards by restricting the allowable density of residential and nonresidential development in these areas

c. reducing the potential severity of an aviation-related incident by prohibiting, in areas of aviation safety hazard, land uses characterized by a limited ability of occupants to evacuate an accident scene

d. reducing the potential severity of an aviation-related incident by prohibiting, in areas of aviation safety hazard, land uses which include features such as above ground storage of flammable materials, fuel pumping facilities, above ground electric transmission lines or switching facilities, and above ground pipelines carrying flammable materials, which could substantially contribute to the severity of an aircraft accident

e. preserving, in areas subject to aviation safety risk, sufficient open space to afford the pilot of a disabled aircraft a reasonable opportunity to effect an emergency off-airport landing without impacting occupied structures or objects which would reduce the likelihood that the crew and passengers will survive the incident.

4.4.2. Definitions

4.4.2.1 Special Function Land Use - For purposes of this ALUP, the term special function land use shall be defined to include certain types of land use which are commonly regarded as requiring special protection from hazards such as aircraft accidents. These uses fall into two categories:

a. *impaired egress uses* – land uses for which the significant common element is the relative inability of the people occupying the space to move out of harm's way; includes elementary and secondary schools, hospitals, nursing homes, and other similar uses; and

b. *unusually hazardous uses* – land uses which include features which could substantially contribute to the severity of an aircraft accident if they were to be involved in one; includes above ground storage of substantial quantities of flammable materials, fuel pumping facilities, above ground electric transmission lines or switching facilities, above ground pipelines carrying flammable materials, and other similar uses.

4.4.2.2 High Intensity Land Use – For purposes of this ALUP, the term high intensity land use shall be defined as any use which is characterized by a potential to attract dense concentrations of persons to an indoor or outdoor area, even for a limited period of time. Such uses include:

a. amusement parks, fairgrounds

b. convention/exhibit halls. major auditoriums

c. stadiums and arenas

d. temporary events attracting dense concentrations of people – fairs, circuses, carnivals, revival meetings, sports tournaments, conventions, but not including events for which exposure to aviation safety hazard is a well-known expectation (air shows, airport open houses, pilots meetings, etc.)

4.4.2.3 Reserve Space - For purposes of this ALUP, reserve space shall be defined as land which:

a. meets the design criteria specified in Table 8 and

b. is restricted in perpetuity by deed restriction, easement, or other suitable legal instrument to uses characterized by low occupancy levels and substantially free of structures.

Land uses which may, if the standards established in Table 8 are met, be consistent with this definition of reserve space include:

a. Undeveloped land – "green belt" reserve

b. Parks

c. Agriculture

d. Certain low intensity recreational uses – e.g., golf courses, shooting ranges

e. Cemeteries

In previous editions of the Airport Land Use Plan, the term "open space" was used to refer to this type of land use. The present version has changed to the phrase *reserve space* to avoid confusion with the concept of open space as it is used in local planning documents.

4.4.2.4 Building Coverage - For purposes of this ALUP, a the term "building coverage" shall mean the total percentage of the gross area of a designated property or group of properties which is encompassed by the footprint of any structure, whether or not such structure is intended for human habitation.

4.4.2.5 Dwelling Unit - For purposes of this ALUP, a dwelling unit is defined as a structure or part of a structure intended to serve as the residence of an individual, family, or group of unrelated individuals sharing living quarters by mutual consent. For specific housing types, number of dwelling units is to be enumerated as follows:

a. Single family detached housing – Each structure shall be counted as one dwelling unit.

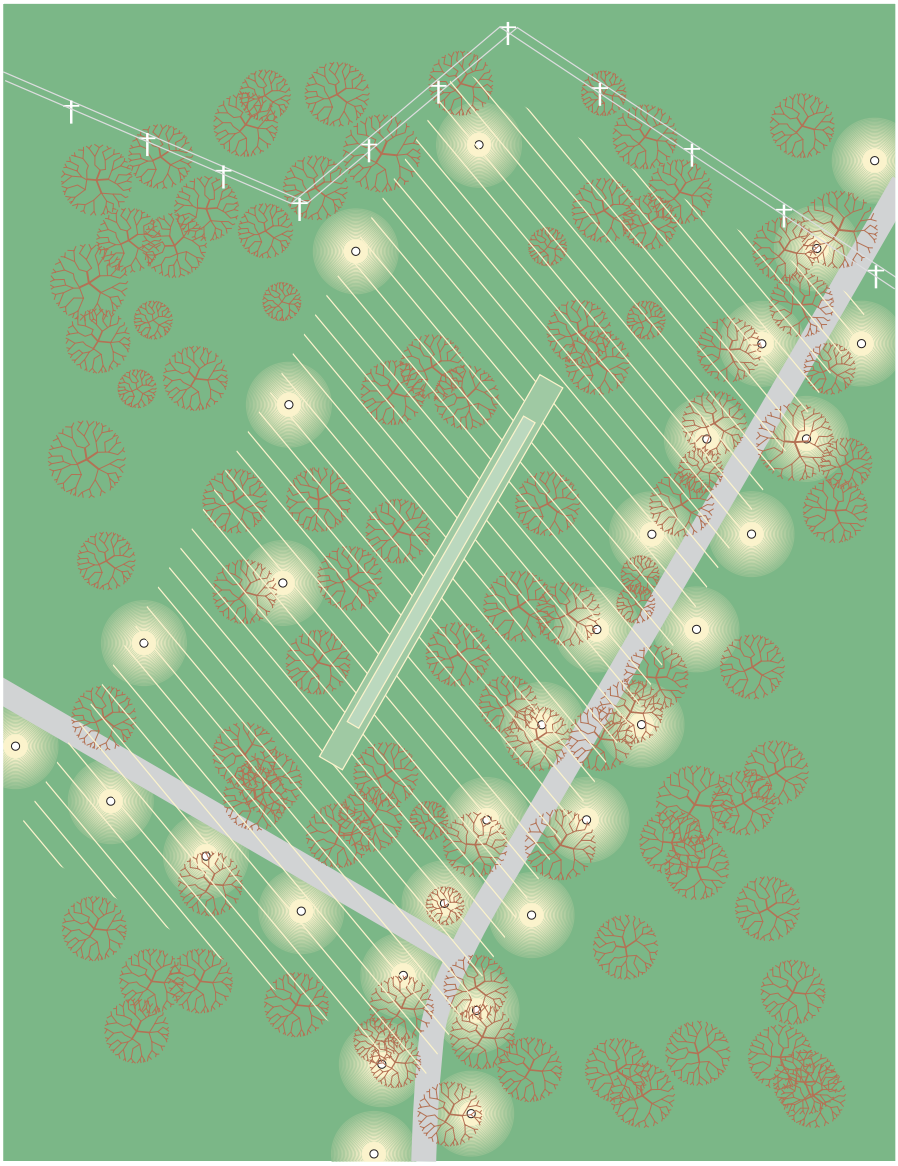
b. Single family detached housing with secondary units allowed– Each primary residential structure shall be counted as one dwelling unit and each actual or allowable secondary residential structure shall count as one dwelling unit.

c. Duplexes, triplexes, quadriplexes, apartment buildings, condominiums, and town houses – Each structure or part of a structure which can be rented, leased, or sold independently shall be counted as one housing unit.

TABLE 8: DESIGN CRITERIA FOR RESERVE SPACE AREAS

Size	The minimum size of any Reserve Space area shall be 60 x 1000 feet. A size of 100 x 2000 feet or greater is suggested.
Distribution	Reserve Space shall be distributed more or less evenly within each Aviation Safety Area in such manner as to provide effective mitigation of aviation safety hazards. Arbitrary clustering of Reserve Space in isolated portions of any Aviation Safety Area is not acceptable.
Topography	Terrain shall be level or gently rolling. Abrupt changes in slope (such as cliffs, bluffs, berms, ravines, creek beds) are not acceptable.
Obstructions	• There is no requirement for removal of rocks, but areas in which the presence of many large rocks or boulders would constitute a hazard to aircraft shall not be approvable as Reserve Space • Within any given Reserve Space area, at least one area must exist which is a minimum of 60 x 1000 feet in size with maximum grade not to exceed 5%; which is free of all streets, roads, highways, parking lots, rights-of-way, vehicles, fences, light poles, trees, and fixed athletic equipment; and which is not overhung by pole-mounted light fixtures or by the canopies of nearby trees (or, in the case of new plantings, by the maximum anticipated canopies of trees at maturity). No above-ground utility poles or wires may be located within 500 feet of this 60 x 1000 foot area. In addition, the center 30 x 800 feet of this area is to be maintained free of curbs, gutters, planting areas, staked crops or plantings, and headstones. Illumination may be provided by bollard lights, so long as the height of each bollard is less than three feet and so long as no bollard lights are located within the center 30 x 800 foot area. • Except within the 60 x 1000 foot area described above, fences are acceptable within Reserve Space areas, provided that they are of wire strand ("barbed wire") or chain link construction. Wood, concrete, concrete block, brick, or stone fences are not permitted. • All light poles within the Reserve Space area shall be designed and colored in such a manner as to be easily visible from the air and shall be illuminated during all hours of darkness (although the level of illumination may, if desired, be reduced during non-business hours). The use of vertical banners or signs mounted to light poles is encouraged as a means to improve the visibility of these fixtures. • Structures (including bleachers or grandstands for athletic events) are prohibited in Reserve Space areas.
Agricultural	• Grazing of cattle, sheep, goats, and the like is acceptable in Reserve Space areas. Specialized animal facilities (such as feedlots, poultry farms, hog farms) and barns or other structures are prohibited • Cultivation of crops not requiring staking is allowed. • Cultivation of staked crops is allowed, provided that, in any given Reserve Space area, at least one area exists which is a minimum of 30 x 800 feet in size and which is free of stakes-as described above. • Forestry and orchards are allowed, provided that, in any given Reserve Space area, at least one area exists which is a minimum of 60 x 1000 feet in size and which is free of intrusion by trees as described above.

FIGURE 3: SAMPLE LAYOUT OF RESERVE SPACE AREA

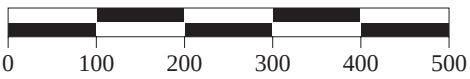


Reserve Space area

Minimum 60 x 1000 foot area – Streets, roads, highways, parking lots, rights-of-way, vehicles, fences, light poles, trees, and fixed athletic equipment prohibited. No above-ground utility poles or wires may be located within 500 feet of this 60 x 1000 foot area *(yellow hatching)*.

Minimum 30 x 800 foot area – Streets, roads, highways, parking lots, rights-of-way, vehicles, fences, light poles, bollard lights, trees, fixed athletic equipment,curbs, gutters, planting areas, staked crops or plantings, and headstones prohibited.

Scale (feet)



d. Rooming houses, boarding houses, long-term residential hotels, dormitories – Each bedroom shall be counted as 0.5 housing unit.

4.4.2.6 Residential Density - For purposes of this ALUP, the terms residential density is defined as the maximum number of dwelling units per acre of gross area of land area allowable under the provisions of a referral to the ALUC. If the area subject to a referred local action encompasses more than one Aviation Safety Area (as shown in Figure 4) residential density must be calculated independently for each Safety Area and standards established by this ALUP must not, except as provided in Policy G-4, be exceeded in any Safety Area. Acreage within each Aviation Safety Area which is allocated for streets or utility easements or which is dedicated in perpetuity to remain as reserve space may be included in the gross area for purposes of determining the residential density in that Safety Area.

If a referred local action includes both residential and nonresidential land uses within a given Aviation Safety Area, acreage allocated to nonresidential uses other than streets, utility easements, or permanent reserve space, may not be included in the gross area employed for purposes of determining residential density in that Safety Area. In addition, acreage devoted to streets, utility easements, or reserve space may not be "double-counted" in determining nonresidential density and residential density (i.e., acreage devoted to streets, utility easements, or reserve space which is utilized in computing nonresidential density may not also be used in computing the residential density.)

In Aviation Safety Areas S-1c and S-2, however, allowances are made to permit mixed use development at a level of combined residential and nonresidential density which is greater than permitted by the preceding paragraph. Permissible densities for Area S-1c and Area S-2 are shown in Figures 6 and 7.

4.4.2.7 Nonresidential Density - For purposes of this ALUP, the definition of the term nonresidential density is defined as the maximum number of persons per acre of gross area that a nonresidential development is expected to attract during periods of use. If the area subject to a referred local action encompasses more than one Aviation Safety Area (as shown in Figure 4) nonresidential density must be calculated independently for each Safety Area and standards established by this ALUP must not, except as provided in Policy G-4, be exceeded in any Safety Area. Acreage within each Aviation Safety Area which is allocated for streets or utility easements or which is dedicated in perpetuity to remain as reserve space may be included in the gross area for purposes of determining the nonresidential density in that Safety Area.

If a referred local action includes both residential and nonresidential land uses within a given Aviation Safety Area, acreage allocated to residential uses may not be included in the gross area employed for purposes of determining nonresidential density in that Safety Area. In addition, acreage devoted to streets, utility easements, or reserve space may not be "double-counted" in determining nonresidential density and residential density (i.e., acreage devoted to streets, utility easements, or reserve space which is utilized in computing residential density may not also be used in computing nonresidential density.)

In Aviation Safety Areas S-1c and S-2, however, allowances are made to permit mixed use development at a level of combined residential and nonresidential density which is greater than permitted by the preceding paragraph. Permissible densities for Area S-1c and Area S-2 are shown in Figures 6 and 7.

4.4.3 Delineation of Aviation Safety Areas

4.4.3.1 Aviation Safety Considerations - Of the above components of aviation risk management, perhaps the most complex element is identifying areas of significant aviation hazard. The Airport Land Use Commission has determined that the considerations of primary importance in this determination are:

a. The flight paths most heavily utilized by aircraft departing from or approaching to land at the San Luis Obispo County Regional Airport – Flight paths utilized by a relatively high proportion of arriving or departing aircraft are associated with an increased accident risk.

b. The flight paths utilized by aircraft departing from or approaching to land at the San Luis Obispo County Regional Airport during adverse weather conditions – Maintaining control of an aircraft in conditions that make visualization of the horizon and the ground impossible is one of the most challenging tasks that a pilot can face. Flight paths which have been designated by the Federal Aviation Administration for use during reduced-visibility conditions, therefore, are of significant concern to the ALUC.

c. The anticipated altitude of aircraft operations – A critical operational element in ensuring the safety of persons and property on the ground is the ability of the pilot of a disabled airplane to avoid impact with inhabited structures. The likelihood of the pilot accomplishing this is directly related to the time and gliding distance available, and both of these are dependent on the aircraft's altitude at the time a malfunction occurs.

4.4.3.1 Aviation Safety Areas - Consideration of the factors discussed above have lead to the delineation of three fundamental areas with respect to aviation safety risks:

a. **Runway Protection Zones** – Areas immediately adjacent to the ends of each active runway, within which the level of aviation safety risk is very high and in which, consequently, structures are prohibited and human activities are restricted to those which require only very low levels of occupancy. The size and configuration of the Runway Protection Zones are specified by Federal Aviation Regulations. The Runway Protection Zones are also referred to as the "clear zones" for each runway.

b. **Aviation Safety Area S-1** – The area, as designated in Figure 4, within the vicinity of which aircraft operate frequently or in conditions of reduced visibility at altitudes ≤ 500 feet above ground level (AGL).

c. **Aviation Safety Area S-2** – The area, as designated in Figure 4, within the vicinity of which aircraft operate frequently or in conditions of reduced visibility at altitudes between 501 and 1000 feet above ground level (AGL).

4.4.4 Delineation of Aviation Safety Sub-Areas

4.4.4.1 Aviation Safety Considerations - In order to further refine the definition of areas of relative aviation safety risk in Aviation Safety Area S-1, the Airport Land Use Commission has incorporated the following considerations:

a. The risk of an aviation accident will be relatively greater in:

   i. areas above which aircraft approaching along various standardized flight paths are converging (increased risk of midair collision)

   ii. areas above which aircraft operators frequently execute abrupt and/or complex maneuvers at relatively low airspeed, such as descending turns from the downwind leg to the base leg of

the traffic pattern or from base leg to final, climbing turns from the upwind leg to the crosswind leg or from crosswind to downwind, or S-turns, 360° turns, or 270° turns for traffic spacing (increased risk of stall/spin accidents)

iii. areas above which aircraft operators are required to perform unanticipated or unusual operations at relatively low airspeed, particularly in conditions of high work load and/or reduced visibility. Such maneuvers include the transition from a normal instrument approach to a missed approach procedure or to a circle-to-land maneuver (increased risk of pilot disorientation/loss of control accidents).

iv. areas within the engine-out gliding distance of aircraft on the initial climbout course or final approach course to Runway 11-29, i.e., the extended runway centerline (increased risk of accident due to mechanical malfunction or fuel exhaustion).

b. Conversely, , the risk of an aviation-related accident will be reduced if flight operations are largely confined to straight-and-level flight or relatively gentle turns in weather conditions with good visibility.

c. Because of the fact that all of the most frequently-used aircraft flight paths are related to takeoffs or landings on Runway 11-29, potential safety hazards associated with operations to and from Runway 7-25 have not been considered in defining Aviation Safety Areas S-1 and S-2. It is likely, however, that future airport operations will see an increase in the use of Runway 7-25 as a means of increasing the flow of traffic during peak periods. The State of California Department of Transportation's *Airport Land Use Planning Handbook* provides recommendations, based on runway length, for the size and configuration of aviation safety zones related to Runway 7-25. Although these state-defined safety zones are almost entirely located within Aviation Safety Area S-1, the ALUC acknowledges that, in delineating sub-areas within Area S-1, appropriate recognition of potential safety hazards related to operations on Runway 7-25 is necessary to provide adequate protection to persons and property in the airport area.

4.4.4.2 **Aviation Safety Sub-Areas -** In consideration of the above, the ALUC has established and adopted the Aviation Safety Sub-Areas shown in Figure 4. The Aviation Safety Sub-Areas shown in Figure 4 are:

a. **Runway Protection Zones** – Areas immediately adjacent to the ends of each active runway, within which the level of aviation safety risk is very high and in which, consequently, structures are prohibited and human activities are restricted to those which require only very low levels of occupancy. The size and configuration of the Runway Protection Zones are specified by Federal Aviation Regulations. The Runway Protection Zones are also referred to as the "clear zones" for each runway.

b. **Aviation Safety Area S-1** – The area within the vicinity of which aircraft operate frequently or in conditions of reduced visibility at altitudes ≤ 500 feet above ground level (AGL).

i. **Safety Area S-1a** – Those portions of Safety Area S-1 which are located within 500 feet of the extended runway centerline of Runway 11-29 and within 5000 feet of the runway end or whiuch are within 250 feet of the extended runway centerline of Runway 7-25 and within 3000 feet of the runway end.

ii. **Safety Area S-1b** – Those portions of Safety Area S-1 which are not included in Safety Area S-1a, but are within probable gliding distance for aircraft on expected approach or departure courses; also includes State-defined sideline safety areas, inner turning zones and outer safety zones for both Runway 11-29 and Runway 7-25 and portions of existing Airport Land Use Zone 3. Aviation safety hazards to be particularly considered in this area include mechanical failures, fuel exhaustion, deviation from glideslope or MDA during IFR operations (due to pilot error or equipment malfunction), loss of control during short approach procedures, stall/spin incidents during engine-out maneuvers in multi-engine aircraft, loss of control during "go around" or missed approach procedures, and midair collisions.

iii. **Safety Area S-1c** – Those portions of Safety Area S-1 which are not included in Safety Areas S-1a or S-1b, but are adjacent to (within 0.5 nm) frequent or low-visibility aircraft operations at less than 500 feet above ground level. Aviation safety hazards to be considered in this area include mechanical failures, deviation from localizer or VOR during IFR operations (due to pilot error or equipment malfunction), stall/spin incidents during engine-out maneuvers in multi-engine aircraft, loss of control during "go around" or missed approach procedures, and loss of visual references by aircraft performing circle-to-land procedures.

c. **Aviation Safety Area S-2** – The area within the vicinity of which aircraft operate frequently or in conditions of reduced visibility at altitudes between 501 and 1000 feet above ground level (AGL). Aviation safety hazards to be considered in this area include mechanical failures, fuel exhaustion, loss of control during turns from downwind to base legs or from base to final legs of the traffic pattern, stall/spin incidents during engine-out maneuvers in twin engine aircraft, and midair collisions. Operational factors of concern include circle-to-land instrument approaches south of Runway 11-29, extensive "pattern work" by student pilots in fixed-wing aircraft (predominantly, but not exclusively to the south and west of the airport), and extensive practice flight by students in rotary-wing aircraft to the north of the airport. Nonetheless, because aircraft in Area S-2 are at greater altitude and are less densely concentrated than in other portions of the Airport Planning Area, the overall level of aviation safety risk is considered to be lower than that in Area S-1 or the Runway Protection Zones.

In the event of any conflict between these verbal descriptions and the depiction of Aviation Safety Areas in Figure 4, the depictions shown in Figure 4 shall take precedence.

4.4.5. Development Standards for Aviation Safety Compatibility

The development standards required to achieve consistency with the Safety Policies of the Airport Land Use Plan are summarized in Table 9. These development standards are based on Table 9C (page 9-47) of the Airport Land Use Planning Handbook (January, 2002) published by the California Division of Aeronautics. In general, the densities specified in Table 9 correspond with or are slightly lower than the most restrictive criteria recommended by the Division of Aeronautics, as they represent the standards which must be adhered to if none of the other safety policies recommended by Handbook are enacted. If additional safety planning features, such as the establishment of appropriate Reserve Space and clustering of development, are implemented, higher densities may be achieved through the mechanism of density adjustments.

TABLE 9: DEVELOPMENT STANDARDS FOR AVIATION SAFETY COMPATIBILITY[1]

		Aviation Safety Area	
	Runway Protection Zone	**Aviation Safety Area S-1**	**Aviation Safety Area S-2**
Maximum Nonresidential density *(persons/acre)*	5	30-50	150
Maximum Residential density *(d.u./acre)*	0	0.2	6
Special function land uses	prohibited	prohibited	prohibited
High intensity land uses	prohibited	prohibited	prohibited

[1] *It should be noted that the basic requirements of Table 9 may be modified by the incorporation of specific planning features to ensure airport compatibility (See Section 4.4.6).*

4.4.6. Density Adjustments

4.4.6.1. Conceptual Basis for Density Adjustments

It is a goal of the Airport Land Use Commission to protect the long-term viability of the San Luis Obispo County Regional Airport, not only by prohibiting inappropriate development in the airport planning area, but by also encouraging land development which has been specifically planned to be compatible with current and future airport operations. One benefit of the above delineation of Aviation Safety Sub-Areas is that it identifies portions of the Airport Planning Area where the inclusion of appropriate safety features in proposed projects or local actions may allow development of a nature or intensity of land use which would otherwise be inconsistent with the Airport Land Use Plan. The special planning elements which may provide a basis for density adjustments include:

a. provision, by means of adopted local planning instruments, of designated areas of Reserve Space consistent with the requirements of this ALUP and approved by the Airport Land Use Commission

b. clustered development zones

c. preparation of specific area plans to afford more precise regulation of land use than would otherwise be the case

Although the adjustments to ALUP safety policy requirements which result from the incorporation of these planning elements are collectively referred to as "density adjustments", the actual modifications to development standards may (depending on the area and on the specific planning elements) include:

a. an increase in allowable nonresidential density

b. an increase in allowable residential land use density

c. rendering of high intensity land uses as permissible in areas where they are otherwise inconsistent with the ALUP

d. rendering of special function land uses as permissible in areas where they are otherwise inconsistent with the ALUP

e. elimination of limitations on maximum building footprint.

4.4.6.2. Procedures for Density Adjustments – Airport-Compatible Open Space Plan

The primary means by which local agencies may obtain density adjustments is by preparation of one or more Airport-Compatible Open Space Plans (ACOS). The ACOS shall be incorporated as an element of a general plan, specific plan, zoning ordinance, or other local planning instrument which is subject to mandatory review by the ALUC. An ACOS may be prepared for any area within the Airport Planning Area, and the geographic extent of each ACOS will be determined and specified by the responsible local agency.

In order to be approved by the ALUC, an Airport-Compatible Open Space Plan must provide for the establishment, protection, and maintenance *in perpetuity* of a portion of the area as Reserve Space (as defined in Section 4.4.2.3. of this ALUP). Reserve Space areas should be located so as to mitigate existing aviation safety risks to the greatest degree possible. The portion of the area to be established, protected, and maintained as Reserve Space shall be equal to or greater than the percentage of gross land area indicated in Section 4.4.6.3. To this end, the ACOS shall:

a. indicate the size, location, and configuration of sites within a specified planning area that conform to the definition of Reserve Space provided in Section 4.4.2.3 and Table 8 of this ALUP or that will be

improved to conform to the standards of Section 4.4.2.3 and Table 8, and

b. include, with respect to each area of Reserve Space, a verbal description of the site demonstrating compliance with the standards provided in Section 4.4.2.3 and in Table 8, or indicating the improvements needed to conform to the standards and a date by which such improvements will be made, and

c. contain specific provisions for the upkeep and maintenance of each area of Reserve Space and for ensuring that the design standards provided in Section 4.4.2.3 and in Table 8 will be maintained *in perpetuity*."

4.4.6.3. Procedures for Density Adjustments – Minimum Reserve Space Requirements

An ACOS shall not be approved by the ALUC unless it establishes a minimum amount of Reserve Space as follows:

a. In any Runway Protection Zone or portion thereof ..... 100% of gross land area

b. In any Aviation Safety Area S-1a or portion thereof ..... 50% of gross land area

c. In any Aviation Safety Area S-1b or portion thereof ..... 20% of gross land area

d. In any Aviation Safety Area S-1c or portion thereof ..... 15% of gross land area

e. In Aviation Safety Area S-2 or any portion thereof ..... 8% of gross land area

In the case of Aviation Safety Areas that are segmented, the above percentages of Reserve Space must be provided within each segment.

4.4.6.4. Procedures for Density Adjustments – Clustered Development Zones

Additional density adjustments (as specified in Table 10) may be attained through the designation of Clustered Development Zones (CDZ). A CDZ may include any part or all of the area encompassed by an ACOS, and the geographic extent of each CDZ will be determined and specified by the responsible local agency.

In order to be approved by the ALUC, an Airport-Compatible Open Space Plan which proposes to establish one or more CDZs must provide for the establishment, protection, and maintenance *in perpetuity* of the following percentages of each proposed CDZ as Reserve Space:

a. in Aviation Safety Area S-1c ..... 35% of the gross area of the CDZ

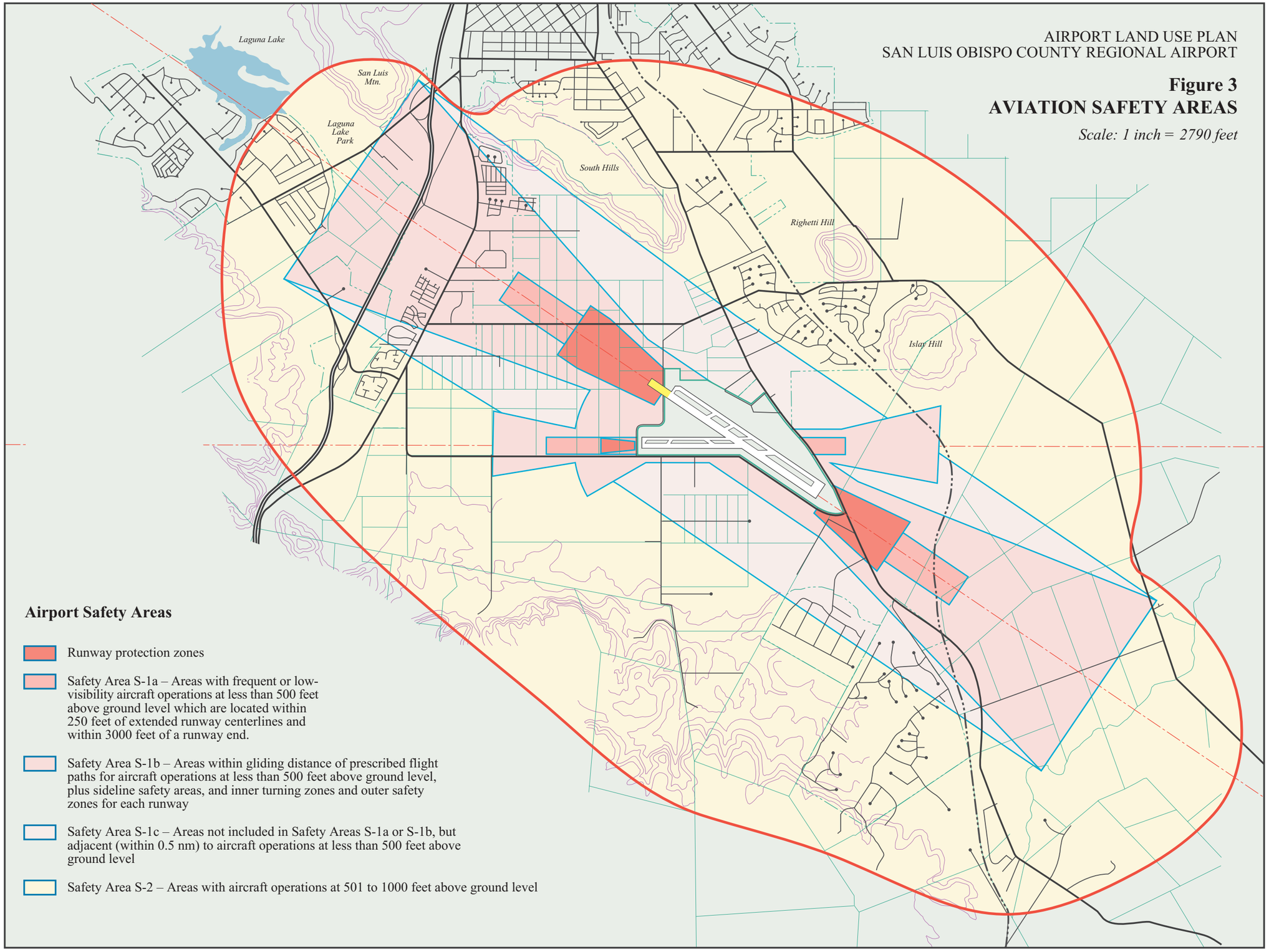
b. in Aviation Safety Area S-2 ..... 25% of the gross area of the CDZ.

4.4.6.5. Steps in Establishing an Approved ACOS

a. *The local agency (City or County) formulates an ACOS which covers an area of the local agency's choosing* – In formulating such plan, the local agency is to be guided by the standards for Reserve Space set forth in the ALUP Section 4.4.2.3 and in Table 8. The ACOS shall be formulated as an element of a general plan, specific plan, zoning ordinance, building code or other local agency planning document which must undergo mandatory consistency determination by the ALUC and shall be referred to the ALUC for such mandatory determination of consistency

b. *The local agency submits the proposed ACOS to the ALUC for approval*

c. *The ALUC evaluates the proposed ACOS*. In its evaluation, the ALUC shall consider the degree to which the standards specified in ALUP Section 4.4.2.3 and in Table 8 are met and the degree to which the proposed ACOS mitigates existing or anticipated aviation safety hazards, together with any other criteria or information that it deems fit. If the ALUC determines that the proposed ACOS is adequate to offset the increased densities of development permitted in Table 10 of the ALUP, the plan shall be


AIRPORT LAND USE PLAN
SAN LUIS OBISPO COUNTY REGIONAL AIRPORT
Figure 3
AVIATION SAFETY AREAS
Scale: 1 inch = 2790 feet
Laguna Lake
San Luis Mtn.
Laguna Lake Park
South Hills
Righetti Hill
Islay Hill
Airport Safety Areas
Runway protection zones
Safety Area S-1a – Areas with frequent or low-visibility aircraft operations at less than 500 feet above ground level which are located within 250 feet of extended runway centerlines and within 3000 feet of a runway end.
Safety Area S-1b – Areas within gliding distance of prescribed flight paths for aircraft operations at less than 500 feet above ground level, plus sideline safety areas, and inner turning zones and outer safety zones for each runway
Safety Area S-1c – Areas not included in Safety Areas S-1a or S-1b, but adjacent (within 0.5 nm) to aircraft operations at less than 500 feet above ground level
Safety Area S-2 – Areas with aircraft operations at 501 to 1000 feet above ground level

approved. In no circumstance, however, shall the ALUC approve an ACOS which fails to specify and designate a percentage of Reserve Space within any Airport Safety Area that is less than the percentage required by Section 4.4.6.3 or a percentage of Reserve Space within any Clustered Development Zone than is less than the percentage required by Section 4.4.6.4.

d. Once an ACOS is approved by the ALUC, all properties within the area included in the ACOS shall be eligible to receive the density adjustments specified in Table 10 and shall be exempt from the maximum building footprint restriction specified in that Table, and all properties within a Clustered Development Zone specified by the ACOS will be eligible to receive the density adjustments listed by Table 10.

4.4.7. Policies

Notwithstanding any other provision of this ALUP except for the specific provisions set forth in Section 6 (Specific Land Use Provisions for the Margarita Area), a proposed general plan, general plan amendment, specific plan, specific plan amendment, zoning ordinance, zoning ordinance amendment, building regulation modification, or individual development proposal will be determined to be inconsistent with the ALUP if the proposed project or local action:

a. **Policy S-1** – Would permit or lack sufficient provisions to prohibit structures and other obstacles within the Runway Protection Zones for any runway at the Airport, as depicted in Figure 4.

b. **Policy S-2** – Would permit or fail to adequately prohibit development of any residential or non-residential land uses at a density greater than specified in Table 10 or of any mixed land use at densities greater than illustrated in Figures 5 through 8.

c. **Policy S-3** – Would permit or fail to adequately prohibit, development with a greater building coverage than permitted by Table 10.

d. **Policy S-4** – Would permit or fail to adequately prohibit high intensity land uses or special land use functions (impaired egress uses or unusually hazardous uses) , except that, when conditions specified by Table 10 for density adjustments have been determined to be met by the ALUC, high intensity land and/or special function uses may be allowed in Aviation Safety Area S-2.

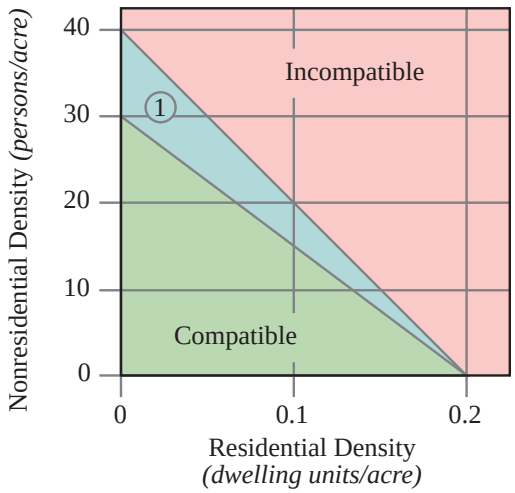
TABLE 8: PLANNING REQUIREMENTS AND DENSITY ADJUSTMENTS FOR LAND USES WITHIN THE AVIATION SAFETY AREAS FOR THE SAN LUIS OBISPO COUNTY REGIONAL AIRPORT

Aviation Safety Area	Maximum Building Coverage (% of gross area)	Maximum Density of Use (Non-Residential) persons/acre[1]	Maximum Density of Residential Development d. u./acre[2]	Special Function Land Uses Allowed	High Intensity Land Uses Allowed
Runway Protection Zone	0	5	0	no	no
Airport Safety Area 1a	5	30	0.2	no	no
With approved ACOS	n/a	40	0.2	no	no
Airport Safety Area 1b	10	40	0.2	no	no
With approved ACOS	n/a	50	0.2	no	no
Airport Safety Area 1c	15	50	0.2	no	no
With approved ACOS	n/a	60	0.2	no	no
With approved ACOS and specific plan[3]	n/a	80	0.2	no	no
Within CDZ specified by an approved ACOS	n/a	90	0.2	no	no
Within CDZ specified by approved ACOS and specific plan[3]	n/a	120	0.2	no	no
Airport Safety Area 2	20	150	6	no	no
With approved ACOS	n/a	150	9	no	no
With approved ACOS and specific plan[3]	n/a	150	9	yes[4]	yes[4]
Within CDZ specified by an approved ACOS	n/a	180	18	no	no
Within CDZ specified by approved ACOS and specific plan[3]	n/a	Unlimited	Unlimited	yes[4]	yes[4]

[1] *Refers to the maximum number of persons that a development may be expected to attract during the course of normal operations.*
[2] *Refers to the maximum number of dwelling units (as defined by this ALUP) per acre allowable under the terms of a proposed project or local action.*
[3] *Requires that the development be controlled by a specific plan or an amendment to a specific plan that has been developed in consultation with the ALUC and has been reviewed by the ALUC and has been determined to be consistent with the ALUP after the date of adoption of this amendment.*
[4] *Location and type of Special Function and/or High Intensity land uses shall be designated by Specific Plan and shall be subject to ALUC approval.*

ABBREVIATIONS:
ACOS – Airport Compatible Open Space plan – See Sections 4.4.6.2 and 4.4.6.5 for additional information.
CDZ – Clustered Development Zone – See Section 4.4.6.4 for additional information.

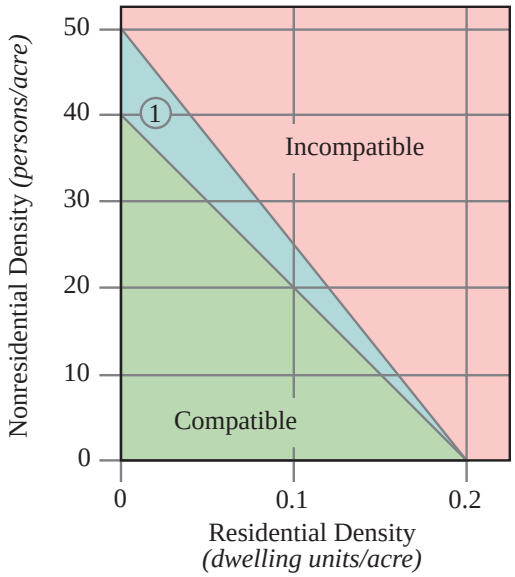
Figure 5: ALLOWABLE DENSITIES
Aviation Safety Area S-1a



Legend for Figure 5:

- Allowable with No Density Adjustments
- (1) Allowable with approved ACOS
- Prohibited

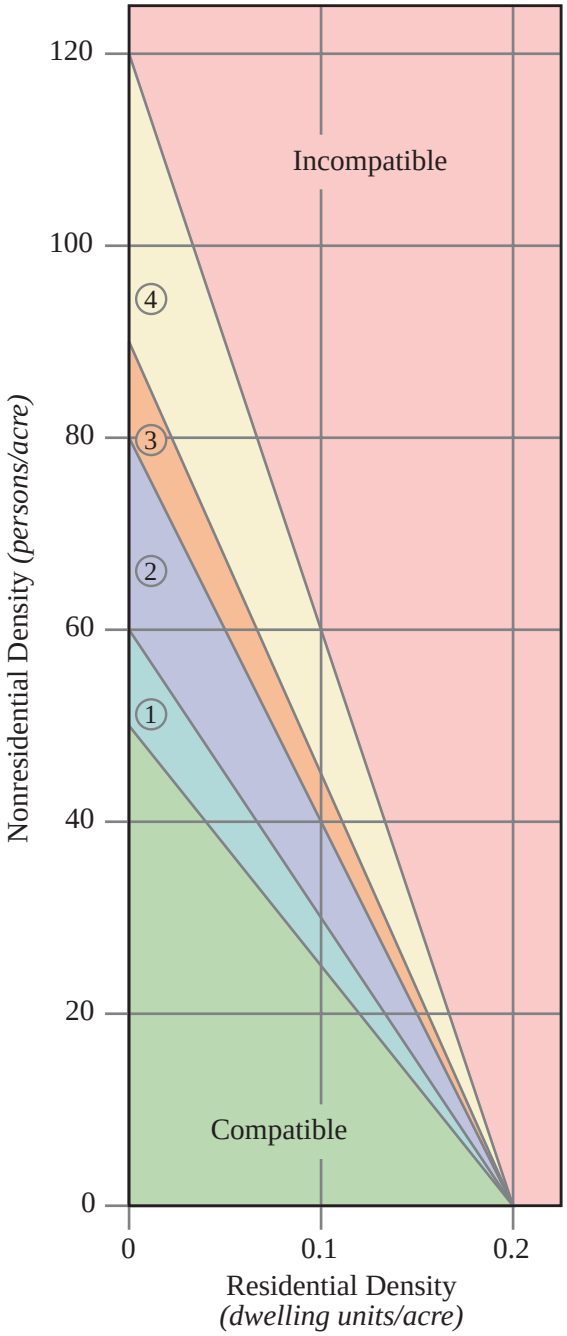
Figure 6: ALLOWABLE DENSITIES
Aviation Safety Area S-1b



Legend for Figure 6:

- Allowable with No Density Adjustments
- (1) Allowable with approved ACOS
- Prohibited

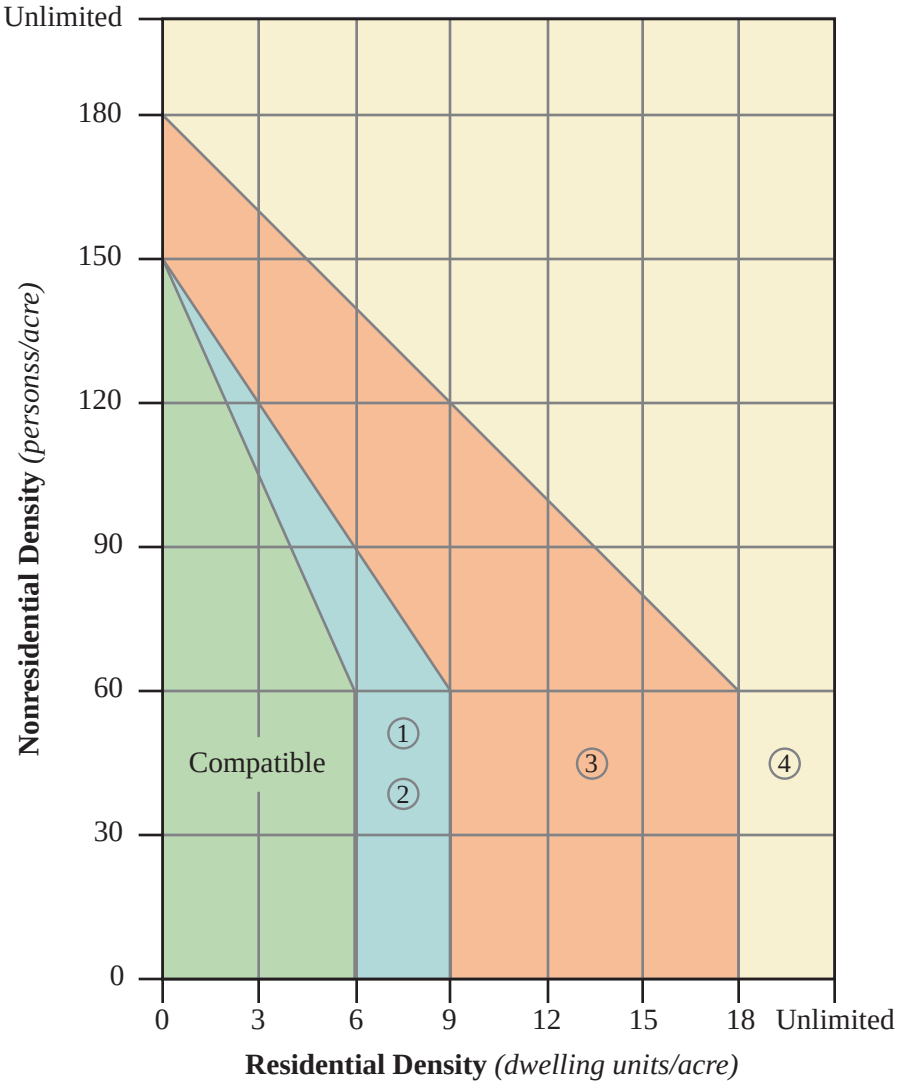
Figure 7: ALLOWABLE DENSITIES
Aviation Safety Area S-1c



Legend for Figure 7:

- Allowable with no density adjustments
- (1) Allowable with approved ACOS
- (2) Allowable with approved ACOS and specific plan
- (3) Allowable in Clustered Development Zones of an approved ACOS
- (4) Allowable in Clustered Development Zones of an approved ACOS, with Specific Plan
- Prohibited

Figure 8: ALLOWABLE DENSITIES: Aviation Safety Area S-2



Legend for Figure 8:

- Allowable with no density adjustments
- 1 Allowable with approved ACOS
- 2 Allowable with approved ACOS and specific plan
- 3 Allowable in Clustered Development Zones of an approved ACOS
- 4 Allowable in Clustered Development Zones of approved ACOS, with specific plan

4.5 SPECIFIC LAND USE POLICIES: AIRSPACE PROTECTION

4.5.1 Objective

The objective of the airspace protection policies of this ALUP is to minimize the risk of potential aircraft accidents in the vicinity of the Airport by avoiding the development of land uses and land use conditions which pose hazards to aircraft in flight.

4.5.2 Definitions

4.5.2.1 **Obstruction to Air Navigation -** For purposes of this ALUP, the term obstruction to air navigation is defined as any existing or future object which is or is expected to be greater than either of the following:

a. A height that is 200 feet above ground level (AGL) or is above 409 feet MSL, whichever is greater.

c. The surface of a takeoff and landing area or any imaginary surface established under Section 77.25 or 77.29 of the Federal Aviation Regulations (See Figure 9). However, no part of the take-off or landing area itself will be considered an obstruction.

4.5.2.2 **Hazard to Air Navigation -** For purposes of this ALUP, the term hazard to air navigation is defined as any existing or future object which entails or is expected to entail characteristics which would potentially interfere with the takeoff, landing, or maneuvering of aircraft at the Airport, including:

a. creation of electrical interference with navigation signals or radio communication between the aircraft and airport;

b. lighting which is difficult to distinguish from airport lighting;

c. glare in the eyes of pilots using the airport;

d. uses which attract birds and create bird strike hazards;

e. uses which produce visually significant quantities of smoke; and

f. uses which entail a risk of physical injury to operators or passengers of aircraft (e.g., exterior laser light demonstrations or shows).

4.5.3 Policies

Notwithstanding any other provision of this ALUP, any proposed general plan, general plan amendment, specific plan, specific plan amendment, zoning ordinance, zoning ordinance amendment, building regulation modification, or individual development proposal will be determined to be inconsistent with the ALUP if the proposed local action:

a. **Policy A-1 –** Lacks sufficient provisions to ensure that no structure, landscaping, apparatus, or other feature, whether temporary or permanent in nature shall constitute an *obstruction to air navigation* or a *hazard to air navigation*, as defined above.

b. **Policy A-2** – Would permit or lacks sufficient provisions to prohibit any new landfill or other disposal site at a site or of a configuration which is not consistent with all current state and federal statutes, FAA regulations, and FAA Advisory Circulars concerning the relationship of landfills and waste disposal sites to aeronautical operations and facilities.

4.6 SPECIFIC LAND USE POLICIES: OVERFLIGHT

4.6.1 Objective

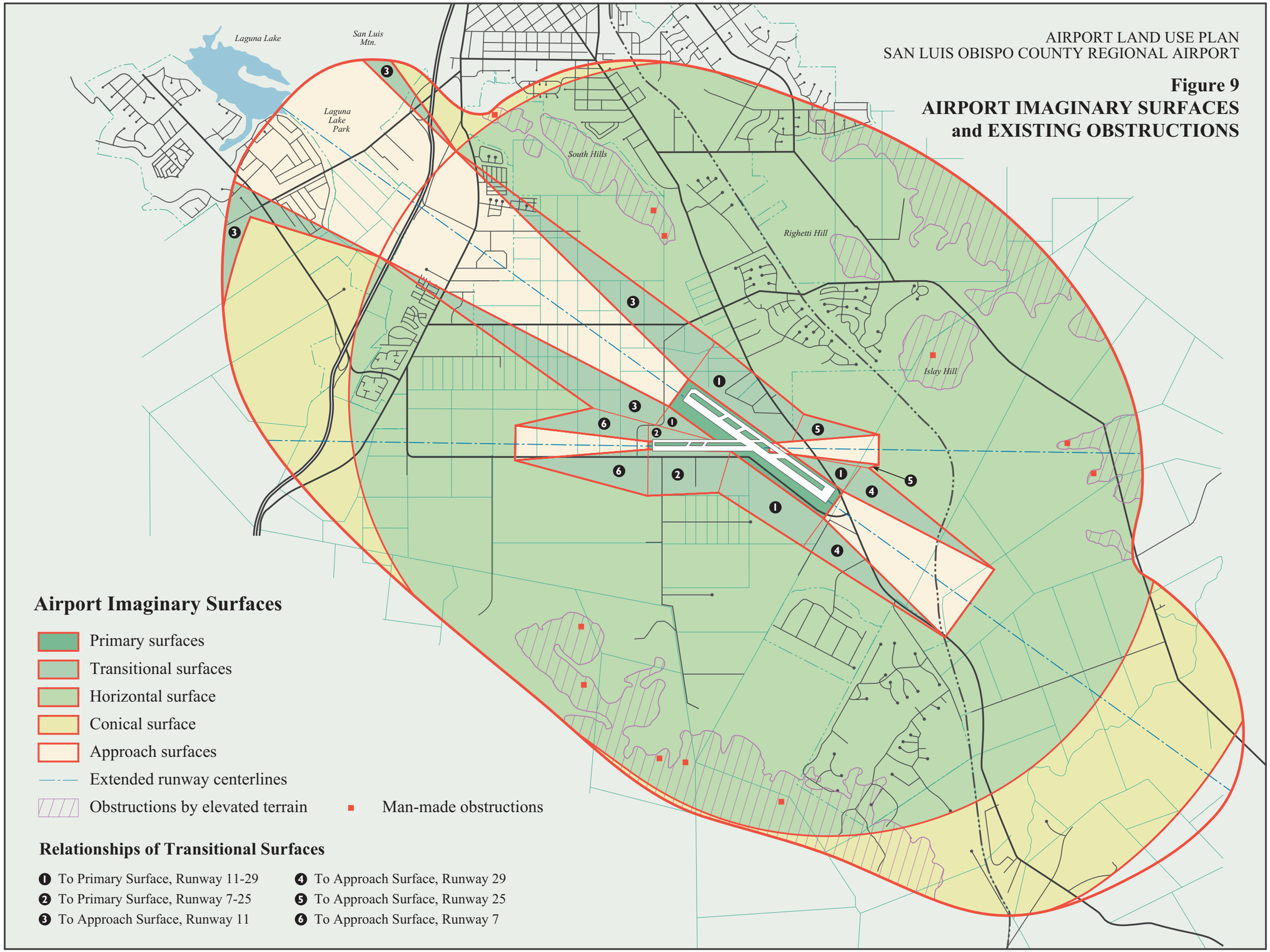
The objective of the overflight policies of this ALUP is to ensure that potential and prospective airport area land users are provided with sufficient information on the presence and activity of the Airport and associated noise and safety impacts in order for them to make an informed decision as to whether or not they wish to live and/or work in the Airport area.

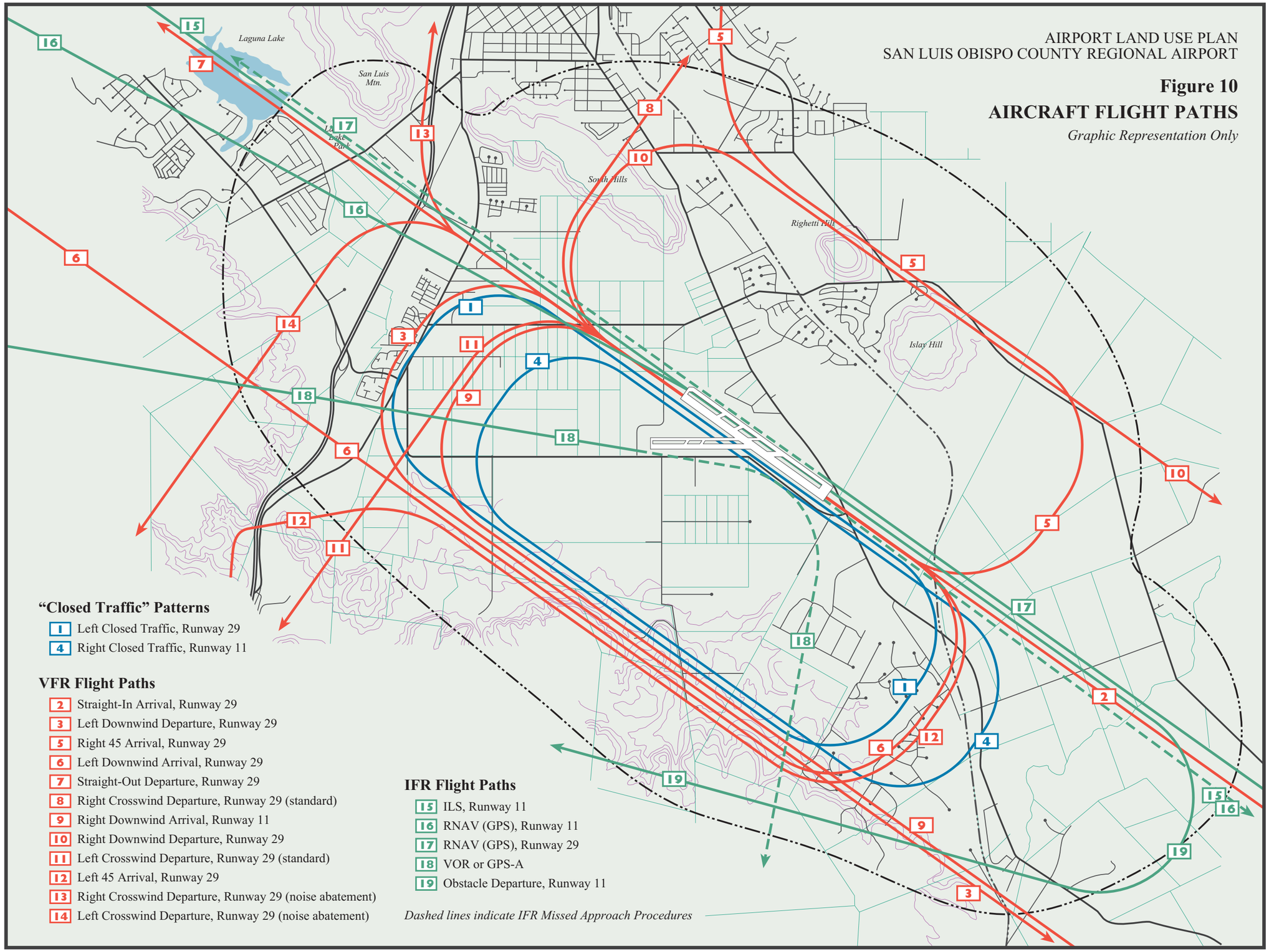
4.6.2 Policies

a. **Policy O-1** – Notwithstanding any other provision of this ALUP, any proposed general plan, general plan amendment, specific plan, specific plan amendment, zoning ordinance, zoning ordinance amendment, building regulation modification, or individual development proposal will be determined to be inconsistent with the ALUP if the proposed local action lacks sufficient provisions to ensure that both of the following provisions will be carried out:

   i. avigation easements will be recorded for each property developed within the area included in the proposed local action prior to the issuance of any building permit or conditional use permit; and

   ii. all owners, potential purchasers, occupants (whether as owners or renters), and potential occupants (whether as owners or renters) will receive full and accurate disclosure concerning the noise, safety, or overflight impacts associated with airport operations prior to entering any contractual obligation to purchase, lease, rent, or otherwise occupy any property or properties within the airport area.


AIRPORT LAND USE PLAN
SAN LUIS OBISPO COUNTY REGIONAL AIRPORT
Figure 9
AIRPORT IMAGINARY SURFACES
and EXISTING OBSTRUCTIONS
Laguna Lake
San Luis Mtn.
Laguna Lake Park
South Hills
Righetti Hill
Islay Hill
Airport Imaginary Surfaces
Primary surfaces
Transitional surfaces
Horizontal surface
Conical surface
Approach surfaces
Extended runway centerlines
Obstructions by elevated terrain
Man-made obstructions
Relationships of Transitional Surfaces
1 To Primary Surface, Runway 11-29
2 To Primary Surface, Runway 7-25
3 To Approach Surface, Runway 11
4 To Approach Surface, Runway 29
5 To Approach Surface, Runway 25
6 To Approach Surface, Runway 7


AIRPORT LAND USE PLAN
SAN LUIS OBISPO COUNTY REGIONAL AIRPORT
Figure 10
AIRCRAFT FLIGHT PATHS
Graphic Representation Only
Laguna Lake
San Luis Mtn.
South Hills
Righetti Hill
Islay Hill
"Closed Traffic" Patterns
1 Left Closed Traffic, Runway 29
4 Right Closed Traffic, Runway 11
VFR Flight Paths
2 Straight-In Arrival, Runway 29
3 Left Downwind Departure, Runway 29
5 Right 45 Arrival, Runway 29
6 Left Downwind Arrival, Runway 29
7 Straight-Out Departure, Runway 29
8 Right Crosswind Departure, Runway 29 (standard)
9 Right Downwind Arrival, Runway 11
10 Right Downwind Departure, Runway 29
11 Left Crosswind Departure, Runway 29 (standard)
12 Left 45 Arrival, Runway 29
13 Right Crosswind Departure, Runway 29 (noise abatement)
14 Left Crosswind Departure, Runway 29 (noise abatement)
IFR Flight Paths
15 ILS, Runway 11
16 RNAV (GPS), Runway 11
17 RNAV (GPS), Runway 29
18 VOR or GPS-A
19 Obstacle Departure, Runway 11
Dashed lines indicate IFR Missed Approach Procedures

SECTION 5

LAND USE COMPATIBILITY TABLE

5.1 INTENDED USE

The Land Use Compatibility Table is intended as a quick reference guide to allowable land uses and maximum permissible densities of development within the airport planning area. The Table does not introduce any new policies or requirements, but merely presents the requirements of the ALUP Noise and Safety Policies in a convenient, quick-reference format.

Explanation of the land use designations employed in the Land Use Compatibility Table is as set forth in the Glossary (Section 8) of this ALUP.

Regardless of the designation assigned to a particular land use by the Land Use Compatibility Table, the following ALUP sections may also apply, and the relevant requirements imposed by these policies must additionally be met to achieve consistency with the Airport Land Use Plan:

- **Section 4.3.4, paragraph d**, Noise Policy N-4: Prohibits development of noise sensitive uses adjacent to or in an acoustic environment substantially similar to an area of demonstrated noise incompatibility
- **Section 4.5.3, paragraph a**, Airspace Protection Policy A-1: Prohibits land uses which would constitute either an obstruction to air navigation or a hazard to air navigation
- **Section 4.5.3, paragraph b**, Airspace Protection Policy A-2: Regulates the establishment of landfills in the airport planning area
- **Section 4.6.2,** Overflight Policy O-1: Requires the recording of avigation easements and the preparation and distribution of real estate disclosure documents

In the event of any conflict or apparent conflict between the Land Use Compatibility Table and the ALUP Land Use Policies, the Land Use Policies shall take precedence.

5.2 LAND USE COMPATIBILITY TABLE: Key to Symbols

P Indicates that the land use is Prohibited in the specified noise exposure zone or aviation safety zone. No action can be taken by the Airport Land Use Commission that will render Prohibited uses permissible.

A Indicates that the land use is Allowed in the specified noise exposure zone or aviation safety zone. Allowed land uses are, nonetheless, subject to the requirements noted in Section 5.1.

I Indicates that the land use may be developed in the specified noise exposure zone only if it qualifies as an infill development under the criteria specified by ALUP Section 4.3.2.3 and has been designated as infill development by the ALUC.

M Indicates that the land use may be developed in the specified noise exposure zone only if the specific noise mitigation measures required by ALUP Table 6 are incorporated into the referral. Refer to ALUP Section 4.3.3, ALUP Table 6, and ALUP Figure 2 for specific mitigation requirements.

NR5 Indicates that the land use is Allowed in the indicated Aviation Safety Area, provided that the maximum non-residential density of use is limited to the values specified in Table 10 and in Figure 5.

NR6 Indicates that the land use is Allowed in the indicated Aviation Safety Area, provided that the maximum non-residential density of use is limited to the values specified in Table 10 and in Figure 6.

NR7 Indicates that the land use is Allowed in the indicated Aviation Safety Area, provided that the maximum non-residential density of use is limited to the values specified in Table 10 and in Figure 7.

NR8 Indicates that the land use is Allowed in the indicated Aviation Safety Area, provided that the maximum non-residential density of use is limited to the values specified in Table 10 and in Figure 8.

R5 Indicates that the land use is Allowed in the indicated Aviation Safety Area, provided that the maximum density of residential development of use is limited to the values specified in Table 10 and in Figure 5.

R6 Indicates that the land use is Allowed in the indicated Aviation Safety Area, provided that the maximum density of residential development of use is limited to the values specified in Table 10 and in Figure 6.

R7 Indicates that the land use is Allowed in the indicated Aviation Safety Area, provided that the maximum density of residential development of use is limited to the values specified in Table 10 and in Figure 7.

R8 Indicates that the land use is Allowed in the indicated Aviation Safety Area, provided that the maximum density of residential development of use is limited to the values specified in Table 10 and in Figure 8.

HI Indicates that the listed land use is designated as a High Intensity Land Use by the ALUP, and is prohibited in the specified aviation safety area unless the proposed development is controlled by both an approved Airport Compatible Open Space Plan (ACOS) and a Specific Plan which has been determined to be consistent with the ALUP.

SF Indicates that the listed land use is designated as a Special Function Land Use by the ALUP, and is prohibited in the specified aviation safety area unless the proposed development is controlled by both an approved Airport Compatible Open Space Plan (ACOS) and a Specific Plan which has been determined to be consistent with the ALUP.

5.3 LAND USE COMPATIBILITY TABLE

	Airport Noise Exposure (dB CNEL)			Aviation Safety Area				
	More than 60	55 to 60	Less than 55	RPZ	S-1a	S-1b	S-1c	S-2
Agricultural Uses								
Agricultural processing	A	A	A	P	NR5	NR6	NR7	NR8
Animal raising and keeping	A	A	A	A	A	A	A	A
Crop production (except staked crops) and grazing	A	A	A	A	A	A	A	A
Farm equipment and supplies – sales	A	A	A	P	NR5	NR6	NR7	NR8
Farm support quarters	P	I	A	P	R5	R6	R7	R8
Greenhouses, nursery specialties	A	A	A	P	NR5	NR6	NR7	NR8
Specialized animal facilities	A	A	A	P	NR5	NR6	NR7	NR8
Vineyards and other staked crops	A	A	A	P	P	A	A	A
Communications Uses								
Antennas, repeater stations, etc. – unmanned	A	A	A	P	A	A	A	A
Radio, television, recording, or rehearsal studios	M	M	A	P	NR5	NR6	NR7	NR8
Cultural, Educational, and Recreational Uses								
Amusement arcades	A	A	A	P	NR5	NR6	NR7	NR8
Amusement parks, fairgrounds	A	A	A	P	P	P	P	P
Bars, taverns with outdoor eating/drinking areas	P	I	A	P	NR5	NR6	NR7	NR8
Bars, taverns without outdoor serving areas	M	M	A	P	NR5	NR6	NR7	NR8
Campgrounds, outdoor sleeping facilities	P	I	A	P	NR5	NR6	NR7	NR8
Cemeteries, mausoleums, columbariums	A	A	A	P	A	A	A	A
Churches	M	M	A	P	NR5	NR6	NR7	NR8
Day-care facilities for children, other	M	M	A	P	P	P	P	SF
Day-care facilities for adults	M	M	A	P	P	P	P	SF
Convention/exhibit centers, major auditoriums	M	M	A	P	P	P	P	HI
Drive-in or other outdoor theatres	P	I	A	P	NR5	NR6	NR7	NR8
Libraries and museums	M	M	A	P	NR5	NR6	NR7	NR8

5.3 LAND USE COMPATIBILITY TABLE (continued)

	Airport Noise Exposure (dB CNEL)			Aviation Safety Area				
	More than 60	55 to 60	Less than 55	RPZ	S-1a	S-1b	S-1c	S-2
Cultural, Educational, and Recreational Uses (continued)								
Membership organizations, meeting rooms, and small auditoriums	M	M	A	P	NR5	NR6	NR7	NR8
Outdoor sports and recreation	A	A	A	A	A	A	A	A
Rural recreation and picnicing (no camping)	A	A	A	A	A	A	A	A
Schools –Specialized training and education	M	M	A	P	NR5	NR6	NR7	NR8
Schools –Colleges, universities, adult schools	M	M	A	P	NR5	NR6	NR7	NR8
Schools –Pre-school through high school	M	M	A	P	P	P	P	SF
Sports stadiums, racetracks, fairgrounds	A	A	A	P	P	P	P	HI
Swimming pools, public	A	A	A	P	NR5	NR6	NR7	NR8
Temporary events	A	A	A	P	P	P	P	HI
Manufacturing and Processing Uses								
Hazardous, corrosive, or flammable chemicals	A	A	A	P	P	P	P	SF
Electrical generating plants	A	A	A	P	P	P	P	SF
Petroleum refining or bulk storage	A	A	A	P	P	P	P	SF
Other manufacturing and processing	A	A	A	P	NR5	NR6	NR7	NR8
Residential Uses								
Caretakers or employees residences	P	I	A	P	R5	R6	R7	R8
Dormitories	P	I	A	P	R5	R6	R7	R8
Farm support quarters	P	I	A	P	R5	R6	R7	R8
Fraternity or sorority houses	P	I	A	P	R5	R6	R7	R8
High-occupancy residential use	P	I	A	P	R5	R6	R7	R8

5.3 LAND USE COMPATIBILITY TABLE (continued)

	Airport Noise Exposure (dB CNEL)			Aviation Safety Area				
	More than 60	55 to 60	Less than 55	RPZ	S-1a	S-1b	S-1c	S-2
Residential Uses (continued)								
Homeless shelters	P	I	A	P	R5	R6	R7	R8
Home occupations	P	I	A	P	R5	R6	R7	R8
Mobilehomes, mobile home parks	P	I	A	P	R5	R6	R7	R8
Multifamily dwellings	P	I	A	P	R5	R6	R7	R8
Nursing, residential care, personal care facilities	P	I	A	P	P	P	P	SF
Organization houses	P	I	A	P	R5	R6	R7	R8
Secondary dwelling units	P	I	A	P	R5	R6	R7	R8
Single family residential	P	I	A	P	R5	R6	R7	R8
Temporary dwellings	P	I	A	P	R5	R6	R7	R8
Resource Extraction Uses								
Forestry, mining, fishing and game preserves	A	A	A	P	NR5	NR6	NR7	NR8
Petroleum extraction	A	A	A	P	P	P	P	SF
Retail Trade Uses								
Restaurants, without outdoor seating areas	M	M	A	P	NR5	NR6	NR7	NR8
Restaurants, with exterior seating areas	P	I	A	P	NR5	NR6	NR7	NR8
Retail sales – fuels, lubricants, propane, etc.	A	A	A	P	P	P	P	SF
Retail sales, other than listed above	A	A	A	P	NR5	NR6	NR7	NR8
Service Uses								
Correctional institutions	P	I	A	P	R5	R6	R7	R8
Health services, ambulatory	M	M	A	P	NR5	NR6	NR7	NR8

5.3 LAND USE COMPATIBILITY TABLE (continued)

	Airport Noise Exposure (dB CNEL)			Aviation Safety Area				
	More than 60	55 to 60	Less than 55	RPZ	S-1a	S-1b	S-1c	S-2
Service Uses (continued)								
Hospitals, acute or convalescent	M	M	A	P	P	P	P	SF
Offices, office buildings	M	M	A	P	NR5	NR6	NR7	NR8
Other personal, consumer, or business services	A	A	A	P	NR5	NR6	NR7	NR8
Transient Lodgings								
Bed and breakfast facilities	P	I	A	P	NR5	NR6	NR7	NR8
Employee sleeping rooms	M	M	A	P	NR5	NR6	NR7	NR8
Homestays	P	I	A	P	R5	R6	R7	R8
Hotels and motels	M	M	A	P	NR5	NR6	NR7	NR8
Recreational vehicle parks	P	I	A	P	NR5	NR6	NR7	NR8
Temporary employee trailer parks	P	I	A	P	R5	R6	R7	R8
Transportation Uses								
Airfields, landing strips, heliports, helipads	A	A	A	P	P	P	P	SF
High voltage transmission lines	A	A	A	P	P	P	P	SF
Pipelines, above ground, flammable liquids	A	A	A	P	P	P	P	SF
Pipelines, above ground, non-flammable liquids	A	A	A	A	A	A	A	A
Truck stops	A	A	A	P	NR5	NR6	NR7	NR8
Vehicle, freight, and transit terminals	A	A	A	P	NR5	NR6	NR7	NR8
Wholesale Uses								
Warehousing	A	A	A	P	NR5	NR6	NR7	NR8
Wholesaling and distribution	A	A	A	P	NR5	NR6	NR7	NR8

SECTION 6

SPECIFIC LAND USE PROVISIONS FOR THE MARGARITA AREA

NOTE: *This Section of the Airport Land Use Plan refers to "Airport Planning Zone 3", "Airport Planning Zone 4", and "Airport Planning Zone 5". These Zones had wide applicability in previous versions of the ALUP, but have been superseded in this revision. Currently Airport Land Use Zones 3, 4, and 6 are only applicable within the Margarita Specific Plan Area. To minimize the possibility of confusion, these zones are renamed "Margarita-Airport Zone 3" (MAZ3), "Margarita-Airport Zone 4" (MAZ4), and"Margarita-Airport Zone 6" (MAZ6). The configuration of these Zones is, as applied to the Margarita Specific Plan Area, is unchanged, and is shown in Figure 11.*

Sections 6.3.1.b and 6,3.2.b previously referred to conditions for rendering "conditionally Approvable" land uses compatible with the Airport Land Use Plan. This phraseology is not relevant under the current ALUP Revision. Sections 6.3.1.b and 6,3.2.b are, therefore, deleted. Development which adheres to the Margarita Area Planning Standards (Section 6.2) and which is located in accordance with Figure 11: Allowable Land Uses: Margarita Area shall be considered to be consistent with the ALUP.

The term "noise-sensitive uses", for purposes of Section 6 only shall be construed only those uses which were designated as "noise-sensitive" by the June 19, 2002 revision of the ALUP. These include: residential development (except temporary buildings), schools, health care services (including hospitals), nursing and personal care facilities, churches, public assembly and entertainment, libraries, and museums.

The dimensions of the "Inner Turning Zone" and Outer Safety Zone" shall, for purposes of this section. be as defined in the 1993 Airport Land Use Planning Handbook of the Division of Aeronautics of the California Department of Transportation, shall be applied to the existing runway length of 5300 feet, rather than the planned 6000 foot length, and are as illustrated in Figure 11.

The ALUC adopts the following Specific Land Use Provisions for the Margarita Area.

6.1 APPLICABILITY OF SPECIFIC LAND USE PROVISIONS FOR THE MARGARITA AREA

a. Section 6 is applicable only to the Margaria Area as shown in Figure 10. Any referred action for land within the Margarita Area shall be subject to this section. Any referred action for land outside the Margarita Area shall be subject to all of the policies of Section 4 and Section 6.

b. Unless specifically modified by the provisions of Section 6.3, all of the Land Use Policies set forth with respect to Noise, Safety, Airspace Protection, and Overflight in Section 4 of this ALUP Amendment entitled "Land Use Policies" shall fully apply to the Margarita Area.

c. Land uses that are in conformance with the Section 6.3, but are in noncompliance with any Land Use Policy not specifically superceded or invalidated by this Section are prohibited by the ALUP. A general plan, general plan amendment, specific plan, specific plan amendment, zoning ordinance, zoning ordinance amendment, or building ordinance that permits or fails to adequately prohibit such land uses shall be determined to be inconsistent with the ALUP.

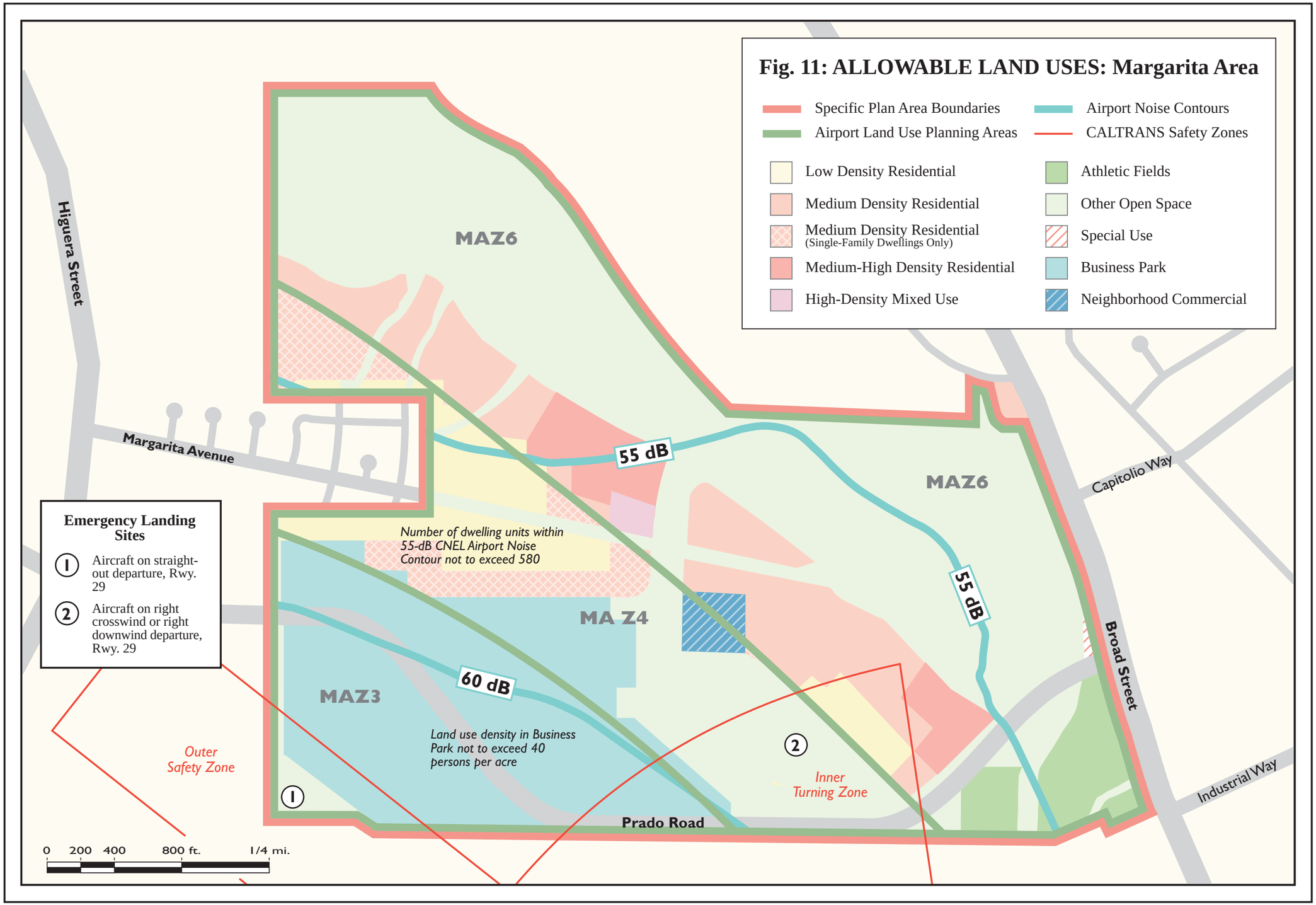


Fig. 11: ALLOWABLE LAND USES: Margarita Area
Specific Plan Area Boundaries
Airport Land Use Planning Areas
Airport Noise Contours
CALTRANS Safety Zones
Low Density Residential
Medium Density Residential
Medium Density Residential (Single-Family Dwellings Only)
Medium-High Density Residential
High-Density Mixed Use
Athletic Fields
Other Open Space
Special Use
Business Park
Neighborhood Commercial
MAZ6
MAZ6
MA Z4
MAZ3
Higuera Street
Margarita Avenue
Capitolio Way
Broad Street
Industrial Way
Prado Road
55 dB
55 dB
60 dB
Number of dwelling units within 55-dB CNEL Airport Noise Contour not to exceed 580
Land use density in Business Park not to exceed 40 persons per acre
Outer Safety Zone
Inner Turning Zone
Emergency Landing Sites
1 Aircraft on straight-out departure, Rwy. 29
2 Aircraft on right crosswind or right downwind departure, Rwy. 29
0 200 400 800 ft. 1/4 mi.

d. Section 6 is intended for use as one component of the comprehensive strategy for land use planning created by the overall ALUP. The provisions of this Section are valid only within the context of the policies and figures that are provided in other Sections. If any portion of the ALUP is invalidated or modified, other than by action of the ALUC itself, and if such invalidation or modification substantially impacts the authority of the ALUP to regulate or influence land use planning decisions within the Airport Planning Area, this Section shall become null and void, and its contents shall not constitute a precedent nor prejudice any subsequent deliberations or decisions by the ALUC. If, following the adoption of an airport land use plan or an amendment to an airport land use plan, any local agency having jurisdiction within the Airport Planning Area fails to amend its general plan, specific area plans, zoning ordinances, and building codes to achieve consistency with the ALUP, all of the provisions of Section 6 shall be suspended and shall not constitute grounds for a determination of consistency until such time as the local planning instruments have been amended and the ALUC has determined that such local planning instruments are consistent with the ALUP.

6.2 MARGARITA AREA PLANNING STANDARDS FOR AIRPORT COMPATIBILITY

6.2.1 Noise Standards

a. The total number of dwelling units within the projected 55 dB CNEL contour shall not exceed 580 dwelling units.

b. All residential or other noise-sensitive land uses within the projected 55 dB CNEL contour shall be located within the areas specified in Figure 11.

c. Residential or other noise-sensitive land uses within the projected 55 dB CNEL contour shall be situated as far as is feasible from the projected 60 dB CNEL contour and as far as is feasible from the departure (northwesterly) end and from the extended centerline of Runway 29 at the Airport.

d. Higher density residential land uses in MAZ6 will be clustered and will be situated closer to the projected 55dB CNEL contour than to the projected 60 dB CNEL contour.

e. All residential or other noise-sensitive land uses within the projected 55 dB CNEL contour shall incorporate design and construction features that will reduce aviation-related interior continuous noise levels to 45 dB CNEL or less in all interior spaces intended for human habitation.

f. All residential or other noise-sensitive land uses within the projected 55 dB CNEL contour shall incorporate design and construction features that will reduce aviation-related interior single-event noise levels to 60 dB or less in all interior spaces intended for human habitation.

g. In common use areas, facilities will be strongly encouraged to provide residents with an opportunity to participate in outdoor-oriented activities (e.g., child play, barbecues, swimming, tennis) in environments where, by partial or full enclosure, baffling, or other design and construction features, aircraft noise is attenuated.

h. Design standards set forth in general and specific plans or other planning instruments shall strongly encourage individual residential and other noise-sensitive land uses to incorporate design and construction features that will provide residents with an opportunity to participate in outdoor-oriented activities in environments that afford a significant degree of aircraft noise attenuation. Examples of

such environments include:

i. Appropriately landscaped interior noise-sheltered garden courts or atria (in multi-family residential buildings)

ii. Outdoor covered and noise-insulated patio areas or "garden rooms"

iii. Fully or partially enclosed swimming pools and tennis courts

6.2.2 Safety Standards

a. Within MAZ3, all residential land uses shall be prohibited.

b. Within MAZ4:

i. The total number of residences allowed shall not exceed a maximum of 260 dwelling units, and

ii. Multi-family residential land uses shall be prohibited. Residential units may not be attached or share a common wall, although single-family residences with a zero lot-line setback on one side will be permissible, and

iii. A minimum of 22% of the land area will be preserved as open space. For purposes of this Section, *open space* shall be defined as land which is substantially free of structures, vehicles, and trees, which is relatively smooth and level, and which is devoted to use characterized by low occupancy levels. Land uses which may be consistent with this definition of open space include undeveloped land – "green belt" reserve; parks; agriculture – grazing, vineyards or field crops (but not forestry or orchards); certain recreational uses (e.g., golf courses, shooting ranges); cemeteries; and streets, roads, highways, parking lots, and rights-of-way, provided that such hazards as utility poles and wires, parked vehicles, and trees are appropriately prohibited.

c. Within the Outer Safety Zone (as defined by the State of California's *Airport Land Use Planning Handbook, December, 1993*), all buildings shall be prohibited.

d. Within the Inner Turning Zone (as defined by the State of California's *Airport Land Use Planning Handbook, December, 1993*):

i. the total number of residences allowed shall not exceed a maximum of 40 dwelling units, and

ii. residential land uses shall be situated as far as feasible from the departure end and from the extended centerline of runway 29 at the Airport, and

iii. A minimum of 40% of the land area will be preserved as open space.

e. Within the portion of MAZ4 which also lies within the Inner Turning Zone (as defined by the State of California's *Airport Land Use Planning Handbook, December, 1993*):

i. Residential land uses shall be prohibited, and

ii. Non-residential structures shall be minimized.

f. Unobstructable emergency landing sites for aircraft shall be provided as follows:

i. An unobstructable emergency aircraft landing site which is at least 150 feet in width and 1,000 feet in length and which is located and oriented for use by aircraft executing a right crosswind or right downwind departure from runway 29 shall be provided, and

ii. An additional open space shall be preserved at the southwest corner of the Margarita Area (as shown in Figure 11) for incorporation into a future unobstructable emergency aircraft landing site for use by aircraft executing a straight out departure from Runway 29 or a straight in arrival to Runway 11.

g. Schools and other public-assembly buildings shall be prohibited in the Margarita Area.

h. All non-residential land uses within the Margarita Area shall be situated within the areas specified in Figure 11.

i. Nonresidential density of use within the area designated as Business Park by Figure 11 shall not exceed 40 persons per acre.

6.3 SPECIFIC LAND USE POLICIES-MARGARITA AREA

6.3.1 Noise Policies

a. **Policy MN-1** – Within the Margarita Area:

   i. Policy N-2 shall not apply, and

   ii. Not withstanding any other provision of this ALUP, a proposed general plan, general plan, general plan amendment, specific plan, specific plan amendment, zoning ordinance, zoning ordinance amendment, building regulation modification, or individual development proposal will be determined to be inconsistent with the ALUP if the proposed local action would permit or fail to sufficiently prohibit residential or other noise-sensitive development within the projected 55 dB CNEL contour, unless:

   - the local action would permit only those residential or other noise-sensitive developments which meet the criteria delineated in this ALUP for designation as infill[33] , or
   - the local action would permit only those residential or other noise-sensitive developments which adhere to the requirements of the Margarita Area Planning Standards for Airport Compatibility, as set forth in this ALUP.

6.3.2 Safety Polices

a. **Policy MS-1** – Within the Margarita Area:

   i. Policy S-2 and S-3 shall not apply, and

   ii. Notwithstanding any other provision of this ALUP, any local action, including a proposed general plan, general plan amendment, specific plan, specific plan amendment, zoning ordinance, building regulation modification, or individual development proposal will be determined to be inconsistent with the ALUP if the proposed local action would permit or fail to adequately prohibit any development or land use which fails to conform adhere to the standards set forth in Section 6.2.2.

SECTION 7

PROCEDURAL POLICIES

7.1 AIRPORT LAND USE COMMISSION: RESERVATION OF RIGHT OF REVIEW

In accordance with Public Utilities Code Section 21676(b), prior to the amendment of a general plan or specific plan, or the adoption or approval of a zoning ordinance, zoning ordinance amendments or building regulation with the planning boundaries established by this ALUC, the referring agency shall first refer the proposed local action to the ALUC. The ALUC shall make a finding, on these and other projects referred, of whether or not the amendment, ordinance, regulation, or project is consistent with the ALUP. All determinations of consistency or inconsistency shall be made by the ALUC acting in its official capacity, and no such decisions may be delegated to the staff of the ALUC nor to any referring agency.

A finding by the ALUC that any project, general plan or general plan amendment, specific plan or specific plan amendment, zoning ordinance, or building regulation is consistent with the ALUP does not constitute a finding that a subsequent version of the project or action which has been modified from the version submitted to the ALUC is consistent nor does it constitute a finding that any subsequent project or action on the part of the referring agency is consistent.

7.2 INFORMATION REQUIRED FOR ALUC REVIEW

Failure to provide the ALUC with required information for any proposed project or local action shall constitute sufficient grounds for a determination of inconsistency.

To ensure that appropriate information is submitted, the ALUC may, by a majority vote, require that each future referral for determination of consistency be accompanied by a completed ALUC Referral Form, together with all required attachments. The ALUC Referral Form shall be devised and provided by the ALUC, and shall be revised as necessary. The ALUC Referral Form is not an element of the ALUP, and revision of the Referral Form shall not constitute nor require an amendment to the ALUP.

7.3 TIMING OF ALUC REFERRALS

In order to avoid unnecessary delays in the overall processing of a plan or project, referral for review by the ALUC should, in general be made as soon as all of the requirements for review are met. This practice will allow the ALUC's review to be duly considered by the local jurisdiction prior to formalizing its action.

a. For new general plans, specific plans, or zoning ordinances and for major modifications to existing general plans, specific plans, or zoning ordinances, it is strongly suggested that a preliminary review by the ALUC be completed prior to it being released for public comment and a formal review be completed prior to initial reading of the proposed local action by the referring agency..

b. For minor modifications to existing general plans, specific plans, zoning ordinances, or building regulations and for voluntary reviews of individual projects, depending on the normal scheduling of

meetings, it may be appropriate that review by the ALUC be carried out concurrently with review by the local planning commission and other advisory bodies.

In all instances, review by the ALUC must be accomplished before final action by the city council or board of supervisors.

7.4 TIMING OF ALUC REVIEW

The ALUC shall make a determination of consistency or inconsistency within sixty (60) days after the date on which all required information was received from the referring agency.

If the ALUC has not acted upon a referral within sixty (60) days after all information necessary for review of the proposed local action is received, and the proposed local action involves a general or specific plan, zoning ordinance, or building regulation, the proposed local action shall be deemed consistent with the ALUP.

If, at the time of initial receipt of a referral from a referring agency, the information required for ALUC review is incomplete, the ALUC or its staff shall notify the referring agency, indicating the specific items which are incomplete. If the required information is not received, the ALUC may make a finding that the referred local action is inconsistent with the ALUP based on failure of the referring agency to submit sufficient information for review.

7.5 REFERRING AGENCY OPTIONS

If the ALUC determines that a proposed local action is inconsistent with the ALUP, the referring agency shall be notified and the governing body of the referring agency may, after a public hearing, overrule the ALUC if both of the following conditions are met:

a. The governing body of the local agency shall, at least 45 days prior to the decision to overrule the commission, provide to the ALUC and the California Department of Transportation a copy of the proposed decision and findings, as required by State law, and shall have include any comments from the ALUC and/or the Division of Aeronautics in the public record of any final decision to overrule the Commission.

b. The governing body of the referring agency votes to overrule the ALUC's determination by at least a two-thirds vote of its members; and

c. The governing body of the referring agency makes specific findings that the proposed local action is consistent with the purposes of Article 3.5 of the California Public Utilities Code, as stated in Section 21670, as follows:

    i. to provide for the orderly development of the Airport as a public use airport and the area surrounding the Airport so as to promote the overall goals and objectives of the California airport noise standards pursuant to Public Utilities Code Section 21669 and to prevent the creation of new noise and safety problems; and

    ii. to protect public health, safety, and welfare by ensuring the orderly expansion of airports and the adoption of land use measures that minimize the public's exposure to excessive noise and safety hazards within areas around the Airport to the extent that these areas are not already devoted to incompatible uses.

    Such findings may not be adopted as a matter of opinion, but must be supported by substantial evidence.

Should the ALUC determine that a general or specific plan has not been made consistent with the ALUP and when a referring agency has failed to override the ALUC by the above procedure, the ALUC may require that the referring agency submit all subsequent actions, regulations, and permits to the ALUC for review.

7.6 AMENDMENT OF THE ALUP

The ALUP shall be reviewed by the ALUC as often as is necessary to accomplish its purposes, and may be amended by the ALUC no more often than once in any calendar year.[5]

Within 60 days after the adoption of any amendment to the ALUP, the ALUC shall review the general and specific plans of all affected local agencies to determine whether they are consistent with the ALUP, as amended. If the plan or plans are found to be inconsistent, the referring agency shall be notified and that referring agency shall hold a hearing to reconsider its plan or plans.

SECTION 8

GLOSSARY

Agricultural processing: A variety of operations performed on crops after harvest to prepare them for market on-site or further processing and packaging at a distance from the agricultural area. Includes, but is not limited to alfalfa cubing, hay baling and cubing, corn shelling, drying of corn, rice, hay, fruits or vegetables, pre-cooling and packaging of fresh or farm-dried fruits and vegetables, grain cleaning and custom grinding, custom grist mills, custom milling of flour, feed, or grain, grading and packaging of fruits and vegetables, tree nut hulling and shelling, cotton ginning, wineries, alcohol fuel production, and receiving and processing of green material which is not produced on-site (commercial composting).

Air carrier: An operator that:

1. performs at least five round trips per week between two or more points and publishes flight schedules which specify the times, days of the week and places between which such flights are performed; or
2. transport mail by air pursuant to a current contract with the United States Postal Service.

Air carriers are certified in accordance with Federal Aviation Regulations.

Air charter: An air carrier certified in accordance with Federal Aviation Regulations and authorized to provide, on demand, public transportation of persons and property by aircraft. Air charters generally operate small aircraft "for hire" for specific trips.

Air taxi: See air charter.

Air traffic control: A term used to denote a number of different types of facilities which are operated by or under the auspices of the Federal Aviation Administration and which provide informational, navigational, and collision avoidance services to aircraft in flight. Air traffic control towers and air route traffic control centers are elements of the air traffic control system.

Air traffic control tower (ATCT) ("tower"): A facility located within the physical boundaries of certain airports and consisting of a tower which provides visual and/or radar tracking, ground-to-air radio communications, traffic management, and limited informational, navigational, and separation services to aircraft operating in the immediate vicinity of an airport.

Air route traffic control center (ARTCC): A facility which provides radar tracking and informational, navigational, and separation services to aircraft operating beyond the immediate vicinity of an airport.

Aircraft, parts, instruments – repair and service (as a land use): Any establishment which, as its primary activity, performs repair, maintenance, inspection, fabrication, or other services which are necessary or useful in maintaining the airworthiness, appearance, value, comfort, or functionality of aircraft or any component thereof.

Airport operation: A take off or a landing.

Amusement arcade: An establishment offering, as a primary business activity, participation in electronic or mechanical games.

Amusement park: A permanent site where entertainment, food, rides, games, and the like are offered for viewing or sale.

Angle of descent: The angle, with respect to a horizontal plane, of the flight path of an aircraft descending from a higher altitude to a lower altitude (usually expressed in degrees or in feet per nautical mile). Also referred to as **descent slope**.

Animal raising: The keeping, feeding, or raising of animals as a commercial agricultural venture, avocation, hobby, or school project, either as a principal land use or subordinate to a residential use. Includes the keeping of common farm animals, small animal specialties (such as rabbit farms and other fur-bearing animals), bee farms, aviaries, worm farms, household pets, etc.

Approach angle: The angle, with respect to a horizontal plane, of the flight path of an aircraft descending to land at an airport (usually expressed in degrees or in feet per nautical mile). Also referred to as **approach slope**.

Approach lighting system (ALS): An airport lighting system which, by means of a standardized array of lights on the ground provides visual cues which enable pilots or aircraft approaching the runway in conditions of darkness or poor visibility, to align the flight path of the aircraft with the extended centerline of the runway.

Bank: Any land use whereby some or all of the financial services customarily provided by banking institutions are offered to the general public. Examples include traditional banks, savings and loan associations, and credit unions. The provision of banking services at a site which is predominantly devoted to a compatible use (e.g., in-store supermarket bank branches, automated teller machines), however, shall not be considered as banks in the context of this ALUP.

Bar, tavern: Any establishment engaged, as a primary business, in the sale of alcoholic beverages for on-site consumption. Entertainment, if provided, must be incidental, and no dance floor may be provided. Establishments which feature a dance floor and/or entertainment as a principal use are classified as "nightclubs or discotheques".

Base leg: A segment of the standard airport traffic pattern which extends at right angles from the extended runway centerline at some distance from the approach end of the runway. The base leg extends from the downwind leg of the traffic pattern to the final approach course (extended runway centerline) and is flown in the direction toward the runway centerline. The altitude of aircraft flying the base leg is usually between 1000 and 400 feet above ground level.

Bed & Breakfast: A structure or facility which is intended or suitable for short-term occupancy by persons as a temporary dwelling and which, by its nature, appearance, or presentation would appear to offer occupants a peaceful, pastoral, or rural experience. Characteristicss which distinguish a bed and breakfast inn is distinguished from a hotel or motel typically include: openable windows, an absence of central climate control systems, and/or extensive outdoor landscaping or lawns, walking paths, or outdoor dining/conversation areas.

Broadcast studio: Any commercial or public communications use, including telegraph, telephone, radio and television broadcasting and receiving stations and studios and motion picture studios, with facilities entirely within buildings.

Campground: Any land use which permits individuals to sleep in the outdoors, in a tent, or in a recreational vehicle.

Caretaker residence: A permanent residence that is secondary or accessory to the primary use of the property. The purpose of a caretaker residence must be to provide housing to an individual who is employed on the site of the nonresidential use and whose presence is required for security purposes or to provide 24-hour care or monitoring of people, plants, animals, equipment, stored goods, or other conditions on the site.

Cemetery, mausoleum, or columbarium: Any establishment engaged in subdividing property and offering burial plots or air space for sale. Includes animal cemeteries, cemetery real estate operations, cemetery associations, and funeral parlors accessory to a cemetery, mausoleum, or columbarium. Funeral parlors and related facilities as a principal use are considered to be "personal services".

Church: Any land use devoted exclusively or primarily to religious worship. Classrooms and/or meeting rooms may be included as part of a church if sufficient conditions are placed upon the development to ensure that such facilities will be utilized only for religious instruction or church-related meetings and that their use for such purposes will remain subsidiary to the primary activity of religious worship. In the absence of such conditions, classroom facilities which would be suitable for regular religious or nonreligious education of students will be considered a school.

Circle-to-Land Procedure: A series of standardized aerial procedures which enable aircraft which have completed an instrument approach intended to culminate in a landing on a specified runway to maneuver for landing on a different runway than specified in the basic instrument approach while maintaining visual contact with the airport.

Climb gradient: The angle, with respect to a horizontal plane, of the flight path of an aircraft ascending from a lower altitude to a higher altitude (usually expressed in feet per nautical mile).

Closed traffic: An airborne maneuver by which an aircraft takes off from and lands at an airport without leaving the immediate airport vicinity (usually performed as a flight training or practice maneuver) or the airport traffic pattern flown by such an aircraft.

Community noise equivalent level (CNEL): A measure, in decibels, of the cumulative noise exposure at a given site. The CNEL mathematically increases the significance of noise events occurring during evening and nighttime hours, in response to the widely-held assumptions that such events are more intrusive than similar events occurring during daytime hours.

Compatible: A designation employed within the Land Use Matrix to denote that a proposed land use is not prohibited or restricted by the Land Use Matrix within the specified zone.

Consistent: A determination made by the ALUC when a referral meets the conditions outlined in the ALUP.

Correctional Institution: A facility for confinement of offenders sentenced by a court.

Crop production: Growing of grains, field crops, vegetables, melons, fruits, tree nuts, flower fields, seed production, ornamental crops, tree and sod farms, together with associated crop preparation services and harvesting activities, including but not limited to mechanical soil preparation, irrigation system construction, spraying, crop processing, and sales in the field not involving a permanent structure.

Crosswind departure: A VFR departure procedure in which an aircraft exits the airport area by extension of the crosswind leg of the traffic pattern.

Crosswind leg: A segment of the standard airport traffic pattern which extends at right angles from the extended runway centerline at some distance from the departure end of the runway. The base leg extends from the upwind leg of the traffic pattern to the downwind leg and is flown in the direction away from runway centerline.

Course Deviation Indicator (CDI): An instrument commonly installed in aircraft and utilized for aerial navigation, which depicts the location, in the horizontal plane, of the aircraft relative the intended direction of flight.

Day-care facility for children: A facility, irrespective of size or number of clients, which provides nonmedical care and supervision to children under 18 years of age for periods of less than 24 hours per day.

Day-care facility, adult: A facility, irrespective of size or number of clients, which provides nonmedical care and supervision for periods of less than 24 hours per day to persons who are 18 years of age or older but who are in need of personal services, supervision, or assistance for sustaining the activities of daily living.

Decibel (dB): A unit for expressing the relative intensity of sounds on a scale of zero for the average least perceptible sound to about 130 for the average pain level.

Decision altitude (DA): The minimum altitude above mean sea level to which an aircraft operating according to a precision instrument approach may descend without visual contact with the airport or the airport environs.

Decision height (DH): The minimum vertical distance above the height of the intended landing zone to which an aircraft operating according to a precision instrument approach may descend without visual contact with the airport or the airport environs.

Departure Procedure (DP): See **instrument departure procedure**.

Descent slope: The angle, with respect to a horizontal plane, of the flight path of an aircraft descending from a higher altitude to a lower altitude (usually expressed in degrees or in feet per nautical mile). Also referred to as **angle of descent**.

Distance Measuring Equipment (DME): An apparatus, consisting of a ground-based radio transmitter and a specialized airborne receiver, which provides information regarding the slant-range distance of an aircraft from the ground-based facility. Also, by extension, any airborne maneuver, course, or flight path which is determined through the application of DME information.

Dormitory: A building used or intended for use as group quarters for members of a student body, military unit, or religious order and located on the site of a college, university, boarding school, convent, monastery, military camp, or other similar institutional use.

Downwind departure: A VFR departure procedure in which an aircraft exits the airport area by extension of the downwind leg of the traffic pattern.

Downwind leg: A segment of the standard airport traffic pattern which is parallel to the runway of intended landing, is usually between 1/2 and 1 1/2 miles lateral to the runway, and is flown in a direction opposite to the direction of intended landing. The downwind leg is, in most instances, is the initial leg of the traffic pattern for landing aircraft. The altitude of general aviation aircraft flying the base leg is usually between 1000 and 800 feet above ground level.

Drive-in theatres: Facilities for presentation of motion pictures for viewing from vehicles. May include subordinate eating places or play areas for children.

Electrical generating plant: Any facility engaged in the production of electric energy for sale. The electricity may be generated from oil, gas, coal, nuclear materials, water, wind, solar energy, bio-gas, municipal or agricultural waste, or geothermal energy. Does not include the generation of electrical energy by means of wind, water, solar panels or temporary generator if the primary use for such energy is on-site consumption.

Employee sleeping room: Sleeping quarters which are located on the site of a nonresidential business and are provided, without charge, by an employer for temporary or transient use by employees in the course of or in conjunction with the performance of required duties.

Enplaned passengers: The total number of revenue-producing passengers boarding aircraft, including originating, stopover, and transfer passengers, in scheduled and nonscheduled services.

Fairgrounds: A site where temporary public or commercial gatherings are held under the sponsorship and control of private individuals or government entities and at which gatherings entertainment, food, rides, games, crafts, and the like are offered for viewing or sale.

Farm equipment and supplies – sales: Land use primarily consisting of the sale, rental, or repair of agricultural machinery and equipment for use in the preparation and maintenance of the soil, the planting or harvesting of crops; also dairy and other livestock equipment. Includes agricultural machinery (except the sale of trailers, tractors, or other motorized self-propelled farm vehicles, which are included under "Auto, Mobilehome and Vehicle Dealers and Supplies"), dairy farm machinery and equipment, irrigation equipment, hay, grain, and feed sales, retail sales of prepackaged fertilizer and agricultural sprays. Sales may include the final assembly of farm machinery, implements, or equipment from component parts received from the manufacturer, but not the creation of such components from raw materials.

Farm support quarters: Residences, rooming or boarding houses, and mess halls for farm workers employed on and near land owned by the owner of the building site on which the quarters are located.

Fixed base operator (FBO): A provider of support services to users of an airport. Such services include fueling, hangaring, flight training, repair, maintenance, and other services.

Fraternity or sorority house: A residence for college or university students who are members of a social or educational association and where such organization holds meetings or gatherings.

General aviation: That portion of civil aviation which encompasses all facets of aviation except air carriers and air charters.

Glide slope: The vertical flight path flown by aircraft receiving and adhering to information from an apparatus which provides, by means of radio, light, or other signals, vertical guidance for approaching and landing at an airport.

Global positioning system (GPS): A navigational aid which determines the position, direction of flight, speed, and (to a limited extent) altitude of an aircraft by means of signals received from a constellation of earth-orbiting satellites.

Global positioning system (GPS) approach: A series of standardized, predetermined, and published aerial maneuvers which are based on navigational data received from earth-orbiting satellites and which enable aircraft to descend toward an airport with the intention of landing when meteorologic conditions are such that a safe approach cannot be made solely through the use of visual information. A typical GPS approach permits aircraft to descend to within 400-500 feet of the surface solely on the basis of satellite navigation aids.

Global positioning system (GPS) overlay: An FAA designation applied to certain instrument approach procedures originally designed to be executed by reference to ground-based navigational aids which authorizes pilots to perform the approach solely by reference to navigational information provided by earth-orbiting GPS satellites.

Grazing: The keeping of herbivorous animals at a density of less than two animals per acre.

Gross Area or Gross Acreage: For the purposes of this ALUP, the terms *gross area* and *gross acreage* will be considered interchangeable, and will be considered to indicate a measurement of the entire size of the site, parcel, intended use, or zone specified by a referral to the ALUC.

Gross Floor Area: For the purposes of this ALUP, the terms *gross floor area* is defined as the total number of square feet of floor area enclosed within the walls of a structure, including, for multi-story structures, the area on all floors. The gross floor area includes all common areas, such as hallways, entryways, atria, restrooms, and storage areas, as well as workspaces and dwelling units. Indoor areas designed exclusively for parking of vehicles owned by employees, residents, customers, or visitors are excluded, unless such vehicles are offerred for sale, lease, rental, or hire.

Hazardous, corrosive, or flammable chemicals: Refers to manufacturing land uses which entail the use of or result in the production of materials which are poisonous, infectious, caustic, corrosive, acidic, flammable, explosive, or radioactive to the extent that such materials could cause harm to persons who might be exposed to them.

Health services, ambulatory: Land use primarily for the furnishing of medical, mental health, surgical, and other personal health services on an outpatient basis. Includes offices of physicians, dentists, psychiatrists, osteopaths, opticians, chiropractors, and alternative or natural healers, as well as urgent care facilities and allied health services. Facilities offering inpatient care (hospitals, convalescent homes, skilled nursing facilities, etc.) are excluded, as are medical and dental laboratories.

High intensity land use: A land use which is characterized by a potential to attract dense concentrations of persons to a small or confined indoor or outdoor area, even for limited time periods, or which can attract above average concentrations of persons for longer periods of time, potentially aggravating the consequences of an aviation-related accident.

High occupancy residential use: Any dwelling, other than a residential care facility, in which the occupancy consists of six or more adults.

High voltage transmission lines: Any above ground facility for the long-distance transmission of electric power, including wires, towers, transformers, and insulators. Includes all structures and apparatus for transmission of power from a generating plant or distribution substation to distant communities or for transfer of power between communities. Wires and apparatus for distribution of power within a local community are excluded.

Homeless shelters: Any facility which regularly houses homeless people or persons needing protection from domestic violence on an overnight basis.

Home occupations: The gainful employment of the occupant of a dwelling, with such employment activity being subordinate to the residential use of the property, and there is no display, no stock in trade, and no commodity sold on the premises and no employees other than residents of the dwelling.

Homestays: A residential structure with a family or an individual in permanent residence where no more than two bedrooms (without cooking facilities) are rented for overnight transient lodging. Does not include provision of meals.

Hospital: A facility housing and offering a full range of acute and convalescent medical care to individuals who exhibit physical, emotional, or mental disability or illness.

Hotel/motel: Any structure or facility intended or suitable for short-term occupancy by persons as a temporary dwelling, with the exception of bed and breakfast facilities and homestays. Characteristicss which distinguish a hotel or motel from a bed and breakfast inn or homestay typically include: a central climate control system and absence of openable windows, and the absence

of extensive outdoor landscaping or lawns, walking paths, or outdoor dining/conversation areas. Examples of this type of land use include hotels, motels, youth hostels, pensiones, and temporary shelters.

Inconsistent: A determination made by the ALUC when a proposed local action does not meet the conditions outlined in the ALUP.

Instrument approach: A series of standardized, predetermined, and published aerial maneuvers which are based on navigational data received from ground-based navigational aids or satellites and which enable aircraft to descend toward an airport with the intention of landing when meteorologic conditions are such that a safe approach cannot be made solely through the use of visual information.

Instrument departure procedure (DP): A series of standardized, predetermined, and published aerial maneuvers which are based on navigational data received from ground-based navigational aids or satellites and which enable aircraft to depart from an airport when meteorologic conditions are such that a safe departure cannot be made solely through the use of visual information. Formerly known as a **standard instrument departure (SID)**.

Instrument flight rules (IFR): A set of FAA rules, regulations, and procedures which define flight operations under conditions which do not permit navigation by means of visual information alone. Also employed as an adjective to designate a flight plan which will enable an aircraft to operate under conditions which preclude navigation by means of visual information.

Instrument landing system (ILS): A precision instrument approach system which provides aircraft with both vertical (glideslope) and lateral guidance by means of radio signals transmitted from installations within the physical boundaries of the airport .

Instrument landing system (ILS) approach: A series of standardized, predetermined, and published aerial maneuvers which are based on vertical and lateral navigational data received from radio transmitters located within the physical boundaries of the airport and which enable aircraft to descend toward an airport with the intention of landing when meteorologic conditions are such that a safe approach cannot be made solely through the use of visual information. A typical ILS approach permits aircraft to descend to within 200 feet of the surface.

Instrument meteorologic conditions (IMC): Weather conditions specified in FAA regulations under which aircraft are not authorized to takeoff, land, or maneuver under visual flight rules and may operate only by reference to electronic aids to navigation. The visibility and cloud clearance requirements for IMC are determined by the airspace designation in which and aircraft is operating, by the aircraft's altitude above both sea level and ground level, and by whether the aircraft is operating in daylight or at night.

Libraries and museums: Permanent public or quasi-public facilities (generally of a noncommercial nature) devoted to the storage and preservation of printed materials or physical artifacts and to providing public access to such items for scholarly research or personal intellectual enrichment. Includes libraries, museums, art exhibitions, planetariums, aquariums, botanical gardens, arboretums, and historical sites and exhibits.

Localizer (LOC): An apparatus which provides, by means of radio signals from a transmitter located within the physical boundaries of an airport and a specialized airborne receiver, lateral course guidance for aircraft descending to land.

Localizer approach: A series of standardized, predetermined, and published aerial maneuvers which are based on lateral guidance information received by means of a localizer transmitter located within the physical boundaries of an airport and which enable aircraft to descend toward an airport with the intention of landing when meteorologic conditions are such that a safe approach cannot be made solely through the use of visual information. Localizer approaches do not provide vertical guidance, but localizers are often coupled with glide slope transmitters. A typical localizer approach permits aircraft to descend to within 400-500 feet of the surface solely on the basis of radio navigation aids.

Localizer-type directional array (LDA): A type of apparatus which provides, by means of radio signals from a transmitter located within the physical boundaries of an airport and a specialized airborne receiver, lateral course guidance for aircraft descending to land. The primary distinction between an LOC and an LDA is that the final approach course provided by the LDA is not aligned with the runway centerline. Glide slope information is never provided in conjunction with an LDA.

Localizer-type directional array (LDA) approach: A series of standardized, predetermined, and published aerial maneuvers which are based on lateral guidance information received by means of an LDA transmitter located within the physical boundaries of an airport and which enable aircraft to descend toward an airport with the intention of landing when meteorologic conditions are such that a safe approach cannot be made solely through the use of visual information.

Manufacturing: The production, fabrication, or assembly of any product, including, but not limited to apparel products, chemical products, concrete, gypsum, or plaster products, electrical equipment, electronic or scientific instruments, food and kindred products, furniture, fixtures, glass products, lumber, wood products, machinery, metal products, motor vehicles, paper products, paving materials, plastic products, rubber products, and printed materials. Excluded are processes and facilities which produce or utilize hazardous, corrosive, or flammable chemicals; refining or bulk storage of petroleum products; and electrical generating plants.

Membership organizations facility: Permanent headquarters and meeting facilities for organizations operating on a membership basis for the promotion of the interests of members. Includes facilities for business associations, professional organizations, labor unions, grange and farm centers, civic/social/fraternal organizations, political organizations, and other membership organizations. Does not include country clubs in association with golf courses, which are included in "Outdoor Sports and Recreation".

Minimum descent altitude (MDA): The minimum altitude above mean sea level to which an aircraft operating according to a non-precision instrument approach may descend without visual contact with the airport or the airport environs.

Minimum descent height (MDH): The minimum vertical distance above the height of the intended landing zone to which an aircraft operating according to a non-precision instrument approach may descend without visual contact with the airport or the airport environs.

Missed approach: An instrument approach which does not terminate in a landing. Usual reasons for a missed approach include failure to establish visual contact with the airport environs at the completion of an instrument approach, loss of course guidance, or instructions from air traffic control.

Missed approach course: A standardized, predetermined, and published flight path to be flown in the event of a missed approach.

Mobilehome park: Any area or tract of land where two or more mobilehome lots or spaces are leased or rented or held out for lease or rental to accommodate manufactured homes or mobilehomes for human habitation.

Mobilehome: A structure which is transportable in one or more sections and which is designed and equipped to contain not more than two dwelling units, to be used with or without a foundation system. Does not include recreational vehicles, commercial coaches, or factory-built housing.

Multifamily residential (land use): Any project, development, or other land use in which separate families and/or unrelated individuals occupy dwelling units which share a common wall or a common roof, or occupy a common legal parcel of real estate. Examples include duplexes, triplexes, quadriplexes, apartment buildings, condominiums, townhouses, and residential courts. In addition, institutional uses such as hospitals, nursing homes, board and care facilities, correctional institutions, and boarding schools, which entail the long-term occupancy of a single-structure by unrelated individuals will be considered to be multifamily residential in nature.

Nautical mile (nm): a measure of distance equal to 6076.115 feet (1852 meters).

Nightclub or discotheque: Any establishment engaged, as a primary activity, in providing entertainment (other than motion pictures, television, or sporting events) and/or dancing in conjunction with the sale of food and/or alcoholic or nonalcoholic beverages for on-site consumption.

Non-directional beacon (NDB): A radio beacon which transmits signals which do not contain encoded directional information, but which can be used for as a "homing" signal for aircraft tracking to or away from the transmitter.

Non-directional beacon (NDB) approach: A series of standardized, predetermined, and published aerial maneuvers which are based on lateral guidance information received by means of an NDB transmitter located either at or remote from an airport and which enable aircraft to descend with the intention of landing when meteorologic conditions are such that a safe approach cannot be made solely through the use of visual information.

Non-precision instrument approach procedure: An instrument approach procedure for which vertical guidance is not provided. Common types of non-precision instrument approach procedures include VOR, GPS, localizer, NDB, and LDA.

Nonresidential density: The maximum number of persons per acre of gross area that a nonresidential development is expected to attract during periods of use. If the area subject to a referred local action encompasses more than one Aviation Safety Area (as shown in Figure 3) nonresidential density must be calculated independently for each Safety Area. For purposes of this ALUP, nonresidential density will be determined according to the data provided in Appendix G.

Nursery specialties: Establishments primarily engaged in the production of ornamental plants and other nursery products, grown under cover or outdoors. Also includes establishments engaged in the sale of such products (e.g., wholesale and retail nurseries) and commercial scale greenhouses.

Nursing, residential, and personal care facilities: Residential and uses characterized by the provision of nursing or health-related care or assistance with tasks of daily living as a principal use. Includes skilled nursing facilities, extended care facilities, convalescent homes, rest homes, board and care facilities, assisted living facilities, children's homes, orphanages, and residential rehabilitation centers. Does not include halfway houses and self-help group homes, which are classified as "multifamily residential" uses.

Office: A business establishment or agency which renders personal, clerical, professional, or financial services as a primary use. Also, any development, regardless of structure size, which includes significant floor space suitable for use by personnel performing or providing personal, clerical, professional, or financial duties or any portion of a structure or site occupied or intended for occupation by personnel performing such duties.

Operation: A takeoff or landing

Organization house: A residential lodging facility operated by a membership organization (other than a fraternity or sorority) for its constituents, and not open to the general public.

Outdoor sports and recreation: Facilities for various sporting and recreational activities. Includes golf courses (with associated country clubs and on-site sales of golfing equipment as a "pro-shop" and/or rental of golf carts and equipment), golf driving ranges, miniature golf courses, skateboard parks, go-cart and miniature auto race tracks, health and athletic clubs with predominately outdoor facilities, tennis courts and tennis clubs, play lots, playgrounds, and athletic fields (nonprofessional). Also includes establishments which rent equipment for outdoor recreation, including ATVs and other unlicensed off-road vehicles, roller skates, surf and beach equipment. Does not include recreation and community centers, which are included in the "public assembly" land use category. Does not include swimming pools and water slides, which are included in the "swimming pools - public" land use category.

Petroleum extraction: Production of crude petroleum or natural gas or recovery of oil from oil sands or shales. On-site processing is permitted only to the extent necessary to permit extraction or to conform extracted crude oil to pipeline requirements.

Petroleum refining and bulk storage: The manufacture, production, or storage of products or substances from crude oil or any derivative of crude oil. Includes oil or gas processing facilities, liquefied natural gas facilities, manufacture of petroleum coke and briquettes, and tank farms.

Pipeline, above ground: Any facility engaged in the transportation of water, crude or refined oil, natural gas, liquefied natural gas, or other commodities by pipelines which lie above the surface of the earth. Also includes above-ground facilities (such as pump stations, bulk stations, surge tanks, and storage tanks) which are associated with buried pipelines.

Precision instrument approach procedure: An instrument approach procedure for which vertical guidance is provided. ILS is the only common type of precision instrument approach currently in use. In the near future, certain GPS approaches will be upgraded to provide vertical guidance information, as well.

Prohibited: A determination made by the ALUC when a proposed local action does not meet the criteria set forth in the Land Use Matrix.

Public assembly and entertainment: Facilities for public gatherings and meetings and for group entertainment. Includes public, semipublic, and private auditoriums, amphitheaters, exhibition and convention halls, civic theatres, meeting halls, facilities for live theatrical presentations, lectures, or concerts, motion picture theatres, recreation and community centers, and meeting halls for rent.

Public building: A structures which is utilized by government or social agencies for the provision of services to the public. Examples of such uses would include post offices, police or fire stations, and offices and agencies of local, state, or federal government.

Public safety facility: A fire station, other fire prevention and fire fighting facility, or police or sheriff substation or headquarters (including interim incarceration facilities).

Public utility facility: A fixed-base structure or facility which serves as a junction point for transferring utility services from one transmission system to another or to local distribution and service systems. Such uses include electrical substations and switching stations; telephone switching facilities; natural gas regulation and distribution stations; public water system wells, treatment plants, and storage; and community wastewater treatment plants, settling ponds, and disposal fields.

Rate of climb: The vertical speed or rate of change in altitude of an aircraft ascending from a lower altitude to a higher altitude (usually expressed in feet per minute).

Rate of descent: The vertical speed or rate of change in altitude of an aircraft descending from a higher altitude to a lower altitude (usually expressed in feet per minute).

Recreational vehicle park: Any area or tract of land where two or more lots or spaces are leased, rented, or otherwise provided, or held out for lease or rental, to accommodated recreational vehicles which are occupied, intermittently or continuously, by humans. May include accessory food and beverage retail sales if such sales are clearly incidental and intended to serve RV park patrons only.

Reserve Space: Land which meets the design criteria specified in Table 8 of this ALUP and which is restricted *in perpetuity* by deed restriction, easement, or other suitable legal instrument to uses characterized by low occupancy levels and substantially free of structures.

Residential density: The maximum number of dwelling units per acre of gross area of land area specified by or allowable under the provisions of a referral to the ALUC. If the area subject to a referred local action encompasses more than one Aviation Safety Area (as shown in Figure 3) residential density must be calculated independently for each Safety Area.

Restaurant: Any establishment which sells food (other than commercially packaged snack foods) for on-site consumption or which sells prepared foods intended for off-site consumption without further cooking or preparation. Included are conventional restaurants, food takeout establishments, "fast food" restaurants, delicatessens, sandwich shops, soda fountains, and ice cream parlors. Establishments which transport food to other locations for consumption and which are not frequented by members of the public (e.g., catering services, pizza delivery services with no public seating areas) are excluded.

Retail sales – fuels, lubricants, propane, etc.: The public sale of gasoline, aviation gasoline, jet fuel, oils or other lubricants, fuel oil, butane, propane, and/or liquefied natural gas, bottled or in bulk, as a principal use.

Rural recreation and picnicking: Facilities for non-intensive outdoor group activities which do not include sleeping or overnight occupancy. Included are outdoor archery, skeet, rifle, and pistol ranges; outdoor hiking trails and picnic areas; outdoor hot springs or hot tub facilities; and hunting and fishing areas. Not included are dude and guest ranches (classified as "Bed and Breakfast Facilities"), group or organized camps, recreational camps, and RV parks.

Rural residential (land use): As employed in the Land Use Matrix and other sections of the ALUP, the term "rural residential" indicates use of land for dwellings in such manner that no more than one primary dwelling unit is developed per five acres of property.

Schools – college and university: Accredited junior colleges, colleges, universities, and graduate schools which grant associates arts degrees, certificates, or undergraduate or graduate degrees and which require for admission a high school degree or equivalent general academic qualifications.

Schools – preschool to secondary: Facilities providing public, private, sectarian and military educational programs serving students from infancy through grade 12. Boarding schools are included.

Schools – specialized training and education: Business, secretarial, and vocational schools which offer instruction leading to a degree or certificate in trade and commercial areas. Also included are non-degree programs such as music, drama, dance, and language schools; driver's education courses; seminaries and other establishments exclusively engaged in training for religious ministries, and establishments offering educational courses by mail. Facilities, institutions, and conference centers that offer non-degree programs in personal growth and development (e.g., physical fitness, environmental awareness, financial strategies, arts, communications, management, and interpersonal relationships) are not included, but are classified under "Public Assembly and Entertainment".

Single-family residential (land use): The use of land for dwellings in such manner only one residential building is permitted on each legal parcel and each building is occupied by no more than one family. Includes factory-built housing, but does not include duplexes, triplexes, quadriplexes, apartment buildings, condominiums, townhouses, residential courts, or secondary dwellings.

Secondary dwelling unit: A permanent dwelling unit which is established on the same legal parcel as an existing dwelling unit and is accessory to such primary dwelling.

Service station: An establishment primarily engaged in the sale of gasoline to motorists. Such business may also offer vehicle services incidental to fuel sales, such as mechanical repair, lubrication, oil change, and tune up, as well as towing services and trailer rentals. In addition, may include a small convenience store. In the event that such business includes a restaurant, coffee shop, delicatessen, fast food establishment or food takeout, it will be inconsistent with the ALUP in those areas where restaurants are inconsistent.

Specialized animal facilities: Intensive animal care or keeping establishments including hog ranches, dairies, dairy and beef cattle feedlots, livestock auctions, sales buildings and sales lot facilities, chicken, turkey, and other poultry ranches, riding academies, equestrian exhibit facilities, veterinary medical facilities and service, animal hospitals, kennels, and zoos.

Sports assembly: Establishments for competitive sports activities, either commercial, publicly-sponsored or school-related, which include facilities or amenities for spectators. Includes stadiums, colosseums, arenas, field houses, race tracks (vehicle or animal), and drag strips.

Standard instrument departure (SID): See **instrument departure procedure**.

Standard Terminal Arrival Route (STAR): A series of standardized, predetermined, and published routes, procedures and/or maneuvers which enable aircraft to transition safely from the en route environment to the terminal environment. A STAR does not culminate in a landing, but terminates at a point from which an instrument approach to landing may be initiated.

Straight-out departure: A VFR departure procedure in which an aircraft exits the airport area along the extended centerline of the departure runway by extension of the upwind leg of the traffic pattern.

Swimming pool – public: An establishment, either commercial, publicly sponsored, or school related, which provide facilities (indoor or outdoor) for participation in water sports such as swimming, diving, and/or water polo. Includes swimming pools which are open to the public or to members of clubs, organizations or student bodies of schools, water slides, and aquatic parks. Does not include swimming pools which are adjacent to and restricted to use by occupants of private single family or multifamily residences or transient lodgings.

Tactical air navigation facility (TACAN): A ground-based radio navigational aid which transmits encoded signals that enable aircraft equipped with appropriate receivers to determine both bearing and distance with respect to the facility. The information with respect to bearing is generally available only to military aircraft, while information regarding distance is usable by both military and civil aircraft. TACAN facilities are frequently co-located with VORs.

Temporary construction trailer park: A site, whether improved or unimproved, provided by the developer of a construction project to afford short-term employees the opportunity to utilize mobilehomes or recreational vehicles for housing during project construction.

Temporary dwelling: A mobilehome or recreational vehicle which is occupied as a dwelling unit for a limited period of time following the issuance of a building permit for a permanent residence and during the construction of such permanent residence.

Temporary event: Use of a structure or land for an activity over a specified, limited period of time where the site is not to be permanently altered by grading or construction. Includes art shows, rodeos, religious revivals, tent camps, outdoor festivals and concerts.

Transit terminal: A passenger station for a vehicular and/or rail mass transit system. Includes busses, taxis, subways, and railway systems. A facility for the maintenance and service of vehicles operated in the transit system is excluded, unless such facility also functions as a passenger station.

Truck stop: An establishment primarily engaged in the sale of fuels to commercial trucks in transit. Such business may also offer vehicle services incidental to fuel sales, such as mechanical repair, lubrication, oil change, and tune up, as well as towing services and trailer rentals. In addition, may include such driver services as a small convenience store, a restaurant or coffee shop, showers, and lockers.

Upwind leg: A segment of the airport traffic pattern which is coincident with the centerline of the departure runway. The upwind leg is the initial leg of the traffic pattern for departing aircraft and extends from takeoff to the crosswind leg or departure from the airport area.

Vehicle and freight terminal: An establishment providing services incidental to transportation, including freight forwarding services, transportation arrangement services, packing, crating, inspection and weighing services, freight terminal facilities, trucking facilities, transfer and storage, and bulk mail handling. Includes rail, air, and motor freight transportation. Storage of toxic, corrosive, or radioactive material is excluded.

Very high frequency omnidirectional range (VOR): A ground-based radio navigational aid which transmits encoded signals that enable aircraft equipped with appropriate receivers to determine their bearing with respect to the facility.

Very high frequency omnidirectional range with distance-measuring equipment (VOR-DME): A ground-based radio navigational aid which combines a VOR transmitter with a DME facility and which transmits encoded signals that enable aircraft equipped with appropriate receivers to determine both relative bearing and distance with respect to the facility.

Very high frequency omnidirectional range with tactical air navigation (VORTAC): A ground-based radio navigational aid which combines a VOR transmitter with a TACAN facility and which transmits encoded signals that enable both military and civilian aircraft equipped with appropriate receivers to determine both bearing and distance with respect to the facility.

Visual approach: A procedure whereby an aircraft which is operating in VMC according to an IFR flight plan and under control of an air traffic control facility may proceed to the airport of destination and land using visual navigational cues.

Visual approach slope indicator (VASI): A navigational aid installed adjacent to an airport runway which provides, by means of colored light beams, vertical course guidance to aircraft approaching to land on that runway. The usual descent slope provided by VASI installations is 3°.

Visual flight rules (VFR): A set of FAA rules, regulations, and procedures which define flight operations under conditions which allow navigation by means of visual information, pilotage, and dead reckoning alone. Also employed as an adjective to designate a flight plan which will enable an aircraft to operate under conditions which permit navigation by means of visual information alone. For takeoff and landing, operation under visual flight rules requires 3 statute miles visibility and a cloud ceiling of at least 1000 feet. A special VFR clearance may be obtained from ATC if visibility is 1 statute mile or greater and the pilot can maneuver to remain clear of clouds in the vicinity.

Visual meteorologic conditions (VMC): Weather conditions specified in FAA regulations under which aircraft are authorized to takeoff, land, and maneuver under visual flight rules and by means of only visual navigational information. Electronic aids to navigation may be utilized by aircraft operating in VMC, but are not required. The visibility and cloud clearance requirements for VMC are determined by the airspace designation in which and aircraft is operating, by the aircraft's altitude above both sea level and ground level, and by whether the aircraft is operating in daylight or at night.

VOR approach: A series of standardized, predetermined, and published aerial maneuvers which are based on lateral guidance information received by means of a VOR transmitter and which enable aircraft to descend toward an airport with the intention of landing when meteorologic conditions are such that a safe approach cannot be made solely through the use of visual information.

The VOR facility may be located within the physical boundaries of the destination airport or at some distance from the airport. VOR approaches do not provide vertical guidance. A typical VOR approach permits aircraft to descend to within 400-500 feet of the surface solely on the basis of radio navigation aids.

Warehousing: The storage of commercial goods of any nature for later distribution to wholesalers and retailers. Also includes warehouse, storage, or mini-storage facilities offered for rent or lease to the general public. Does not include facilities where the primary purpose of storage is for wholesaling and distribution, nor terminal facilities for handling freight.

Wholesaling and distribution: The sale of merchandise to retailers, to industrial, commercial, institutional, farm, or professional business users, or to other wholesalers.

SECTION 9

ABBREVIATIONS

AGL ..... Above ground level
ALS ..... Approach lighting system
ALUC ..... Airport Land Use Commission
ALUP ..... Airport Land Use Plan
ARTCC ..... Air route traffic control center
ATCT ..... Airport traffic control tower
CDI ..... Course deviation indicator
CNEL ..... Community noise equivalent level
dB ..... Decibel
DA ..... Decision altitude
DH ..... Decision height
DME ..... Distance measuring equipment
DP ..... Instrument departure procedure
EPA ..... U.S. Environmental Protection Agency
FAA ..... Federal Aviation Administration
FAR ..... Federal aviation regulation
FBO ..... Fixed base operator
GPS ..... Global positioning system
GS ..... Glide slope
IFR ..... Instrument flight rules
ILS ..... Instrument landing system
IMC ..... Instrument meteorologic conditions
LDA ..... Localizer-type directional array
LOC ..... Localizer
MDA ..... Minimum descent altitude
MDH ..... Minimum descent height
NDB ..... Non-directional beacon
NRDC ..... Natural Resources Defense Council
nm ..... Nautical mile
PUC ..... Public Utilities Code
SID ..... Standard instrument departure
STAR ..... Standard terminal arrival route
TACAN ..... Tactical air navigation facility
VASI ..... Visual approach slope indicator
VHF ..... Very high frequency
VMC ..... Visual meteorologic conditions
VOR ..... VHF omnidirectional range
VOR-DME .. VHF omnidirectional range with distance measuring equipment
VORTAC ..... VHF omnidirectional range with tactical air navigation equipment
WHO ..... World Health Organization

APPENDICES

APPENDIX A

AIRPORT INFORMATION

AIRPORT INFORMATION

General Description

The San Luis Obispo County Regional Airport/McChesney Field is located approximately three and one-half miles south of the city of San Luis Obispo on 320 acres of land within an unincorporated area of the County. The FAA designation for the airport is SBP, and the ICAO designation is KSBP.

Air traffic control services are provided by a federal contract control tower which operates from 7 am to 8 pm local time. Radar services are provided to arriving and departing aircraft through the Los Angeles Air Traffic Control Center, but local radar services are not available.

Two runways are available for use at the San Luis Obispo County Regional Airport. Runway 11-29 is currently 5,300 feet in length and 150 feet in width. The rated capacity of this runway is 65,000 lbs. for aircraft equipped with landing gear in the dual wheel configuration. Runway 11-29 is equipped with High Intensity Runway Lights (HIRL) for night operations and the adjacent taxiways are also lighted. Lighting is pilot-controlled during periods when the control tower is not in operation. Visual Approach Slope Indicators (VASI) are available for both Runway 11 and 29. Runway 11 is also equipped with a Medium Intensity Approach Lighting System with Runway Alignment Indicator Lights (MALSR-RAILS).

Runway 7-25 is 3,259 feet in length and 100 feet in width. The rated capacity is 12,500 pounds and the runway is unlighted.

A precision (Instrument Landing System or ILS) instrument approach is currently operational for Runway 11, with a circle to land procedure for Runway 29. In addition, three non-precision instrument approaches to the airport are also available: the VOR or GPS-A approach from the Morro Bay VOR, the RNAV (GPS) Runway 11 approach, and the RNAV (GPS) Runway 29 approach. Each of these non-precision instrument approaches includes a published circle-to-land procedure. Five instrument departure procedures are published for aircraft departing the airport: the Avila Three Departure, the Crepe Three Departure, the Wynrr One Departure, the obstacle departure procedure for Runway 11, and the obstacle departure procedure for Runway 29.

Commercial passenger service is currently provided at the San Luis Obispo County Regional Airport by three air carriers – Skywest/United Express, American Eagle, and America West. Commercial cargo service is provided by AmeriFlight, by Federal Express, and by United Parcel Service. Flight training is provided by Air San Luis, PCF Aviation, and Helipro.

Groundside facilities at the airport include a 10,500 square-foot passenger terminal with its attendant parking facilities, baggage areas, and ramps, a full service restaurant, an airline storage/maintenance facility, a fire station, approximately 156 general aviation hangars and 152 tie-down positions, three flight schools (including one which provides helicopter training), two fuel vendors, and six repair stations. A self-service fuel island is also available.

Environmental Factors

- **Climate** – The microclimate of the City of San Luis Obispo is notably temperate. Average monthly temperatures range from a low of 41.7°F. in January to a high of 78.7°F. in September. Rainfall, averaging 23 inches per year, tends to be concentrated in the winter months. The absence of extreme climatic conditions tends to encourage residents of the area to open windows during most of the year and encourages outdoor activities. These factors tend to aggravate airport noise incompatibility issues, particularly with respect to residential land uses.
- **Prevailing Winds** – Local airflow patterns are generally associated with a moderate to strong onshore wind from the northwest. This condition favors the disproportionate use of Runway 29 for both arrivals and departures. The situation is aggravated by the relatively short length of the runways at SBP, which usually renders landing or taking off with a tail wind unsafe. The heavy utilization of Runway 29 concentrates air traffic in flight patterns associated with that runway and increases noise and overflight impacts in areas beneath these paths to a greater degree than would be expected if runway use were more evenly distributed.
- **Topography** – The San Luis Obispo County Regional Airport is located in a valley and is, with the exception of the Los Osos Valley extending to the northwest, largely surrounded by higher terrain associated with the Santa Lucia Mountain Range. Mountainous terrain lies beneath the standard 45° entries to both the right and left downwind approaches to Runway 29 and beneath the right and left crosswind departures from that runway. Several small volcanic intrusion mountains (Terrace Hill, Orcutt Knob, Mine Hill, Islay Hill, and an additional unnamed formation) lie beneath the right traffic pattern for Runway 29. Elevated hilly topography is also found below the "straight-in" approach to Runway 29 and adjacent to the ILS approach to Runway 11. Because of the elevated terrain, the altitude above ground level of aircraft approaching and departing SBP at pattern altitude (1,200 feet above sea level) is much lower than would be the case if the land surrounding the airport were flat. This situation magnifies safety, noise, and overflight concerns with respect to operations at the airport.

Airfield Activities

- **Flight Training** – The relatively high level of flight training at the San Luis Obispo County Regional Airport results in a higher-than-expected amount of low-level, repetitive aircraft operations associated with "touch-and-go" maneuvers. Noise and overflight impacts are greater with this type of activity than with simple departures and arrivals.

Socio-Economic Considerations

- **Airport Environment** – The San Luis Obispo County Regional Airport is surrounded by an area which is essentially quiet and rural in nature. Exceptions to this characterization include commercial uses along State Highway 227 (Broad Street) to the north, suburban residential development northeast of the airport on the east side of Hwy. 227, light industrial uses in the immediate vicinity of the airport boundary and to the along Tank Farm Road, and a circumscribed area of residential use south of the airport (Rolling Hills/Country Club Estates). In contrast, large areas of land to the northwest, west, south, and east of the airport remain open and are utilized primarily for grazing and agriculture. In these areas, the effects of aircraft noise and overflight may be expected to be magnified by the lack of significant background noise.
- **Airport Access** – Transportation access to the San Luis Obispo County Regional Airport is currently marginal at best. Automobile access from the north and west and from the city of San Luis Obispo is by

way of State Highway 227 (Broad Street). This requires negotiating a circuitous course through the city center of San Luis Obispo. Highway 227 also narrows to two lanes at Tank Farm Road (approximately three-quarters of a mile north of the airport entrance.) Access from the south is by way of Tank Farm Road, a two-lane road which is not directly accessible from US Highway 101 and which is often congested with trucks and other commercial vehicles. Although the airport is served by bus service from the city of San Luis Obispo, there is no rail or subway service. Increased traffic congestion resulting from inappropriate development in the airport area, therefore, does entail a significant potential to decrease the value of the airport as a component of the public transportation system if ground access is impaired.

- **Encroachment Pressures** – The area surrounding the San Luis Obispo County Regional Airport is facing increasing pressure for development of open areas, particularly for residential uses. Some of the factors which may be responsible for the increasing pressure for encroachment include:
  - Relatively strong economic and population growth in the County
  - Topography of the area, limiting sites available for residential development
  - State mandated requirements for "fair-share" and low income housing
  - Vigorous annexation policy on the part of the city of San Luis Obispo
- **Local response to airport-related impacts** – The local community has shown, primarily as documented in public comments directed toward the Airport Master Plan and aircraft noise complaints registered with the airport administration, that it is relatively intolerant of aviation impacts and is unusually sensitive to noise and overflight incompatibilities. It is appropriate that the Airport Land Use Plan reflect the sentiments of the local community in this regard.

Airport Planning Status

- **Airport Master Plan** – The Airport Master Plan for the San Luis Obispo County Regional Airport was prepared by Coffman Associates, Inc. in association with Tartaglia Engineering and Dr. Lee McPheters and was adopted by the Board of Supervisors of the County of San Luis Obispo in December of 1998.
- **Airport Master Plan Environmental Assessment/Environmental Impact Report** – The Airport Master Plan EA/EIR was adopted by the Board of Supervisors of the County of San Luis Obispo on December 1,1998. The airport noise study associated with the EA/EIR was prepared by Brown-Buntin Associates, based on data collected in March of 1998. Noise contours published as a result of this study, however, are not useful for airport land use planning, however, because:
  - Projections are made only through the year 2015 – this does not meet the requirement of the State Airport Land Use Planning Handbook that data used in the preparation of an airport land use plan be projected at least 20 years beyond the date of the plan's preparation.
  - Noise contours are not adjusted for possible faster-than-anticipated airport growth or projected to maximum runway capacity as recommended by the State Airport Land Use Planning Handbook.
  - Noise contours are plotted only for the 60, 65, and 70 dB CNEL levels. The 55 dB CNEL contour, recommended as the maximum allowable noise level for residential land uses by the State Airport Land Use Planning Handbook, is not illustrated.
- **Airport Noise Contours** – The airport noise study completed in April of 2001 by Brown-Buntin Associates is adopted as the current basis for application of ALUP policies because:
  - Projections are made of CNEL contours at maximum runway capacity.
  - 50, 55, and 60 dB CNEL contours are illustrated.

Airport Layout Plan

The Airport Layout Plan (Sheets 1 through 8) of the Airport Master Plan (December, 1998) is adopted as the Airport Layout Plan for the Airport Land Use Plan.

Anticipated Airport Expansion

The Airport Master Plan and its associated EA/EIR define a number of planned expansions, improvements, and upgrades for the San Luis Obispo County Regional Airport. Since the adoption of the Master Plan in 1998, a number of the projects have, in fact, been implemented. These include:

Airfield Considerations

- Increase length of Runway 11-29 from 4,799 feet to 5,300 feet
- Add taxiway connecting West Side hangars with departure end of Runway 29
- Add additional taxiway exits to Runway 11-29

Terminal Considerations

- Renovate and expand existing terminal building

Access Considerations

- Expand terminal parking facilities

General Aviation Considerations

- Expand and relocate general aviation hangars and tie-down sites (in progress)
- Develop self-service fuel facility

Improvements that are specified in the Airport Master Plan, but which have not yet been accomplished are:

Airfield Considerations

- Install omnidirectional approach lighting system (ODALS) on Runway 29
- Update visual approach slope indicators (VASIs) on Runway 11-29
- Provide designated site for maintenance run-ups
- Develop precision GPS-WAAS or GPS-LAAS approach for Runway 11

Terminal Considerations

- Replace existing terminal building with 35,000 sq. ft. facility

Access Considerations

- Evaluate future vehicular approaches to airport and signage
- Segregate terminal and non-terminal traffic into airport area
- Improve terminal curb traffic management

General Aviation Considerations

- Develop site for fuel farm

An additional improvement which is being reviewed by airport management at the time of this amendment is the lengthening of Runway 11-29 by a distance of 700 feet to the northwest, to provide a total runway length of 6000 feet.

RESERVED FOR AIRPORT LAYOUT PLAN

RESERVED FOR AIRPORT LAYOUT PLAN

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APPENDIX C

TECHNICAL DATA RELEVANT TO DETERMINATION OF AIRPORT SAFETY

a. For purposes of this Airport Land Use Plan, aircraft overflight is considered to be a significant safety hazard in:

   i. Where overflight is a frequent or regular occurrence – those areas which are located within 1/2 nautical mile of a flight path or paths which are utilized by 10% or greater (as specified in the Environmental Assessment/Environmental Impact Report of the Airport Master Plan (November, 1998) of aircraft arriving, departing from, or operating in closed traffic at the San Luis Obispo County Regional Airport. These flight paths include (in order of frequency of use):
      - left closed traffic, Runway 29
      - straight-in arrival, Runway 29
      - left downwind departure, Runway 29
      - right closed traffic, Runway 11
      - right 45° arrival, Runway 29 (standard entry into traffic pattern)
      - left downwind arrival, Runway 29 (extended downwind entry into traffic pattern)
      - straight out departure, Runway 29
      - right crosswind departure, Runway 29
      - right downwind arrival, Runway 11 (extended downwind entry into traffic pattern)
      - right downwind departure, Runway 29
      - left crosswind departure, Runway 29
      - left 45° arrival, Runway 29 (standard entry into traffic pattern)

   It should be noted that the flight tracks depicted for approach, departure, and closed traffic pattern in Environmental Assessment/Environmental Impact Report of the Airport Master Plan (November, 1998) are highly schematic and do not indicate the geographic areas over which aircraft operations may be expected.

   ii. Where overflight occurs during periods of reduced visibility – those areas which are located within 1/2 nautical mile of the positive approach control area, circle-to-land flight path, or missed approach course of any published or planned instrument approach to or instrument departure from the San Luis Obispo County Regional Airport. Instrument procedures to be considered include, but are not limited to, the following:
      - ILS approach, Runway 11 (with circle-to-land procedure)
      - VOR or GPS-A approach (with circle-to-land procedure)
      - RNAV (GPS) approach, Runway 11 (with circle-to-land procedure)
      - RNAV (GPS) approach, Runway 29 (with circle-to-land procedure)
      - CREPE.3 instrument departure procedure
      - AVILA.3 instrument departure procedure
      - WYNNR.1 instrument departure procedure
      - obstacle departure procedure, Runway 11
      - obstacle departure procedure, Runway 29

b. For purposes of this Airport Land Use Plan, the Airport Land Use, aircraft approaching the San Luis Obispo County Regional Airport will be assumed to descend at an angle of 3±0.7° or to be at the minimum altitude specified by a published instrument approach procedure, whichever shall be lower. The specified descent angle of 3±0.7 is the standard slope for both ILS glideslope and VASI visual descent procedures.

c. For purposes this Airport Land Use Plan, aircraft departing the San Luis Obispo County Regional Airport will be assumed to climb at a rate of 200 feet per nautical mile, the minimum climb gradient specified for IFR operations by U. S. Standards for Terminal Instrument Procedures (TERPS).

d. For purposes of this Airport Land Use Plan, the gliding distance of an aircraft that has lost engine power will be assumed to be 1 nautical mile per 1000 feet of altitude above ground level.

e. For purposes of this Airport Land Use Plan, the term *published instrument approach flight path* is defined as the airspace within which reliable course guidance is provided to aircraft descending to land at or departing from the San Luis Obispo County Regional Airport under established or planned instrument procedures. The width of the published instrument approach flight path is determined by the type of navigational aid which provides course guidance for the instrument approach or instrument departure procedure, as follows (all angles have their apices at the relevant radio aid to navigation):

    i. ILS or localizer approach or departure procedure based on localizer guidance – the published instrument approach flight path extends 2.5° on either side of the centerline of the approach or departure procedure.

    ii. VOR approach, missed approach procedure, or departure procedure based on VOR course guidance – the published instrument approach flight path extends 10° on either side of the centerline of the approach procedure.

    iii. GPS approach, missed approach procedure, or departure procedure based on GPS course guidance – for GPS approach procedures, at distances beyond 2 nautical miles from the final approach fix, the published instrument approach flight path extends 1 nautical mile (6076 feet) on either side of the centerline of the approach procedure; at distances within 2 nautical miles of the final approach fix, the published instrument approach flight path extends 0.3 nautical mile (1823 feet) on either side of the centerline of the approach procedure; for GPS missed approach procedures or instrument departures, the published instrument approach flight path extends 1 nautical mile (6076 feet) on either side of the published course for the instrument procedure.

4

APPENDIX D

INSTRUMENT APPROACHES AND DEPARTURE PROCEDURES

Sheet 1 Instrument Approach:
ILS Approach, Runway 11 ..... Page 90

Sheet 2 Instrument Approach:
VOR or GPS-A Approach ..... Page 91

Sheet 3 Instrument Approach:
GPS Approach, Rwy 11 ..... Page 92

Sheet 4 Instrument Approach:
GPS Approach, Rwy 29 ..... Page 93

Sheet 5 Instrument Departure Procedure:
CREPE THREE Departure ..... Page 94

Sheet 6 Instrument Departure Procedure:
WYNNR ONE Departure ..... Page 95

Sheet 7 Instrument Departure Procedure:
AVILA THREE Departure ..... Page 96

Sheet 8 Obstacle Departure Procedures:
Runways 11 and 29 ..... Page 97

KSBP 29 MAR 02 **SAN LUIS OBISPO, CALIF**
SAN LUIS OBISPO CO-McCHESNEY (11-1) **ILS Rwy 11**

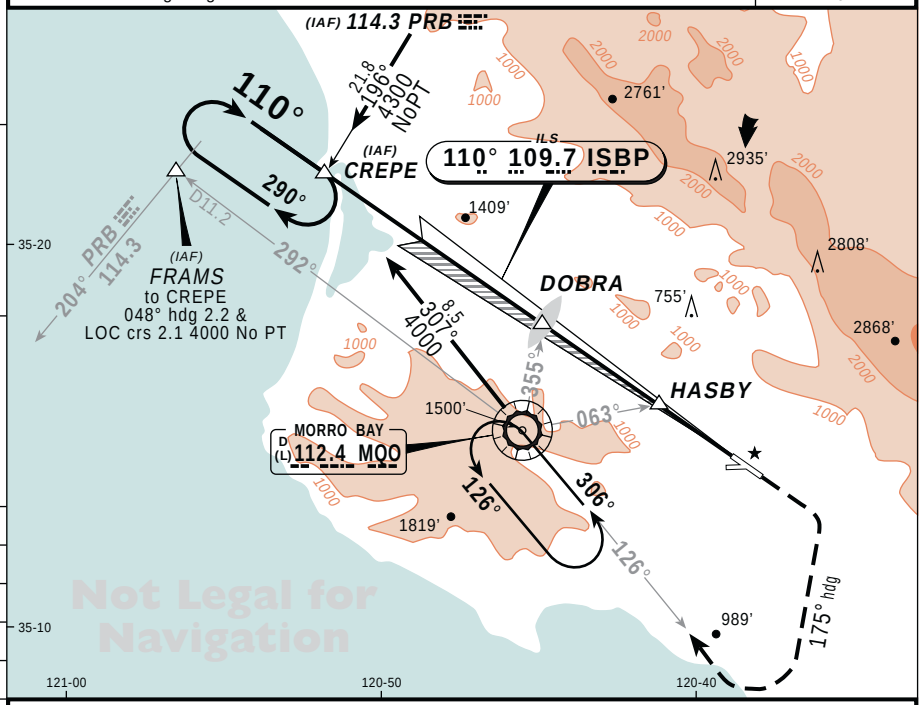
★ATIS	LOS ANGELES Center	★SAN LUIS Tower	★Ground
120.6	119.05	CTAF 124.0	121.6

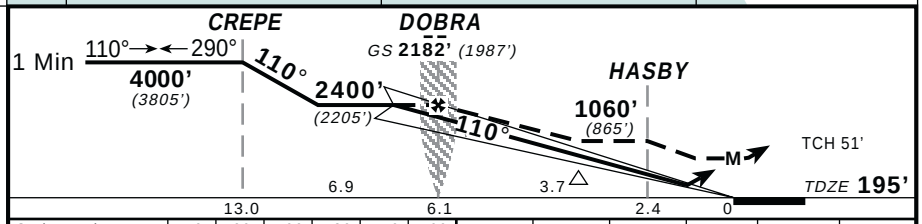
LOC	Final Apch Crs	GS	ILS DA(H)	Apt Elev 209'
ISBP 109.7	110°	DOBRA 2182' (1987')	395' (200')	TDZE 195'

MISSED APCH: Climb to 1200', then climbing RIGHT turn to 3000' via heading 175° and inbound on MQO VOR R-126 to MQO VOR and hold.

Pilot controlled lighting 124.0

MSA MQO VOR: 110° 4500', 200° 5100', 290° 3500', 020° 2900'





Gnd speed-Kts	70	90	100	120	140	160
GS 3.00°	377	485	539	647	755	862
DOBRA to MAP 6.1	5:14	4:04	3:40	3:03	2:37	2:17

MALSR VASI | 1200' | 3000' RT via 175° hdg and MQO 112.4 R-126 | MQO 112.4

STRAIGHT-IN LANDING RWY 11

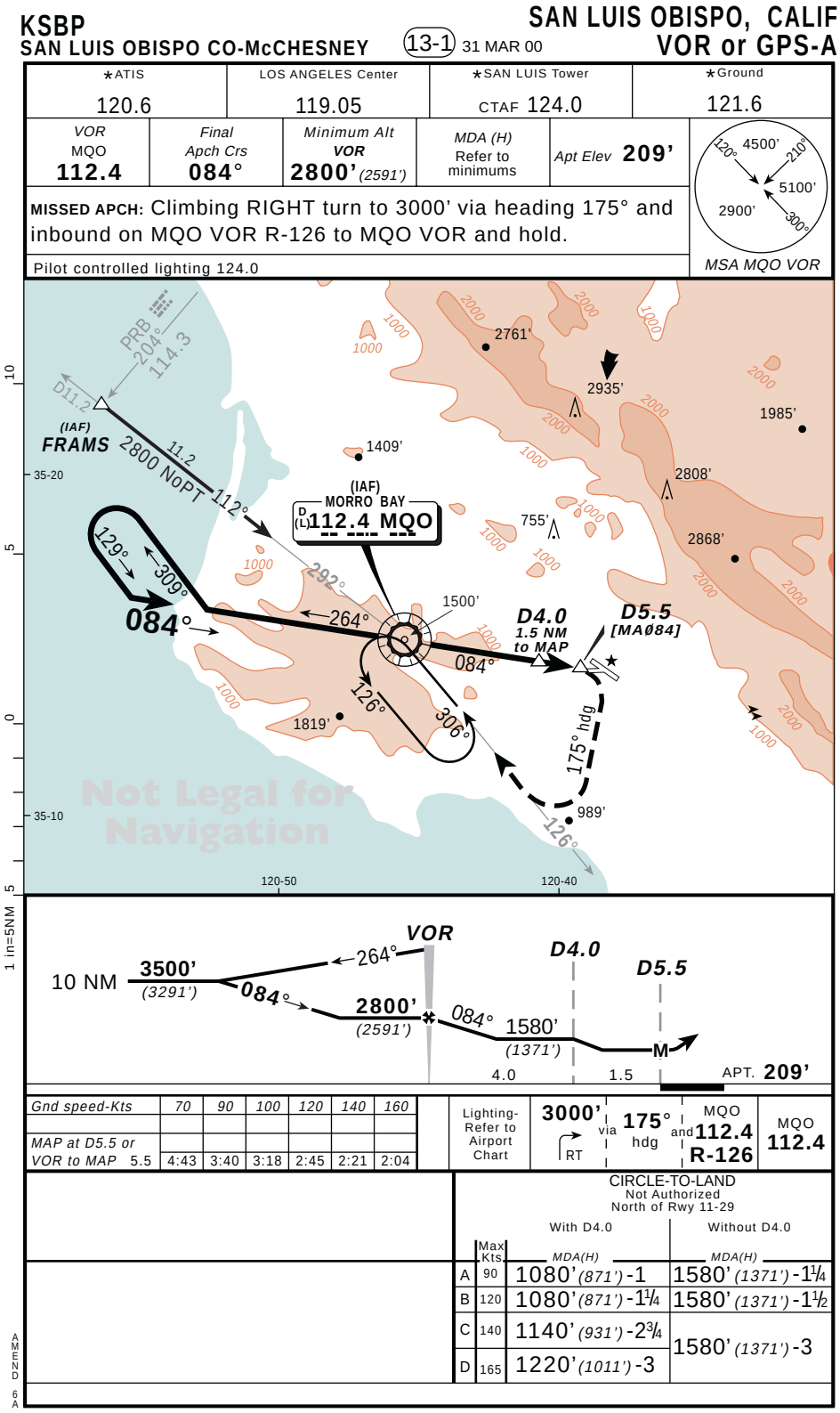
	ILS DA(H) 395' (200')		LOC (GS out) MDA(H) 640' (445') With Hasby			MDA(H) 1060' (865') Without Hasby		
	FULL	RAIL or ALS out		RAIL out	ALS out		RAIL out	ALS out
A	1/2	3/4	1/2	3/4	1	1/2	3/4	1
B						3/4	1 1/4	
C			3/4	1 1/4		2	2 1/2	
D			1	1 1/2		2 1/4	2 3/4	

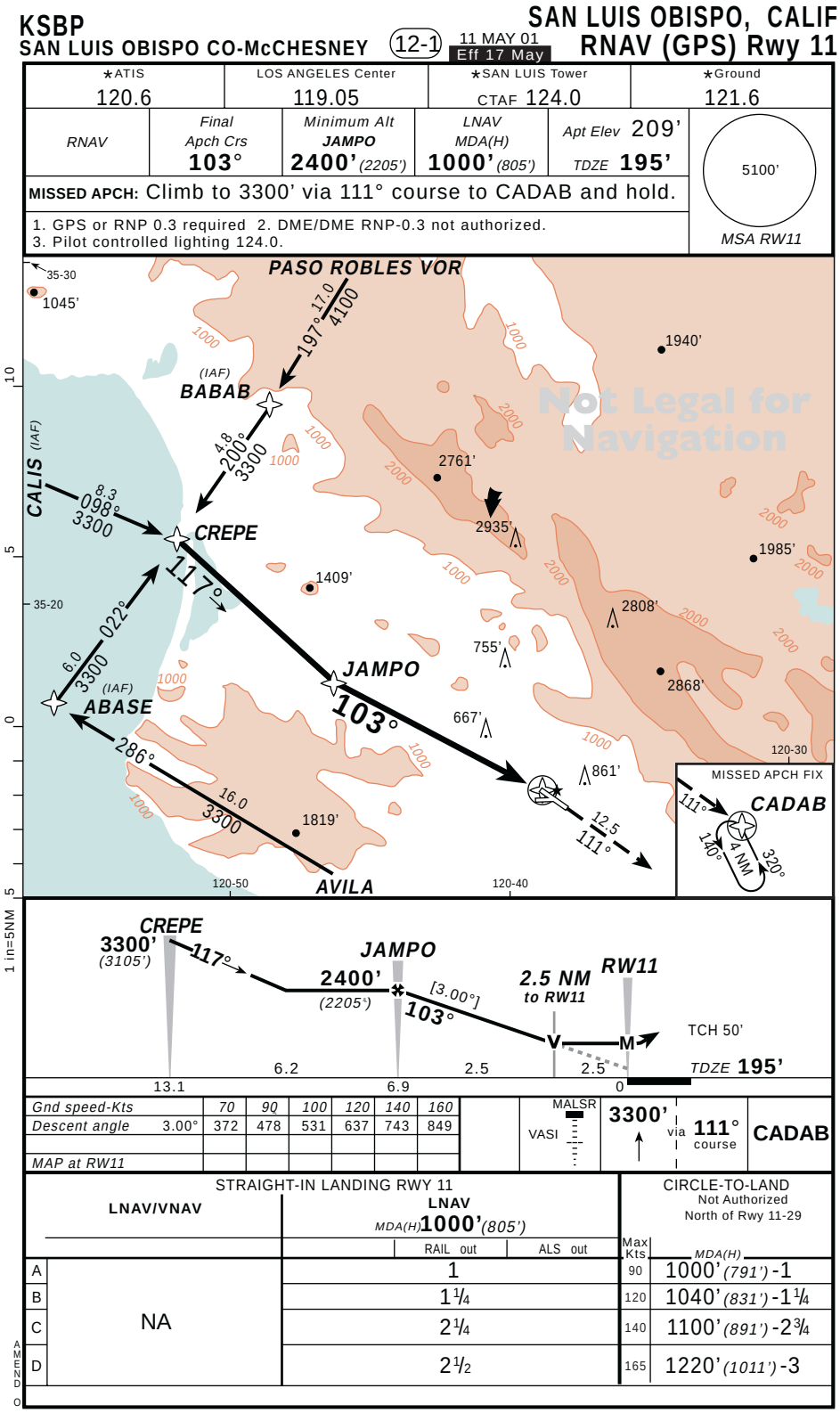
CIRCLE-TO-LAND
Not Authorized North of Runway 11-29

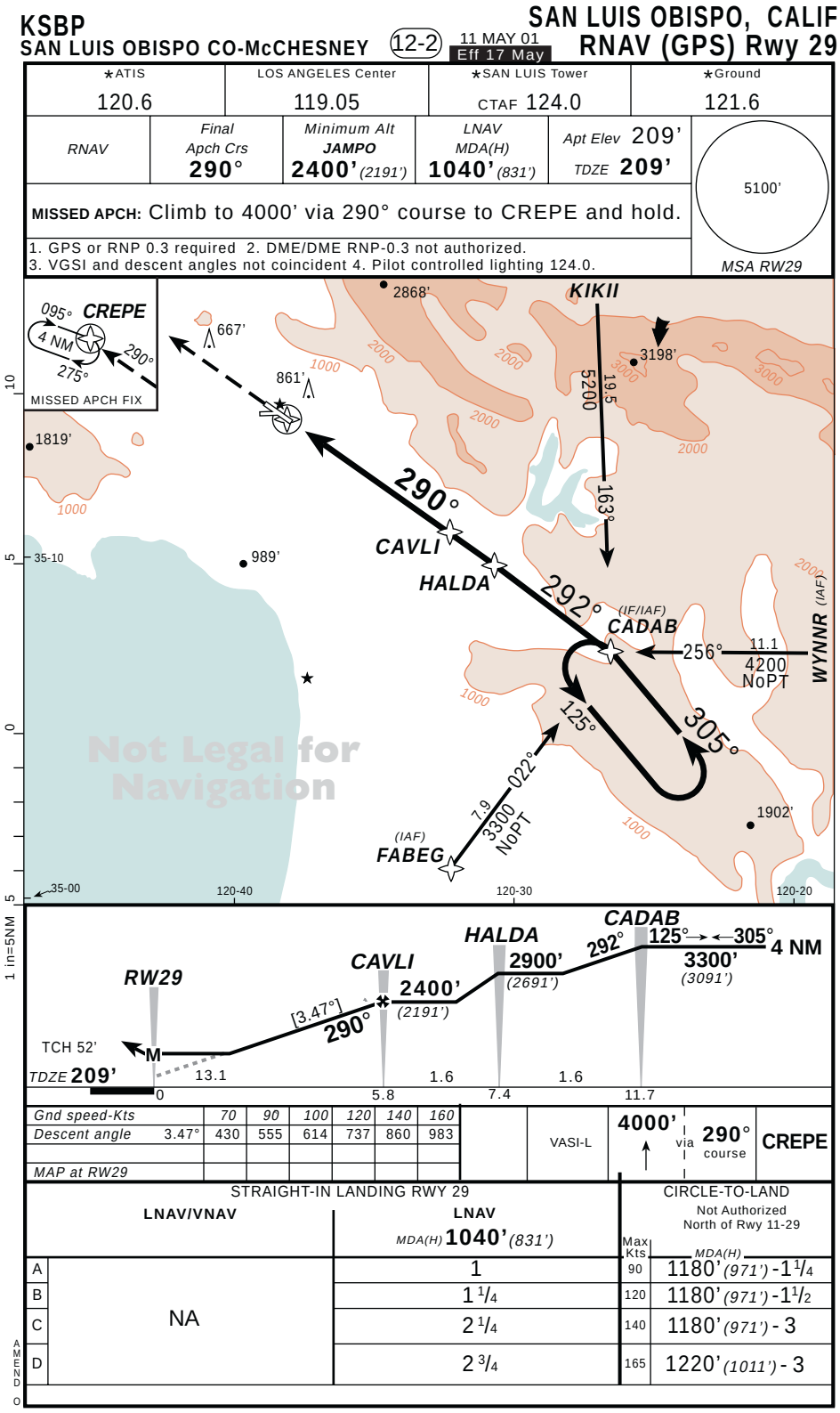
Max Kts.	With Hasby MDA(H)	Without Hasby MDA(H)
90	820' (611') -1	1060' (851') -1
120	880' (671') -1	1060' (851') -1 1/4
140	1140' (931') -2 3/4	1140' (931') -2 3/4
165	1240' (1031') -3	1240' (1031') -3

AMEND OA

APPENDIX D SHEET 2: INSTRUMENT PROCEDURES: VOR OR GPS-A APPROACH




KSBP
SAN LUIS OBISPO CO-McCHESNEY
12-1
11 MAY 01
Eff 17 May
SAN LUIS OBISPO, CALIF
RNAV (GPS) Rwy 11
ATIS 120.6
LOS ANGELES Center 119.05
SAN LUIS Tower CTAF 124.0
Ground 121.6
RNAV
Final Apch Crs 103°
Minimum Alt JAMPO 2400' (2205')
LNAV MDA(H) 1000' (805')
Apt Elev 209'
TDZE 195'
5100'
MSA RW11
MISSED APCH: Climb to 3300' via 111° course to CADAB and hold.
1. GPS or RNP 0.3 required 2. DME/DME RNP-0.3 not authorized.
3. Pilot controlled lighting 124.0.
PASO ROBLES VOR
197° 17.0 4100
(IAF) BABAB
4.8 200° 3300
CALIS (IAF)
8.3 098° 3300
CREPE
117°
JAMPO
103°
6.0 022° 3300
(IAF) ABASE
286°
16.0 3300
AVILA
12.5 111°
MISSED APCH FIX
CADAB
111°
140°
4 NM
320°
Not Legal for Navigation
1 in=5NM
CREPE 3300' (3105')
117°
JAMPO 2400' (2205')
[3.00°]
103°
2.5 NM to RW11
RW11
TCH 50'
TDZE 195'
13.1
6.2
6.9
2.5
2.5
0
Gnd speed-Kts 70 90 100 120 140 160
Descent angle 3.00° 372 478 531 637 743 849
MAP at RW11
MALSR
VASI
3300' via 111° course
CADAB
STRAIGHT-IN LANDING RWY 11
LNAV/VNAV
LNAV MDA(H) 1000' (805')
RAIL out
ALS out
A 1
B 1¼
C 2¼
D 2½
NA
CIRCLE-TO-LAND
Not Authorized North of Rwy 11-29
Max Kts
MDA(H)
90 1000' (791') -1
120 1040' (831') -1¼
140 1100' (891') -2¾
165 1220' (1011') -3


KSBP
SAN LUIS OBISPO CO-McCHESNEY
12-2
11 MAY 01
Eff 17 May
SAN LUIS OBISPO, CALIF
RNAV (GPS) Rwy 29
ATIS 120.6
LOS ANGELES Center 119.05
SAN LUIS Tower CTAF 124.0
Ground 121.6
RNAV
Final Apch Crs 290°
Minimum Alt JAMPO 2400' (2191')
LNAV MDA(H) 1040' (831')
Apt Elev 209'
TDZE 209'
5100'
MSA RW29
MISSED APCH: Climb to 4000' via 290° course to CREPE and hold.
1. GPS or RNP 0.3 required 2. DME/DME RNP-0.3 not authorized.
3. VGSI and descent angles not coincident 4. Pilot controlled lighting 124.0.
CREPE
095°
4 NM
290°
275°
MISSED APCH FIX
KIKII
2868'
3198'
667'
861'
1819'
989'
1902'
5200
19.5
163°
290°
CAVLI
HALDA
292°
(IF/IAF)
CADAB
256°
11.1
4200
NoPT
WYNNR (IAF)
125°
305°
022°
7.9
3300
NoPT
(IAF)
FABEG
Not Legal for Navigation
35-10
35-00
120-40
120-30
120-20
1 in=5NM
RW29
CAVLI
2400'
(2191')
HALDA
2900'
(2691')
CADAB
292°
125°
305°
3300'
(3091')
4 NM
3.47°
290°
TCH 52'
TDZE 209'
13.1
1.6
1.6
0
5.8
7.4
11.7
Gnd speed-Kts 70 90 100 120 140 160
Descent angle 3.47° 430 555 614 737 860 983
MAP at RW29
VASI-L
4000' via 290° course
CREPE
STRAIGHT-IN LANDING RWY 29
LNAV/VNAV
LNAV MDA(H) 1040' (831')
CIRCLE-TO-LAND
Not Authorized North of Rwy 11-29
Max Kts
MDA(H)
A NA 1 90 1180' (971') -1 1/4
B 1 1/4 120 1180' (971') -1 1/2
C 2 1/4 140 1180' (971') - 3
D 2 3/4 165 1220' (1011') - 3
AMEND 0

DEPARTURE (DP)

28 APR 00 (10-3A)

LOS ANGELES Center **119.05**

SAN LUIS OBISPO, CALIF

SAN LUIS OBISPO CO-McCHESNEY

CREPE THREE DEPARTURE (CREPE3.CREPE) (PILOT NAV)

(RWY 29)

This SID requires take-off minimums of 1300-2 or standard and all transitions require a minimum climb gradient of 275' per NM to 1700'.

Gnd speed-Kts	75	100	150	200	250	300
275' per NM	344	458	688	917	1146	1375

During VFR conditions watch for opposing traffic on localizer course.

TAKE-OFF

Rwy 29: Climb via San Luis Obispo localizer ISBP west course to Crepe Int, thence via (transition) or (assigned route).

TRANSITIONS

FRAMS (CREPE3.FRAMS): From Crepe Int to Frams Int: Via San Luis Obispo localizer ISBP west course and PRB R-204.

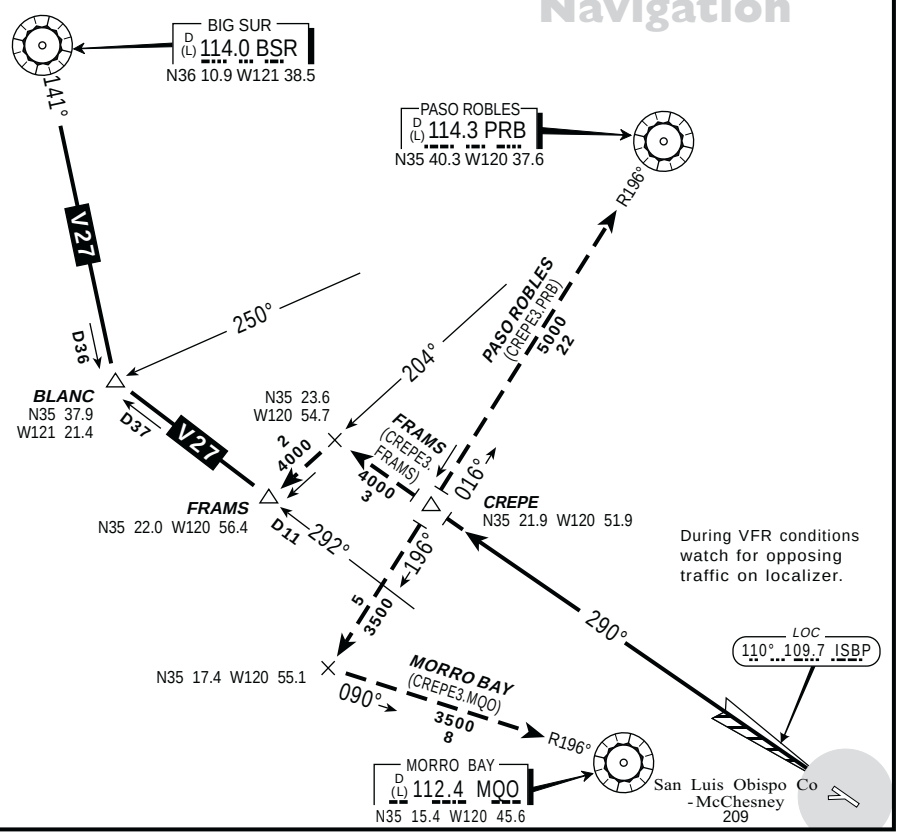
MORRO BAY (CREPE3.MQO): From Crepe Int to MQO VOR: Via PRB R-196 and MQO R-270.

PASO ROBLES (CREPE3.PRB): From Crepe Int to PRB VOR: Via PRB R-196.

Direct distance from San Luis Obispo Co-McChesney Field to: Crepe Int **13NM**

NOT TO SCALE

Not Legal for Navigation



DEPARTURE (DP)

28 APR 00 (10-3B)

LOS ANGELES CENTER **119.05**

SAN LUIS OBISPO, CALIF

SAN LUIS OBISPO CO-McCHESNEY

WYNNR ONE DEPARTURE (WYNNR1.WYNNR)

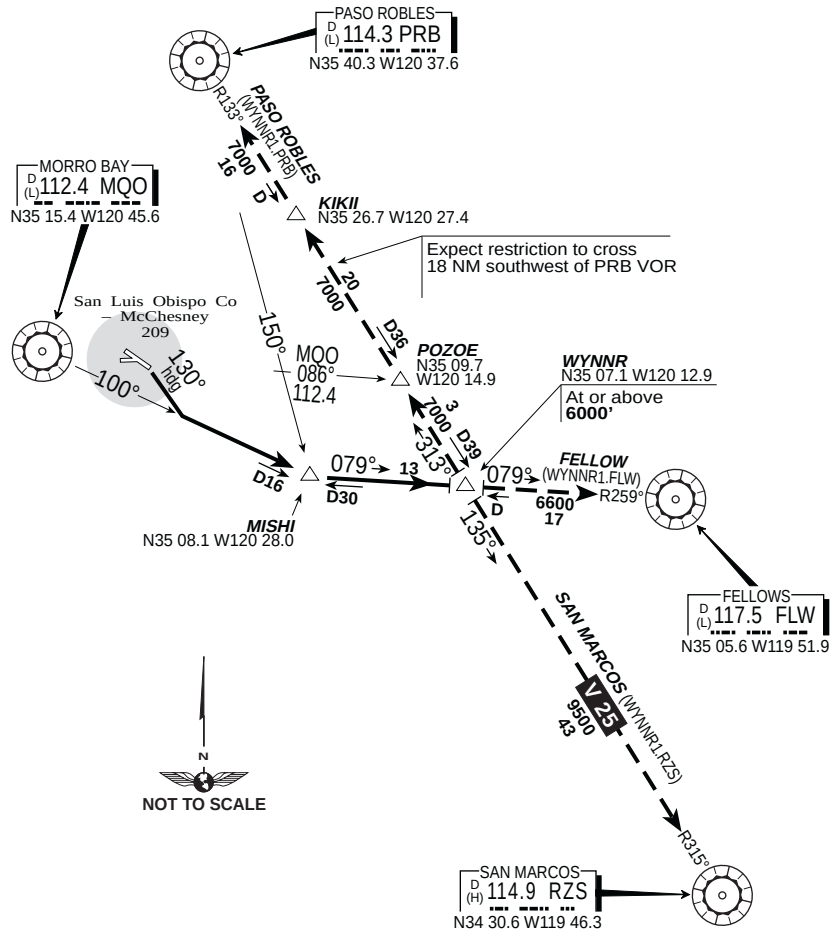
This SID requires a minimum climb gradient of 320' per NM to 3000'.

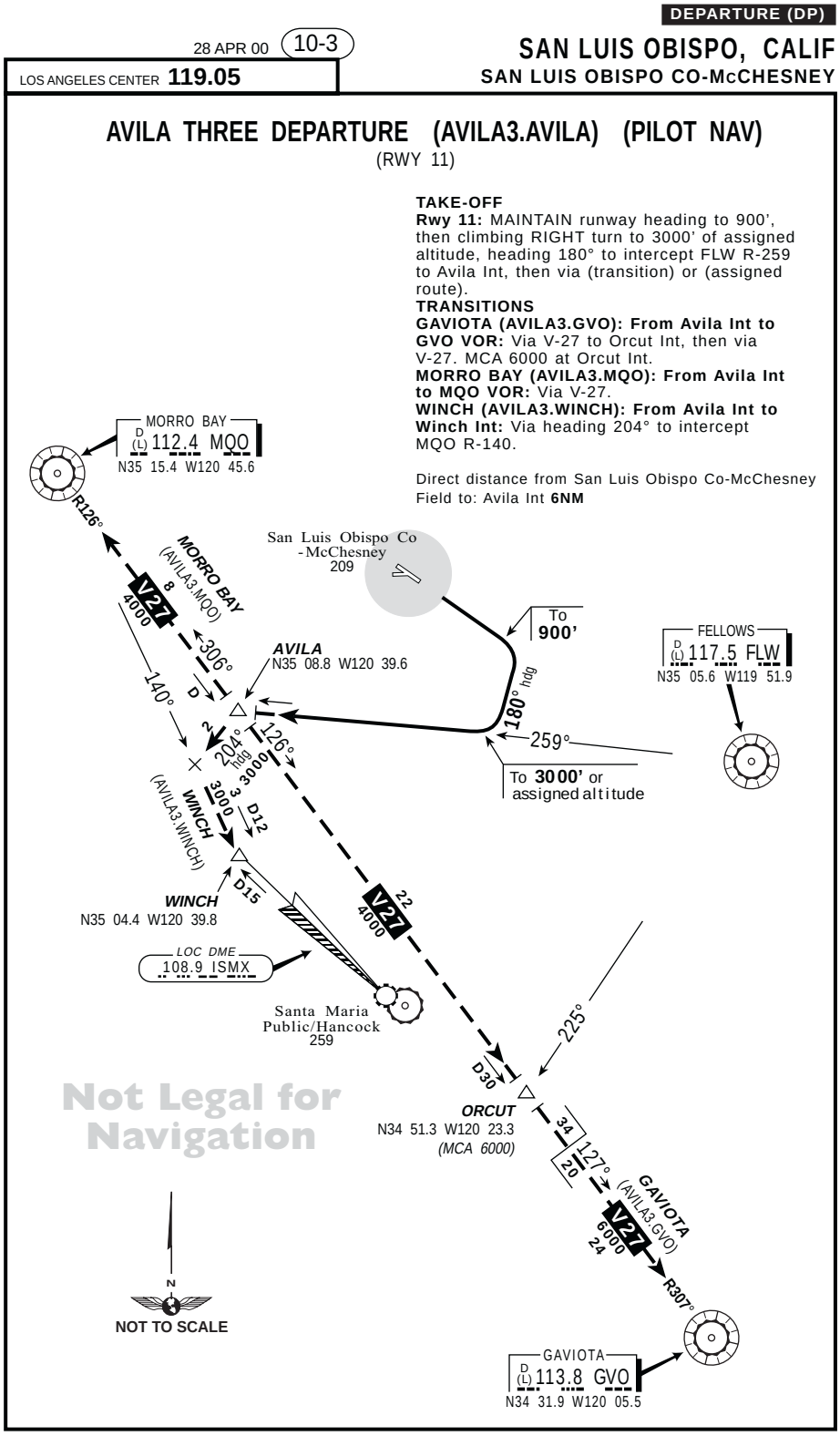
Gnd speed-Kts	75	100	150	200	250	300
320' per NM	400	533	800	1067	1333	1600

TAKE-OFF
Rwy 11: Turn RIGHT 130° heading to intercept and proceed via MQO R-100 to Mishi Int, then via FLW R-259 to Wynnr Int, cross Wynnr Int at or above 6000', thence via (transition or assigned route).

TRANSITIONS
FELLOW (WYNNR1.FLW): From Wynnr Int to FLW VOR: Via FLW R-259 to FLW VOR.
PASO ROBLES (WYNNR1.PRB): From Wynnr Int to PRB VOR: Via PRB R-133 to PRB VOR.
SAN MARCOS (WYNNR1.RZS): From Wynnr Int to RZS VOR: Via RZS R-315 to RZS VOR.

Direct distance from San Luis Obispo Co-McChesney Field to: Mishi Int **11NM**




DEPARTURE (DP)
28 APR 00
10-3
SAN LUIS OBISPO, CALIF
SAN LUIS OBISPO CO-McCHESNEY
LOS ANGELES CENTER 119.05
AVILA THREE DEPARTURE (AVILA3.AVILA) (PILOT NAV)
(RWY 11)
TAKE-OFF
Rwy 11: MAINTAIN runway heading to 900', then climbing RIGHT turn to 3000' of assigned altitude, heading 180° to intercept FLW R-259 to Avila Int, then via (transition) or (assigned route).
TRANSITIONS
GAVIOTA (AVILA3.GVO): From Avila Int to GVO VOR: Via V-27 to Orcut Int, then via V-27. MCA 6000 at Orcut Int.
MORRO BAY (AVILA3.MQO): From Avila Int to MQO VOR: Via V-27.
WINCH (AVILA3.WINCH): From Avila Int to Winch Int: Via heading 204° to intercept MQO R-140.
Direct distance from San Luis Obispo Co-McChesney Field to: Avila Int 6NM
MORRO BAY
D (L) 112.4 MQO
N35 15.4 W120 45.6
R126°
MORRO BAY (AVILA3.MQO)
V27
8
4000
306°
140°
D
AVILA
N35 08.8 W120 39.6
San Luis Obispo Co -McChesney 209
To 900'
180° hdg
259°
To 3000' or assigned altitude
FELLOWS
D (L) 117.5 FLW
N35 05.6 W119 51.9
204° hdg
126°
3000
WINCH (AVILA3.WINCH)
D12
D15
WINCH
N35 04.4 W120 39.8
LOC DME
108.9 ISMX
Santa Maria Public/Hancock 259
22
4000
225°
D30
ORCUT
N34 51.3 W120 23.3
(MCA 6000)
34
20
127°
GAVIOTA (AVILA3.GVO)
6000
24
R307°
Not Legal for Navigation
N
NOT TO SCALE
GAVIOTA
D (L) 113.8 GVO
N34 31.9 W120 05.5

APPENDIX D SHEET 8: INSTRUMENT PROCEDURES: OBSTACLE DEPARTURE PROCEDURES, RUNWAYS 11 AND 29

DEPARTURE (DP)

KSBP
Apt Elev **209'**
083.0°/5.8 From MQO 112.4

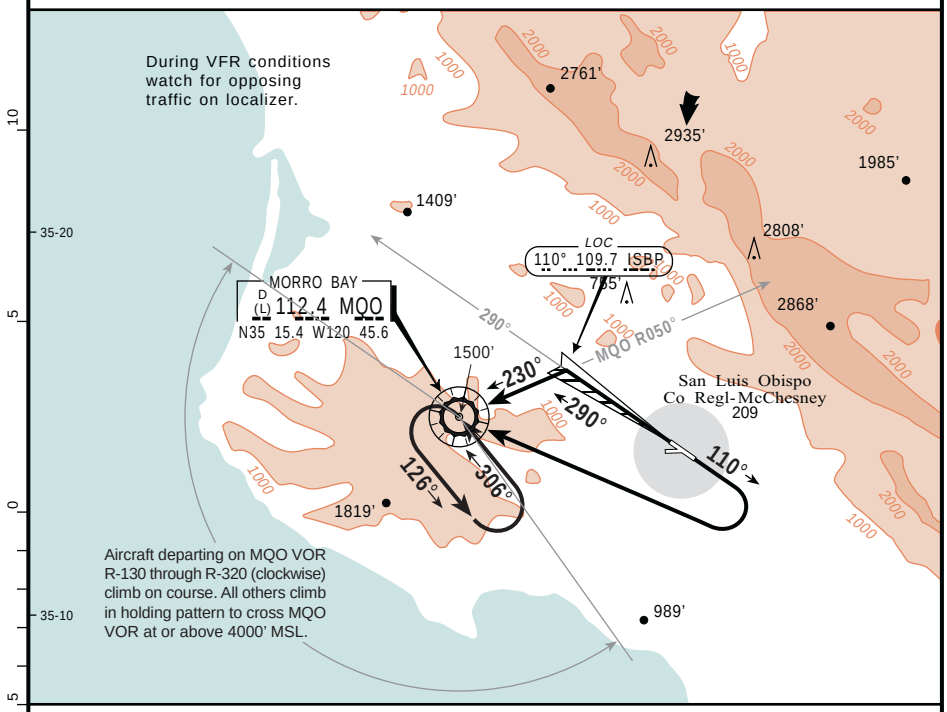
29 MAR 02 (NA)

SAN LUIS OBISPO, CALIF
SAN LUIS OBISPO CO-McCHESNEY

★ATIS	★SAN LUIS Ground	★Tower	UNICOM 122.95	LOS ANGELES Center
120.6	121.6	CTAF124.0		119.05

OBSTACLE DEPARTURE PROCEDURES (PILOT NAV)

(RWY 29 and RWY 11)



Not Legal for Navigation

TAKE-OFF & OBSTACLE DEPARTURE PROCEDURE								FOR FILING AS ALTERNATE		
	Rwy 29			Rwy 11			Rwy 7-25	Authorized Only When Twr Operating or With Approved Weather Service		
	With minimum climb of 390'/NM to 1700'		Other	With minimum climb of 320'/NM to 2300'		Other		ILS Rwy 11 LOC Rwy 11		VOR-A
	Adequate Vis Ref	STD		Adequate Vis Ref	STD					
1 & 2 Eng	¼	1	1200-2	¼	1	1800-2	NA	A	900-2	1400-3
3 & 4 Eng		½			½			B		
								C	1000-2 3/4	
								D	1100-3	

OBSTACLE DP: Rwy 11. climb runway heading to 900' then climbing right turn direct MQO VOR. Rwy 29. climb via runway heading and MQO VOR R-050 to MQO VOR. All aircraft departing on MQO VOR R-130 clockwise R-320 climb on course. All others continue climbing in MQO VOR holding pattern (hold southeast, left turns, 306° inbound) to cross MQO VOR at or above 4000'.

APPENDIX E

PUBLIC UTILITIES CODE, SECTIONS 21670 – 21679.5

State of California
PUBLIC UTILITIES CODE

Division 9
Chapter 4. Airports and Navigational Facilities
Article 3.5. Airport Land Use Commission
Section 21670-21679.5

21670.

(a) The Legislature hereby finds and declares that:

(1) It is in the public interest to provide for the orderly development of each public use airport in this state and the area surrounding these airports so as to promote the overall goals and objectives of the California airport noise standards adopted pursuant to Section 21669 and to prevent the creation of new noise and safety problems.

(2) It is the purpose of this article to protect public health, safety, and welfare by ensuring the orderly expansion of airports and the adoption of land use measures that minimize the public's exposure to excessive noise and safety hazards within areas around public airports to the extent that these areas are not already devoted to incompatible uses.

(b) In order to achieve the purposes of this article, every county in which there is located an airport which is served by a scheduled airline shall establish an airport land use commission. Every county, in which there is located an airport which is not served by a scheduled airline, but is operated for the benefit of the general public, shall establish an airport land use commission, except that the board of supervisors of the county may, after consultation with the appropriate airport operators and affected local entities and after a public hearing, adopt a resolution finding that there are no noise, public safety, or land use issues affecting any airport in the county which require the creation of a commission and declaring the county exempt from that requirement. The board shall, in this event, transmit a copy of the resolution to the Director of Transportation. For purposes of this section, "commission" means an airport land use commission. Each commission shall consist of seven members to be selected as follows:

(1) Two representing the cities in the county, appointed by a city selection committee comprised of the mayors of all the cities within that county, except that if there are any cities contiguous or adjacent to the qualifying airport, at least one representative shall be appointed therefrom. If there are no cities within a county, the number of representatives provided for by paragraphs (2) and (3) shall each be increased by one.

(2) Two representing the county, appointed by the board of supervisors.

(3) Two having expertise in aviation, appointed by a selection committee comprised of the managers of all of the public airports within that county.

(4) One representing the general public, appointed by the other six members of the commission.

(c) Public officers, whether elected or appointed, may be appointed and serve as members of the commission during their terms of public office.

(d) Each member shall promptly appoint a single proxy to represent him or her in commission affairs and to vote on all matters when the member is not in attendance. The proxy shall be designated in a signed written instrument which shall be kept on file at the commission offices, and the proxy shall serve at the

pleasure of the appointing member. A vacancy in the office of proxy shall be filled promptly by appointment of a new proxy.

(e) A person having an "expertise in aviation" means a person who, by way of education, training, business, experience, vocation, or avocation has acquired and possesses particular knowledge of, and familiarity with, the function, operation, and role of airports, or is an elected official of a local agency which owns or operates an airport.

21670.1.

(a) Notwithstanding any other provision of this article, if the board of supervisors and the city selection committee of mayors in the county each makes a determination by a majority vote that proper land use planning can be accomplished through the actions of an appropriately designated body, then the body so designated shall assume the planning responsibilities of an airport land use commission as provided for in this article, and a commission need not be formed in that county.

(b) A body designated pursuant to subdivision (a) which does not include among its membership at least two members having an expertise in aviation, as defined in subdivision (e) of Section 21670, shall, when acting in the capacity of an airport land use commission, be augmented so that that body, as augmented, will have at least two members having that expertise. The commission shall be constituted pursuant to this section on and after March 1, 1988.

(c)

(1) Notwithstanding subdivisions (a) and (b), and subdivision (b) of Section 21670, if the board of supervisors of a county and each affected city in that county each makes a determination that proper land use planning pursuant to this article can be accomplished pursuant to this subdivision, then a commission need not be formed in that county.

(2) If the board of supervisors of a county and each affected city makes a determination that proper land use planning may be accomplished and a commission is not formed pursuant to paragraph (1) of this subdivision, that county and the appropriate affected cities having jurisdiction over an airport, subject to the review and approval by the Division of Aeronautics of the department, shall do all of the following:

(A) Adopt processes for the preparation, adoption, and amendment of the comprehensive airport land use plan for each airport that is served by a scheduled airline or operated for the benefit of the general public.

(B) Adopt processes for the notification of the general public, landowners, interested groups, and other public agencies regarding the preparation, adoption, and amendment of the comprehensive airport land use plans.

(C) Adopt processes for the mediation of disputes arising from the preparation, adoption, and amendment of the comprehensive airport land use plans.

(D) Adopt processes for the amendment of general and specific plans to be consistent with the comprehensive airport land use plans.

(E) Designate the agency that shall be responsible of the preparation, adoption, and amendment of each comprehensive airport land use plan.

(3) The Division of Aeronautics of the department shall review the processes adopted pursuant to paragraph (2), and shall approve the processes if the division determines that the processes are consistent with the procedure required by this article and will do all of the following:

(A) Result in the preparation, adoption, and implementation of plans within a reasonable amount of time.

(B) Rely on the height, use, noise, safety, and density criteria that are compatible with airport operations, as established by this article, and referred to as the Airport Land Use Planning Handbook, published by the division, and any applicable federal

aviation regulations, including, but not limited to, Part 77 (commencing with Section 77.1) of Title 14 of the Code of Federal Regulations.

(C) Provide adequate opportunities for notice to, review of, and comment by the general public, landowners, interested groups, and other public agencies.

(4) If the county does not comply with the requirements of paragraph (2) within 120 days, then the plan and amendments shall not be considered adopted pursuant to this article and a commission shall be established within 90 days of the determination of noncompliance by the division and a plan shall be adopted pursuant to this article within 90 days of the establishment of the commission.

(d) A commission need not be formed in a county that has contracted for the preparation of comprehensive airport land use plans with the Division of Aeronautics under the California Aids to Airport Program (Title 21 (commencing with Section 4050) of the California Code of Regulations), Project Ker-VAR 90-1, and that submits all of the following information to the Division of Aeronautics for review and comment that the county and the cities affected by the airports within the county, as defined by the plans:

(1) Agree to adopt and implement the comprehensive airport plans that have been developed under contract.

(2) Incorporated the height, use, noise, safety, and density criteria that are compatible with airport operations as established by this article, and referred to as the Airport Land Use Planning Handbook, published by the division, and any applicable federal aviation regulations, including, but not limited to, Part 77 (commencing with Section 77.1) of Title 14 of the Code of Federal Regulations as part of the general and specific plans for the county and for each affected city.

(3) If the county does not comply with this subdivision on or before May 1, 1995, then a commission shall be established in accordance with this article.

(e) (1) A commission need not be formed in a county if all of the following conditions are met:

(A) The county has only one public use airport that is owned by a city.

(B) (i) The county and the affected city adopt the elements in paragraph (2) of subdivision (d), as part of their general and specific plans for the county and the affected city.

(ii) The general and specific plans shall be submitted, upon adoption, to the Division of Aeronautics. If the county and the affected city do not submit the elements specified in paragraph (2) of subdivision (d), on or before May 1, 1996, then a commission shall be established in accordance with this article.

21670.2.

(a) Sections 21670 and 21670.1 do not apply to the County of Los Angeles. In that county, the county regional planning commission has the responsibility for coordinating the airport planning of public agencies within the county. In instances where impasses result relative to this planning, an appeal may be made to the county regional planning commission by any public agency involved. The action taken by the county regional planning commission on such an appeal may be overruled by a four-fifths vote of the governing body of a public agency whose planning led to the appeal.

(b) By January 1, 1992, the county regional planning commission shall adopt the comprehensive land use plans required pursuant to Section 21675.

(c) Sections 21675.1, 21675.2, and 21679.5 do not apply to the County of Los Angeles until January 1, 1992. If the comprehensive land use plans required pursuant to Section 21675 are not adopted by the

county regional planning commission by January 1, 1992, Sections 21675.1 and 21675.2 shall apply to the County of Los Angeles until the plans are adopted.

21670.4.

(a) As used in this section, "intercounty airport" means any airport bisected by a county line through its runways, runway protection zones, inner safety zones, inner turning zones, outer safety zones, or sideline safety zones, as defined by the department' s Airport Land Use Plan handbook and referenced in the comprehensive land use plan formulated under Section 21675.

(b) It is the purpose of this section to provide the opportunity to establish a separate airport land use commission so that an intercounty airport may be served by a single airport land use planning agency, rather than having to look separately to the airport land use commissions of the affected counties.

(c) In addition to the airport land use commissions created under Section 21670 or the alternatives established under Section 21670.1, for their respective counties, the boards of supervisors and city selection committees for the affected counties, by independent majority vote of each county's two delegations, for any intercounty airport, may do either of the following:

(1) Establish a single separate airport land use commission for that airport. That commission shall consist of seven members to be selected as follows:

(A) One representing the cities in each of the counties, appointed by that county's city selection committee.

(B) One representing each of the counties, appointed by the board of supervisors of each county.

(C) One from each county having expertise in aviation, appointed by a selection committee comprised of the managers of all the public airports within that county.

(D) One representing the general public, appointed by the other six members of the commission.

(2) In accordance with subdivision (a) or (b) of Section 21670.1, designate an existing appropriate entity as that airport's land use commission.

21671.

In any county where there is an airport operated for the general public which is owned by a city or district in another county or by another county, one of the representatives provided by paragraph (1) of subdivision (b) of Section 21670 shall be appointed by the city selection committee of mayors of the cities of the county in which the owner of that airport is located, and one of the representatives provided by paragraph (2) of subdivision (b) of Section 21670 shall be appointed by the board of supervisors of the county in which the owner of that airport is located.

21671.5.

(a) Except for the terms of office of the members of the first commission, the term of office of each member shall be four years and until the appointment and qualification of his or her successor. The members of the first commission shall classify themselves by lot so that the term of office of one member is one year, of two members is two years, of two members is three years, and of two members is four years. The body which originally appointed a member whose term has expired shall appoint his or her successor for a full term of four years. Any member may be removed at any time and without cause by the body appointing that member. The expiration date of the term of office of each member shall be the first Monday in May in the year in which that member's term is to expire. Any vacancy in

the membership of the commission shall be filled for the unexpired term by appointment by the body which originally appointed the member whose office has become vacant. The chairperson of the commission shall be selected by the members thereof.

(b) Compensation, if any, shall be determined by the board of supervisors.

(c) Staff assistance, including the mailing of notices and the keeping of minutes and necessary quarters, equipment, and supplies shall be provided by the county. The usual and necessary operating expenses of the commission shall be a county charge.

(d) Notwithstanding any other provisions of this article, the commission shall not employ any personnel either as employees or independent contractors without the prior approval of the board of supervisors.

(e) The commission shall meet at the call of the commission chairperson or at the request of the majority of the commission members. A majority of the commission members shall constitute a quorum for the transaction of business. No action shall be taken by the commission except by the recorded vote of a majority of the full membership.

(f) The commission may establish a schedule of fees necessary to comply with this article. Those fees shall be charged to the proponents of actions, regulations, or permits, shall not exceed the estimated reasonable cost of providing the service, and shall be imposed pursuant to Section 66016 of the Government Code. Except as provided in subdivision (g), after June 30, 1991, a commission which has not adopted the comprehensive land use plan required by Section 21675 shall not charge fees pursuant to this subdivision until the commission adopts the plan.

(g) In any county which has undertaken by contract or otherwise completed land use plans for at least one-half of all public use airports in the county, the commission may continue to charge fees necessary to comply with this article until June 30, 1992, and, if the land use plans are complete by that date, may continue charging fees after June 30, 1992. If the land use plans are not complete by June 30, 1992, the commission shall not charge fees pursuant to subdivision (f) until the commission adopts the land use plans.

21672.

Each commission shall adopt rules and regulations with respect to the temporary disqualification of its members from participating in the review or adoption of a proposal because of conflict of interest and with respect to appointment of substitute members in such cases.

21673.

In any county not having a commission or a body designated to carry out the responsibilities of a commission, any owner of a public airport may initiate proceedings for the creation of a commission by presenting a request to the board of supervisors that a commission be created and showing the need therefor to the satisfaction of the board of supervisors.

21674.

The commission has the following powers and duties, subject to the limitations upon its jurisdiction set forth in Section 21676:

(a) To assist local agencies in ensuring compatible land uses in the vicinity of all new airports and in the vicinity of existing airports to the extent that the land in the vicinity of those airports is not already devoted to incompatible uses.

(b) To coordinate planning at the state, regional, and local levels so as to provide for the orderly development of air transportation, while at the same time protecting the public health, safety, and welfare.

(c) To prepare and adopt an airport land use plan pursuant to Section 21675.

(d) To review the plans, regulations, and other actions of local agencies and airport operators pursuant to Section 21676.

(e) The powers of the commission shall in no way be construed to give the commission jurisdiction over the operation of any airport.

(f) In order to carry out its responsibilities, the commission may adopt rules and regulations consistent with this article.

21674.5.

(a) The Department of Transportation shall develop and implement a program or programs to assist in the training and development of the staff of airport land use commissions, after consulting with airport land use commissions, cities, counties, and other appropriate public entities.

(b) The training and development program or programs are intended to assist the staff of airport land use commissions in addressing high priority needs, and may include, but need not be limited to, the following:

(1) The establishment of a process for the development and adoption of comprehensive land use plans.

(2) The development of criteria for determining airport land use planning boundaries.

(3) The identification of essential elements which should be included in the comprehensive plans.

(4) Appropriate criteria and procedures for reviewing proposed developments and determining whether proposed developments are compatible with the airport use.

(5) Any other organizational, operational, procedural, or technical responsibilities and functions which the department determines to be appropriate to provide to commission staff and for which it determines there is a need for staff training or development.

(c) The department may provide training and development programs for airport land use commission staff pursuant to this section by any means it deems appropriate. Those programs may be presented in any of the following ways:

(1) By offering formal courses or training programs.

(2) By sponsoring or assisting in the organization and sponsorship of conferences, seminars, or other similar events.

(3) By producing and making available written information.

(4) Any other feasible method of providing information and assisting in the training and development of airport land use commission staff.

21674.7.

An airport land use commission that formulates, adopts or amends a comprehensive airport land use plan shall be guided by information prepared and updated pursuant to Section 21674.5 and referred to as the Airport Land Use Planning Handbook published by the Division of Aeronautics of the Department of Transportation.

21675.

(a) Each commission shall formulate a comprehensive land use plan that will provide for the orderly growth of each public airport and the area surrounding the airport within the jurisdiction of the commission, and will safeguard the general welfare of the inhabitants within the vicinity of the airport and the public in general. The commission plan shall include and shall be based on a long-range master plan or an airport layout plan, as determined by the Division of Aeronautics of the Department of Transportation, that reflects the anticipated growth of the airport during at least the next 20 years. In formulating a land use plan, the commission may develop height restrictions on buildings, specify use of land, and determine building standards, including soundproofing adjacent to airports, within the planning area. The comprehensive land use plan shall be reviewed as often as necessary in order to accomplish its purposes, but shall not be amended more than once in any calendar year.

(b) The commission may include, within its plan formulated pursuant to subdivision (a), the area within the jurisdiction of the commission surrounding any federal military airport for all of the purposes specified in subdivision (a). This subdivision does not give the commission any jurisdiction or authority over the territory or operations of any military airport.

(c) The planning boundaries shall be established by the commission after hearing and consultation with the involved agencies.

(d) The commission shall submit to the Division of Aeronautics of the department one copy of the plan and each amendment to the plan.

(e) If a comprehensive land use plan does not include the matters required to be included pursuant to this article, the Division of Aeronautics of the department shall notify the commission responsible for the plan.

21675.1.

(a) By June 30, 1991, each commission shall adopt the comprehensive land use plan required pursuant to Section 21675, except that any county which has undertaken by contract or otherwise completed land use plans for at least one-half of all public use airports in the county, shall adopt that plan on or before June 30, 1992.

(b) Until a commission adopts a comprehensive land use plan, a city or county shall first submit all actions, regulations, and permits within the vicinity of a public airport to the commission for review and approval. Before the commission approves or disapproves any actions, regulations, or permits, the commission shall give public notice in the same manner as the city or county is required to give for those actions, regulations, or permits. As used in this section, “vicinity” means land which will be included or reasonably could be included within the plan. If the commission has not designated a study area for the plan, then “vicinity” means land within two miles of the boundary of a public airport.

(c) The commission may approve an action, regulation, or permit if it finds, based on substantial evidence in the record, all of the following:

    (1) The commission is making substantial progress toward the completion of the plan.

    (2) There is a reasonable probability that the action, regulation, or permit will be consistent with the plan being prepared by the commission.

    (3) There is little or no probability of substantial detriment to or interference with the future adopted plan if the action, regulation, or permit is ultimately inconsistent with the plan.

(d) If the commission disapproves an action, regulation, or permit, the commission shall notify the city or county. The city or county may overrule the commission, by a two-thirds vote of its governing body, if it makes specific findings that the proposed action, regulation, or permit is consistent with the purposes of this article, as stated in Section 21670.

(e) If a city or county overrules the commission pursuant to subdivision (d), that action shall not relieve the city or county from further compliance with this article after the commission adopts the plan.

(f) If a city or county overrules the commission pursuant to subdivision (d) with respect to a publicly owned airport that the city or county does not operate, the operator of the airport is not liable for damages to property or personal injury resulting from the city's or county's decision to proceed with the action, regulation, or permit.

(g) A commission may adopt rules and regulations which exempt any ministerial permit for single-family dwellings from the requirements of subdivision (b) if it makes the findings required pursuant to subdivision (c) for the proposed rules and regulations, except that the rules and regulations may not exempt either of the following:

(1) More than two single-family dwellings by the same applicant within a subdivision prior to June 30, 1991.

(2) Single-family dwellings in a subdivision where 25 percent or more of the parcels are undeveloped.

21675.2.

(a) If a commission fails to act to approve or disapprove any actions, regulations, or permits within 60 days of receiving the request pursuant to Section 21675.1, the applicant or his or her representative may file an action pursuant to Section 1094.5 of the Code of Civil Procedure to compel the commission to act, and the court shall give the proceedings preference over all other actions or proceedings, except previously filed pending matters of the same character.

(b) The action, regulation, or permit shall be deemed approved only if the public notice required by this subdivision has occurred. If the applicant has provided seven days advance notice to the commission of the intent to provide public notice pursuant to this subdivision, then, not earlier than the date of the expiration of the time limit established by Section 21675.1, an applicant may provide the required public notice. If the applicant chooses to provide public notice, that notice shall include a description of the proposed action, regulation, or permit substantially similar to the descriptions which are commonly used in public notices by the commission, the location of any proposed development, the application number, the name and address of the commission, and a statement that the action, regulation, or permit shall be deemed approved if the commission has not acted within 60 days. If the applicant has provided the public notice specified in this subdivision, the time limit for action by the commission shall be extended to 60 days after the public notice is provided. If the applicant provides notice pursuant to this section, the commission shall refund to the applicant any fees which were collected for providing notice and which were not used for that purpose.

(c) Failure of an applicant to submit complete or adequate information pursuant to Sections 65943 to 65946, inclusive, of the Government Code, may constitute grounds for disapproval of actions, regulations, or permits.

(d) Nothing in this section diminishes the commission's legal responsibility to provide, where applicable, public notice and hearing before acting on an action, regulation, or permit.

21676.

(a) Each local agency whose general plan includes areas covered by an airport land use commission plan shall, by July 1, 1983, submit a copy of its plan or specific plans to the airport land use commission. The commission shall determine by August 31, 1983, whether the plan or plans are consistent or inconsistent with the commission's plan. If the plan or plans are inconsistent with the commission's plan, the local agency shall be notified and that local agency shall have another hearing to reconsider its plans. The local agency may overrule the commission after such hearing by a two-thirds vote of its

governing body if it makes specific findings that the proposed action is consistent with the purposes of this article stated in Section 21670.

(b) Prior to the amendment of a general plan or specific plan, or the adoption or approval of a zoning ordinance or building regulation within the planning boundary established by the airport land use commission pursuant to Section 21675, the local agency shall first refer the proposed action to the commission. If the commission determines that the proposed action is inconsistent with the commission's plan, the referring agency shall be notified. The local agency may, after a public hearing, overrule the commission by a two-thirds vote of its governing body if it makes specific findings that the proposed action is consistent with the purposes of this article stated in Section 21670.

(c) Each public agency owning any airport within the boundaries of an airport land use commission plan shall, prior to modification of its airport master plan, refer such proposed change to the airport land use commission. If the commission determines that the proposed action is inconsistent with the commission's plan, the referring agency shall be notified. The public agency may, after a public hearing, overrule the commission by a two-thirds vote of its governing body if it makes specific findings that the proposed action is consistent with the purposes of this article stated in Section 21670.

(d) Each commission determination pursuant to subdivision (b) or (c) shall be made within 60 days from the date of referral of the proposed action. If a commission fails to make the determination within that period, the proposed action shall be deemed consistent with the commission's plan.

21676.5.

(a) If the commission finds that a local agency has not revised its general plan or specific plan or overruled the commission by a two-thirds vote of its governing body after making specific findings that the proposed action is consistent with the purposes of this article as stated in Section 21670, the commission may require that the local agency submit all subsequent actions, regulations, and permits to the commission for review until its general plan or specific plan is revised or the specific findings are made. If, in the determination of the commission, an action, regulation, or permit of the local agency is inconsistent with the commission plan, the local agency shall be notified and that local agency shall hold a hearing to reconsider its plan. The local agency may overrule the commission after the hearing by a two-thirds vote of its governing body if it makes specific findings that the proposed action is consistent with the purposes of this article as stated in Section 21670.

(b) Whenever the local agency has revised its general plan or specific plan or has overruled the commission pursuant to subdivision (a), the proposed action of the local agency shall not be subject to further commission review, unless the commission and the local agency agree that individual projects shall be reviewed by the commission.

21677.

Notwithstanding Section 21676, any public agency in the County of Marin may overrule the Marin County Airport Land Use Commission by a majority vote of its governing body.

21678.

With respect to a publicly owned airport that a public agency does not operate, if the public agency pursuant to Section 21676 or 21676.5 overrides a commission's action or recommendation, the operator of the airport shall be immune from liability for damages to property or personal injury caused by or resulting directly or indirectly from the public agency's decision to override the commission's action or recommendation.

21679.

(a) In any county in which there is no airport land use commission or other body designated to assume the responsibilities of an airport land use commission, or in which the commission or other designated body has not adopted an airport land use plan, an interested party may initiate proceedings in a court of competent jurisdiction to postpone the effective date of a zoning change, a zoning variance, the issuance of a permit, or the adoption of a regulation by a local agency, which directly affects the use of land within one mile of the boundary of a public airport within the county.

(b) The court may issue an injunction which postpones the effective date of the zoning change, zoning variance, permit, or regulation until the governing body of the local agency which took the action does one of the following:

(1) In the case of an action which is a legislative act, adopts a resolution declaring that the proposed action is consistent with the purposes of this article stated in Section 21670.

(2) In the case of an action which is not a legislative act, adopts a resolution making findings based on substantial evidence in the record that the proposed action is consistent with the purposes of this article stated in Section 21670.

(3) Rescinds the action.

(4) Amends its action to make it consistent with the purposes of this article stated in Section 21670, and complies with either paragraph (1) or (2) of this subdivision, whichever is applicable.

(c) The court shall not issue an injunction pursuant to subdivision (b) if the local agency which took the action demonstrates that the general plan and any applicable specific plan of the agency accomplishes the purposes of an airport land use plan as provided in Section 21675.

(d) An action brought pursuant to subdivision (a) shall be commenced within 30 days of the decision or within the appropriate time periods set by Section 21167 of the Public Resources Code, whichever is longer.

(e) If the governing body of the local agency adopts a resolution pursuant to subdivision (b) with respect to a publicly owned airport that the local agency does not operate, the operator of the airport shall be immune from liability for damages to property or personal injury from the local agency's decision to proceed with the zoning change, zoning variance, permit, or regulation.

(f) As used in this section, "interested party" means any owner of land within two miles of the boundary of the airport or any organization with a demonstrated interest in airport safety and efficiency.

21679.5.

(a) Until June 30, 1991, no action pursuant to Section 21679 to postpone the effective date of a zoning change, a zoning variance, the issuance of a permit, or the adoption of a regulation by a local agency, directly affecting the use of land within one mile of the boundary of a public airport, shall be commenced in any county in which the commission or other designated body has not adopted an airport land use plan, but is making substantial progress toward the completion of the plan.

(b) If a commission has been prevented from adopting the comprehensive land use plan by June 30, 1991, or if the adopted plan could not become effective, because of a lawsuit involving the adoption of the plan, the June 30, 1991, date in subdivision (a) shall be extended by the period of time during which the lawsuit was pending in a court of competent jurisdiction.

(c) Any action pursuant to Section 21679 commenced prior to January 1, 1990, in a county in which the commission or other designated body has not adopted an airport land use plan, but is making substantial progress toward the completion of the plan, which has not proceeded to final judgment, shall be held in abeyance until June 30, 1991. If the commission or other designated body adopts an airport land use

plan on or before June 30, 1991, the action shall be dismissed. If the commission or other designated body does not adopt an airport land use plan on or before June 30, 1991, the plaintiff or plaintiffs may proceed with the action.

(d) An action to postpone the effective date of a zoning change, a zoning variance, the issuance of a permit, or the adoption of a regulation by a local agency, directly affecting the use of land within one mile of the boundary of a public airport for which an airport land use plan has not been adopted by June 30, 1991, shall be commenced within 30 days of June 30, 1991, or within 30 days of the decision by the local agency, or within the appropriate time periods set by Section 21167 of the Public Resources Code, whichever date is later.

APPENDIX F

FEDERAL AVIATION REGULATIONS, PART 77
SUBPARTS A THROUGH C

PART 77—OBJECTS AFFECTING NAVIGABLE AIRSPACE

Subpart A General

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Subpart A—General

Sec. 77.1 Scope.

This part:

(a) Establishes standards for determining obstructions in navigable airspace;

(b) Sets forth the requirements for notice to the Administrator of certain proposed construction or alteration;

(c) Provides for aeronautical studies of obstructions to air navigation, to determine their effect on the safe and efficient use of airspace;

(d) Provides for public hearings on the hazardous effect of proposed construction or alteration on air navigation; and

(e) Provides for establishing antenna farm areas.

Sec. 77.2 Definition of terms.

For the purpose of this part:

"Airport available for public use" means an airport that is open to the general public with or without a prior request to use the airport.

"A seaplane base" is considered to be an airport only if its sea lanes are outlined by visual markers.

"Nonprecision instrument runway" means a runway having an existing instrument approach procedure utilizing air navigation facilities with only horizontal guidance, or area type navigation equipment, for which a straight- in nonprecision instrument approach procedure has been approved, or planned, and for which no precision approach facilities are planned, or indicated on an FAA planning document or military service military airport planning document.

"Precision instrument runway" means a runway having an existing instrument approach procedure utilizing an Instrument Landing System (ILS), or a Precision Approach Radar (PAR). It also means a runway for which a precision approach system is planned and is so indicated by an FAA approved airport layout plan; a military service approved military airport layout plan; any other FAA planning document, or military service military airport planning document.

"Utility runway" means a runway that is constructed for and intended to be used by propeller driven aircraft of 12,500 pounds maximum gross weight and less.

"Visual runway" means a runway intended solely for the operation of aircraft using visual approach procedures, with no straight-in instrument approach procedure and no instrument designation indicated on an FAA approved airport layout plan, a military service approved military airport layout plan, or by any planning document submitted to the FAA by competent authority.

[Amdt. 77-5, 33 FR 5256, Apr. 2, 1968, as amended by Amdt. 77-9, 36 FR 5969, Apr. 1, 1971]

Sec. 77.3 Standards.

(a) The standards established in this part for determining obstructions to air navigation are used by the

Administrator in:

(1) Administering the Federal-aid Airport Program and the Surplus Airport Program;

(2) Transferring property of the United States under section 16 of the Federal Airport Act;

(3) Developing technical standards and guidance in the design and construction of airports; and

(4) Imposing requirements for public notice of the construction or alteration of any structure where notice will promote air safety.

(b) The standards used by the Administrator in the establishment of flight procedures and aircraft operational limitations are not set forth in this part but are contained in other publications of the Administrator.

[Doc. No. 1882, 30 FR 1839, Feb. 10, 1965, as amended by Amdt. 77-9, 36 FR 5970, Apr. 1, 1971]

Sec. 77.5 Kinds of objects affected.

This part applies to:

(a) Any object of natural growth, terrain, or permanent or temporary construction or alteration, including equipment or materials used therein, and apparatus of a permanent or temporary character; and

(b) Alteration of any permanent or temporary existing structure by a change in its height (including appurtenances), or lateral dimensions, including equipment or materials used therein.

Subpart B—Notice of Construction or Alteration

Sec. 77.11 Scope.

(a) This subpart requires each person proposing any kind of construction or alteration described in Sec. 77.13(a) to give adequate notice to the Administrator. It specifies the locations and dimensions of the construction or alteration for which notice is required and prescribes the form and manner of the notice. It also requires supplemental notices 48 hours before the start and upon the completion of certain construction or alteration that was the subject of a notice under Sec. 77.13(a).

(b) Notices received under this subpart provide a basis for:

(1) Evaluating the effect of the construction or alteration on operational procedures and proposed operational procedures;

(2) Determinations of the possible hazardous effect of the proposed construction or alteration on air navigation;

(3) Recommendations for identifying the construction or alteration in accordance with the current Federal Aviation Administration Advisory Circular AC 70/7460-1 entitled “Obstruction Marking and Lighting,” which is available without charge from the Department of Transportation, Distribution Unit, TAD 484.3, Washington, D.C. 20590.

(4) Determining other appropriate measures to be applied for continued safety of air navigation; and

(5) Charting and other notification to airmen of the construction or alteration.

(Sec. 6, 80 Stat. 937, 49 U.S.C. 1655
[Doc. No. 1882, 30 FR 1839, Feb. 10, 1965, as amended by Amdt. 77-8, 33 FR 18614, Dec. 17, 1968; Amdt. 77-10, 37 FR 4705, Mar. 4, 1972]

Sec. 77.13 Construction or alteration requiring notice.

(a) Except as provided in Sec. 77.15, each sponsor who proposes any of the following construction or alteration shall notify the Administrator in the form and manner prescribed in Sec. 77.17:

(1) Any construction or alteration of more than 200 feet in height above the ground level at its site.

(2) Any construction or alteration of greater height than an imaginary surface extending outward and upward at one of the following slopes:

(i) 100 to 1 for a horizontal distance of 20,000 feet from the nearest point of the nearest runway of each airport specified in paragraph (a)(5) of this section with at least one runway more than 3,200 feet in actual length, excluding heliports.

(ii) 50 to 1 for a horizontal distance of 10,000 feet from the nearest point of the nearest runway of each airport specified in paragraph (a)(5) of this section with its longest runway no more than 3,200 feet in actual length, excluding heliports.

(iii) 25 to 1 for a horizontal distance of 5,000 feet from the nearest point of the nearest landing and takeoff area of each heliport specified in paragraph (a)(5) of this section.

(3) Any highway, railroad, or other traverse way for mobile objects, of a height which, if adjusted upward 17 feet for an Interstate Highway that is part of the National System of Military and Interstate Highways where overcrossings are designed for a minimum of 17 feet vertical distance, 15 feet for any other public roadway, 10 feet or the height of the highest mobile object that would normally traverse the road, whichever is greater, for a private road, 23 feet for a railroad, and for a waterway or any other traverse way not previously mentioned, an amount equal to the height of the highest mobile object that would normally traverse it, would exceed a standard of paragraph (a) (1) or (2) of this section.

(4) When requested by the FAA, any construction or alteration that would be in an instrument approach area (defined in the FAA standards governing instrument approach procedures) and available information indicates it might exceed a standard of Subpart C of this part.

(5) Any construction or alteration on any of the following airports (including heliports):

(i) An airport that is available for public use and is listed in the Airport Directory of the current Airman's Information Manual or in either the Alaska or Pacific Airman's Guide and Chart Supplement.

(ii) An airport under construction, that is the subject of a notice or proposal on file with the Federal Aviation Administration, and, except for military airports, it is clearly indicated that that airport will be available for public use.

(iii) An airport that is operated by an armed force of the United States.

(b) Each sponsor who proposes construction or alteration that is the subject of a notice under paragraph (a) of this section and is advised by an FAA regional office that a supplemental notice is required shall submit that notice on a prescribed form to be received by the FAA regional office at least 48 hours before the start of the construction or alteration.

(c) Each sponsor who undertakes construction or alteration that is the subject of a notice under paragraph (a) of this section shall, within 5 days after that construction or alteration reaches its greatest height, submit a supplemental notice on a prescribed form to the FAA regional office having jurisdiction over the region involved, if—

(1) The construction or alteration is more than 200 feet above the surface level of its site; or

(2) An FAA regional office advises him that submission of the form is required.

[Amdt. 77-5, 33 FR 5256, Apr. 2, 1968, as amended by Amdt. 77-9, 36 FR 5970, Apr. 1, 1971; Amdt. 77-10, 37 FR 4705, Mar. 4, 1972]

Sec. 77.15 Construction or alteration not requiring notice.

No person is required to notify the Administrator for any of the following construction or alteration:

(a) Any object that would be shielded by existing structures of a permanent and substantial character or by natural terrain or topographic features of equal or greater height, and would be located in the congested area of a city, town, or settlement where it is evident beyond all reasonable doubt that the structure so shielded will not adversely affect safety in air navigation.

(b) Any antenna structure of 20 feet or less in height except one that would increase the height of another antenna structure.

(c) Any air navigation facility, airport visual approach or landing aid, aircraft arresting device, or meteorological device, of a type approved by the Administrator, or an appropriate military service on military airports, the location and height of which is fixed by its functional purpose.

(d) Any construction or alteration for which notice is required by any other FAA regulation.

[Doc. No. 1882, 30 FR 1839, Feb. 10, 1965, as amended by Amdt. 77-5, 33 FR 5257, Apr. 2, 1968; Amdt. 77-9, 36 FR 5970, Apr. 1, 1971]

Sec. 77.17 Form and time of notice.

(a) Each person who is required to notify the Administrator under Sec. 77.13(a) shall send one executed form set (four copies) of FAA Form 7460-1, Notice of Proposed Construction or Alteration, to the Manager, Air Traffic Division, FAA Regional Office having jurisdiction over the area within which the construction or alteration will be located. Copies of FAA Form 7460-1 may be obtained from the headquarters of the Federal Aviation Administration and the regional offices.

(b) The notice required under Sec. 77.13(a) (1) through (4) must be submitted at least 30 days before the earlier of the following dates:

(1) The date the proposed construction or alteration is to begin.

(2) The date an application for a construction permit is to be filed. However, a notice relating to proposed construction or alteration that is subject to the licensing requirements of the Federal Communications Act may be sent to FAA at the same time the application for construction is filed with the Federal Communications Commission, or at any time before that filing.

(c) A proposed structure or an alteration to an existing structure that exceeds 2,000 feet in height above the ground will be presumed to be a hazard to air navigation and to result in an inefficient utilization of airspace and the applicant has the burden of overcoming that presumption. Each notice submitted under the pertinent provisions of this Part 77 proposing a structure in excess of 2,000 feet above ground, or an alteration that will make an existing structure exceed that height, must contain a detailed showing, directed to meeting this burden. Only in exceptional cases, where the FAA concludes that a clear and compelling showing has been made that it would not result in an inefficient utilization of the airspace and would not result in a hazard to air navigation, will a determination of no hazard be issued.

(d) In the case of an emergency involving essential public services, public health, or public safety that requires immediate construction or alteration, the 30-day requirement in paragraph (b) of this section does not apply and the notice may be sent by telephone, telegraph, or other expeditious means, with an executed FAA Form 7460-1 submitted within 5 days thereafter. Outside normal business hours, emergency notices by telephone or telegraph may be submitted to the nearest FAA Flight Service Station.

(e) Each person who is required to notify the Administrator by paragraph (b) or (c) of Sec. 77.13, or both, shall send an executed copy of FAA Form 117-1, Notice of Progress of Construction or Alteration, to

the Manager, Air Traffic Division, FAA Regional Office having jurisdiction over the area involved.

(Sec. 6, 80 Stat. 937, 49 U.S.C. 1655
[Doc. No. 1882, 30 FR 1839, Feb. 10, 1965, as amended by Amdt. 77-2, 31 FR 9449, July 12, 1966; Amdt. 77-8, 33 FR 18614, Dec. 17, 1968; Amdt. 77-10, 37 FR 4705, Mar. 4, 1972; Amdt. 77-11, 54 FR 39292, Sept. 25, 1989]

Sec. 77.19 Acknowledgment of notice.

(a) The FAA acknowledges in writing the receipt of each notice submitted under Sec. 77.13(a).

(b) If the construction or alteration proposed in a notice is one for which lighting or marking standards are prescribed in the FAA Advisory Circular AC 70/7460-1, entitled "Obstruction Marking and Lighting," the acknowledgment contains a statement to that effect and information on how the structure should be marked and lighted in accordance with the manual.

(c) The acknowledgment states that an aeronautical study of the proposed construction or alteration has resulted in a determination that the construction or alteration:

(1) Would not exceed any standard of Subpart C and would not be a hazard to air navigation;

(2) Would exceed a standard of Subpart C but would not be a hazard to air navigation; or

(3) Would exceed a standard of Subpart C and further aeronautical study is necessary to determine whether it would be a hazard to air navigation, that the sponsor may request within 30 days that further study, and that, pending completion of any further study, it is presumed the construction or alteration would be a hazard to air navigation.

[Doc. No. 1882, 30 FR 1839, Feb. 10, 1965, as amended by Amdt. 77-4, 32 FR 12997, Sept. 13, 1967; Amdt. 77-5, 33 FR 5257, Apr. 2, 1968

Subpart C—Obstruction Standards

Sec. 77.21 Scope.

(a) This subpart establishes standards for determining obstructions to air navigation. It applies to existing and proposed manmade objects, objects of natural growth, and terrain. The standards apply to the use of navigable airspace by aircraft and to existing air navigation facilities, such as an air navigation aid, airport, Federal airway, instrument approach or departure procedure, or approved off-airway route. Additionally, they apply to a planned facility or use, or a change in an existing facility or use, if a proposal therefor is on file with the Federal Aviation Administration or an appropriate military service on the date the notice required by Sec. 77.13(a) is filed.

(b) At those airports having defined runways with specially prepared hard surfaces, the primary surface for each such runway extends 200 feet beyond each end of the runway. At those airports having defined strips or pathways that are used regularly for the taking off and landing of aircraft and have been designated by appropriate authority as runways, but do not have specially prepared hard surfaces, each end of the primary surface for each such runway shall coincide with the corresponding end of the runway. At those airports, excluding seaplane bases, having a defined landing and takeoff area with no defined pathways for the landing and taking off of aircraft, a determination shall be made as to which portions of the landing and takeoff area are regularly used as landing and takeoff pathways. Those pathways so determined shall be considered runways and an appropriate primary surface as defined in Sec. 77.25(c) will be considered as being longitudinally centered on each runway so determined, and each end of that primary surface shall coincide with the corresponding end of that runway.

(c) The standards in this subpart apply to the effect of construction or alteration proposals upon an airport

if, at the time of filing of the notice required by Sec. 77.13(a), that airport is—

(1) Available for public use and is listed in the Airport Directory of the current Airman's Information Manual or in either the Alaska or Pacific Airman's Guide and Chart Supplement; or

(2) A planned or proposed airport or an airport under construction, that is the subject of a notice or proposal on file with the Federal Aviation Administration, and, except for military airports, it is clearly indicated that that airport will be available for public use; or,

(3) An airport that is operated by an armed force of the United States.

[Doc. No. 1882, 30 FR 1839, Feb. 10, 1965, as amended by Amdt. 77-5, 33 FR 5257, Apr. 2, 1968; Amdt. 77-9, 36 FR 5970, Apr. 1, 1971]

Sec. 77.23 Standards for determining obstructions.

(a) An existing object, including a mobile object, is, and a future object would be an obstruction to air navigation if it is of greater height than any of the following heights or surfaces:

(1) A height of 500 feet above ground level at the site of the object.

(2) A height that is 200 feet above ground level or above the established airport elevation, whichever is higher, within 3 nautical miles of the established reference point of an airport, excluding heliports, with its longest runway more than 3,200 feet in actual length, and that height increases in the proportion of 100 feet for each additional nautical mile of distance from the airport up to a maximum of 500 feet.

(3) A height within a terminal obstacle clearance area, including an initial approach segment, a departure area, and a circling approach area, which would result in the vertical distance between any point on the object and an established minimum instrument flight altitude within that area or segment to be less than the required obstacle clearance.

(4) A height within an en route obstacle clearance area, including turn and termination areas, of a Federal airway or approved off-airway route, that would increase the minimum obstacle clearance altitude.

(5) The surface of a takeoff and landing area of an airport or any imaginary surface established under Sec. 77.25, Sec. 77.28, or Sec. 77.29. However, no part of the take-off or landing area itself will be considered an obstruction.

(b) Except for traverse ways on or near an airport with an operative ground traffic control service, furnished by an air traffic control tower or by the airport management and coordinated with the air traffic control service, the standards of paragraph (a) of this section apply to traverse ways used or to be used for the passage of mobile objects only after the heights of these traverse ways are increased by:

(1) Seventeen feet for an Interstate Highway that is part of the National System of Military and Interstate Highways where overcrossings are designed for a minimum of 17 feet vertical distance.

(2) Fifteen feet for any other public roadway.

(3) Ten feet or the height of the highest mobile object that would normally traverse the road, whichever is greater, for a private road.

(4) Twenty-three feet for a railroad, and,

(5) For a waterway or any other traverse way not previously mentioned, an amount equal to the height of the highest mobile object that would normally traverse it.

[Amdt. 77-9, 36 FR 5970, Apr. 1, 1971]

Sec. 77.25 Civil airport imaginary surfaces.

The following civil airport imaginary surfaces are established with relation to the airport and to each runway. The size of each such imaginary surface is based on the category of each runway according to the type of approach available or planned for that runway. The slope and dimensions of the approach surface applied to each end of a runway are determined by the most precise approach existing or planned for that runway end.

(a) Horizontal surface. A horizontal plane 150 feet above the established airport elevation, the perimeter of which is constructed by swinging arcs of specified radii from the center of each end of the primary surface of each runway of each airport and connecting the adjacent arcs by lines tangent to those arcs. The radius of each arc is:

(1) 5,000 feet for all runways designated as utility or visual;

(2) 10,000 feet for all other runways. The radius of the arc specified for each end of a runway will have the same arithmetical value. That value will be the highest determined for either end of the runway. When a 5,000-foot arc is encompassed by tangents connecting two adjacent 10,000-foot arcs, the 5,000-foot arc shall be disregarded on the construction of the perimeter of the horizontal surface.

(b) Conical surface. A surface extending outward and upward from the periphery of the horizontal surface at a slope of 20 to 1 for a horizontal distance of 4,000 feet.

(c) Primary surface. A surface longitudinally centered on a runway. When the runway has a specially prepared hard surface, the primary surface extends 200 feet beyond each end of that runway; but when the runway has no specially prepared hard surface, or planned hard surface, the primary surface ends at each end of that runway. The elevation of any point on the primary surface is the same as the elevation of the nearest point on the runway centerline. The width of a primary surface is:

(1) 250 feet for utility runways having only visual approaches.

(2) 500 feet for utility runways having nonprecision instrument approaches.

(3) For other than utility runways the width is:

(i) 500 feet for visual runways having only visual approaches.

(ii) 500 feet for nonprecision instrument runways having visibility minimums greater than three-fourths statute mile.

(iii) 1,000 feet for a nonprecision instrument runway having a nonprecision instrument approach with visibility minimums as low as three-fourths of a statute mile, and for precision instrument runways. The width of the primary surface of a runway will be that width prescribed in this section for the most precise approach existing or planned for either end of that runway.

(d) Approach surface. A surface longitudinally centered on the extended runway centerline and extending outward and upward from each end of the primary surface. An approach surface is applied to each end of each runway based upon the type of approach available or planned for that runway end.

(1) The inner edge of the approach surface is the same width as the primary surface and it expands uniformly to a width of:

(i) 1,250 feet for that end of a utility runway with only visual approaches;

(ii) 1,500 feet for that end of a runway other than a utility runway with only visual approaches;

(iii) 2,000 feet for that end of a utility runway with a nonprecision instrument approach;

(iv) 3,500 feet for that end of a nonprecision instrument runway other than utility, having visibility minimums greater than three-fourths of a statute mile;

(v) 4,000 feet for that end of a nonprecision instrument runway, other than utility, having a nonprecision instrument approach with visibility minimums as low as three-fourths statute mile; and

(vi) 16,000 feet for precision instrument runways.

(2) The approach surface extends for a horizontal distance of:

(i) 5,000 feet at a slope of 20 to 1 for all utility and visual runways;

(ii) 10,000 feet at a slope of 34 to 1 for all nonprecision instrument runways other than utility; and,

(iii) 10,000 feet at a slope of 50 to 1 with an additional 40,000 feet at a slope of 40 to 1 for all precision instrument runways.

(3) The outer width of an approach surface to an end of a runway will be that width prescribed in this subsection for the most precise approach existing or planned for that runway end.

(e) Transitional surface. These surfaces extend outward and upward at right angles to the runway centerline and the runway centerline extended at a slope of 7 to 1 from the sides of the primary surface and from the sides of the approach surfaces. Transitional surfaces for those portions of the precision approach surface which project through and beyond the limits of the conical surface, extend a distance of 5,000 feet measured horizontally from the edge of the approach surface and at right angles to the runway centerline.

[Amdt. 77-9, 36 FR 5970, Apr. 1, 1971; 36 FR 6741, Apr. 8, 1971]

Sec. 77.27 [Reserved]

Sec. 77.28 Military airport imaginary surfaces.

(a) Related to airport reference points. These surfaces apply to all military airports. For the purposes of this section a military airport is any airport operated by an armed force of the United States.

(1) Inner horizontal surface. A plane is oval in shape at a height of 150 feet above the established airfield elevation. The plane is constructed by scribing an arc with a radius of 7,500 feet about the centerline at the end of each runway and interconnecting these arcs with tangents.

(2) Conical surface. A surface extending from the periphery of the inner horizontal surface outward and upward at a slope of 20 to 1 for a horizontal distance of 7,000 feet to a height of 500 feet above the established airfield elevation.

(3) Outer horizontal surface. A plane, located 500 feet above the established airfield elevation, extending outward from the outer periphery of the conical surface for a horizontal distance of 30,000 feet.

(b) Related to runways. These surfaces apply to all military airports.

(1) Primary surface. A surface located on the ground or water longitudinally centered on each runway with the same length as the runway. The width of the primary surface for runways is 2,000 feet. However, at established bases where substantial construction has taken place in accordance with a previous lateral clearance criteria, the 2,000-foot width may be reduced to the former criteria.

(2) Clear zone surface. A surface located on the ground or water at each end of the primary surface, with a length of 1,000 feet and the same width as the primary surface.

(3) Approach clearance surface. An inclined plane, symmetrical about the runway centerline extended, beginning 200 feet beyond each end of the primary surface at the centerline elevation of the runway end and extending for 50,000 feet. The slope of the approach clearance surface is 50 to 1 along the runway centerline extended until it reaches an elevation of 500

feet above the established airport elevation. It then continues horizontally at this elevation to a point 50,000 feet from the point of beginning. The width of this surface at the runway end is the same as the primary surface, it flares uniformly, and the width at 50,000 is 16,000 feet.

(4) Transitional surfaces. These surfaces connect the primary surfaces, the first 200 feet of the clear zone surfaces, and the approach clearance surfaces to the inner horizontal surface, conical surface, outer horizontal surface or other transitional surfaces. The slope of the transitional surface is 7 to 1 outward and upward at right angles to the runway centerline.

[Doc. No. 1882, 30 FR 1839, Feb. 10, 1965, as amended by Amdt. 77-1, 30 FR 6713, May 18, 1965; Amdt. 77-9, 36 FR 5971, Apr. 1, 1971]

Sec. 77.29 Airport imaginary surfaces for heliports.

(a) Heliport primary surface. The area of the primary surface coincides in size and shape with the designated take-off and landing area of a heliport. This surface is a horizontal plane at the elevation of the established heliport elevation.

(b) Heliport approach surface. The approach surface begins at each end of the heliport primary surface with the same width as the primary surface, and extends outward and upward for a horizontal distance of 4,000 feet where its width is 500 feet. The slope of the approach surface is 8 to 1 for civil heliports and 10 to 1 for military heliports.

(c) Heliport transitional surfaces. These surfaces extend outward and upward from the lateral boundaries of the heliport primary surface and from the approach surfaces at a slope of 2 to 1 for a distance of 250 feet measured horizontally from the centerline of the primary and approach surfaces.

[Doc. No. 1882, 30 FR 1839, Feb. 10, 1965, as amended by Amdt. 77-9, 36 FR 5971, Apr. 1, 1971; 36 FR 6741, Apr. 8, 1971]

APPENDIX G

NON-RESIDENTIAL LAND USE DENSITIES

Type of Use	Density
Agriculture	
Agricultural processing	One person per 200 sq. ft. gross floor area, plus one person per 1000 sq. ft. outdoor processing area
Agriculture – grazing and outdoor crops	One person per acre of gross land area
Agriculture – greenhouse culture, livestock raising	Ten persons per acre of gross land area
Carwash – mechanical	Twenty persons
Self serve	Six persons
Food & Beverage Service, Indoor Entertainment	One person per 60 sq. ft. gross floor area.
Hospitals	Two persons per bed
Indoor-Outdoor Uses	
Auto dismantling, scrap dealers, recycling centers	One person per 5000 sq. ft. of gross land area
Equipment rental,contractors' yards, gas distributors – containerized, government agency corporation yards	One person per 1000 sq. ft. of gross land area
Service stations	One person per 500 sq. ft. of gross land area
Laboratories	One person per 200 sq. ft. gross floor area
Libraries and Museums	One person per 50 sq. ft. gross floor area
Manufacturing	One person per 200 sq. ft. gross floor area, plus one person per 1000 sq. ft. outdoor manufacturing or storage area
Offices	One person per 200 sq. ft. gross floor area, plus one person per 10 sq. ft. of floor area of meeting rooms intended for use by the general public; if it is unknown whether meeting rooms will be included, one person per 100 sq. ft. gross floor area
Outdoor Entertainment	
Stadiums	One person per seat or per 10 sq. ft. of spectator area
Swimming pools (public)	One person for each 70 sq. ft. of pool surface
All other	One person per 300 sq. ft. outdoor use area
Public Assembly Uses	One person per seat or per 12 sq. ft. of gross floor area
Residential Uses	Residential use – non-residential density does not apply
Retail Sales	One person per 300 sq. ft. of gross floor area, plus one person per 1000 sq. ft. outdoor sales/storage area
Schools	One person per 45 sq. ft. gross floor area
Service Uses	One person per 200 sq. ft. gross floor area

Type of Use	Density
Transient Lodgings	
Hotels, motels, bed and breakfasts	1.8 persons per room or group of rooms to be occupied as a suite; plus one person per 60 sq. ft. floor area of any restaurants, coffee shops, bars, or night clubs; plus one person per 10 sq. ft. of floor area of meeting rooms
Hostels	One person 100 sq. ft. gross floor area
Transportation Uses	One person per 200 sq. ft. gross floor area (excluding garage), plus one person for 700 sq. ft. enclosed garage
Warehousing, mini-storage, moving company	One person per 1000 sq. ft. gross floor area
Wholesaling and mail-order houses	One person per 300 sq. ft. gross floor area, plus one person per 1000 sq. ft. outdoor sales/storage area

INDIVIDUAL LAND USES INCLUDED IN EACH LAND USE CATEGORY

Use Category	Specific Uses Included
Food and Beverage	Amusement arcades (video games) Bars, taverns Catering services Hot tubs – commercial use Nightclubs, discotheques Restaurants, sandwich shops, food take-out, etc. Skating rinks
Indoor-Outdoor Uses	Convalescent hospitals Hospitals
Hospitals	Convalescent hospitals Hospitals
Hotels	Bed and breakfast inns Hotels and motels
Indoor-Outdoor Uses	Auto dismantling, scrap dealers, recycling centers Equipment rental Contractors' yards Gas distributors – containerized Government agency corporation yards Service stations
Laboratories	Laboratories – medical or analytical Research and development laboratories
Manufacturing Uses	Manufacturing Laundry/dry cleaner: cleaning plant Tallow works Tire recapping
Offices	Government offices and meeting rooms Offices – contractors Offices – professional, other than medical or dental Organizations offices and meeting rooms Utility companies: engineering and administrative offices
Outdoor Entertainment	Amusement parks, fairgrounds Athletic fields, game courts Circus, carnival, fair, festival, parade Drive-in theatres
Public Assembly Uses	Auditoriums, convention/exhibit halls Churches, synagogues, temples, etc. Community meeting rooms Mortuaries Theatres
Retail Sales	Feed stores and farm supply stores Retail sales – outdoor sales of building and landscape materials (lumberyards, nurseries) Retail sales – indoor sales of building materials and gardening supplies (floor and wall coverings, stores, etc.) Retail sales – appliances, furniture and furnishings, musical instruments, data processing equip ment, business, office, and medical equipment, catalog stores, sporting goods and outdoor supplies Retail sales and repair of bicycles Retail sales and rentals – autos, trucks, RVs, motorcycles, trailers, boats, aircraft, motorhomes Retail sales – auto parts, accessories (including tires and/or batteries) as a principle use Retail sales – convenience markets

Use Category	Specific Uses Included
	Retail sales – groceries, liquor and specialized foods (bakery, meats, dairy items, etc.) Retail sales – general merchandise (drug, discount, department, and variety stores) Retail sales – neighborhood grocery market Retail sales – specialties (shoe stores, clothing, stores, book/record/video stores, toy stores, stationery stores, gift shops) and rentals Warehouse (“big box”) stores
Residential Uses	Boarding/rooming houses; dormitories Caretaker’s quarters Convents and monasteries Dwellings Fraternities and sororities Homeless shelters Mobile home parks
Service Uses	Advertising and related services (graphic design, writing, mailing, addressing, etc.) Ambulance services Animal hospitals, boarding and grooming (large or small animals) Athletic and health clubs, gymnasiums, fitness centers, tanning centers Auto repair and related services (body, brake, transmissions, muffler shops, painting, etc.) Banks and savings and loans Broadcast studios Barbers, hairstylists, manicurists Building and landscape maintenance services Cemeteries, mausoleums, columbariums Computer services Credit reporting and collecting Credit unions and finance companies Delivery and postal services Detective and security services Exterminators Employment agencies Florists Insurance service – local Insurance service – regional office Offices – medical or dental Photocopy services Pharmacies – prescription drugs only Photofinishing – retail Photofinishing – wholesale; blueprinting and microfilming services Photographic studios Police and fire stations and training facilities Pool halls and billiard parlors Post offices Printing and publishing Refuse hauling, septic tank/portable toilet services Repair service – small household appliances, locksmiths, seamstresses, shoe repair Repair service – large appliances, electrical equipment, power tools, saw sharpening Laundry/dry cleaner: pick-up point or office Laundry/dry cleaner: self-service Secretarial and related services (court reporting, stenography, typing, phone answering) Telegraph offices Ticket/travel agencies Title companies Utility companies: customer account services
Transportation Uses	Bus stations Railroad yards, stations, crew facilities Trucking/taxi services

Summary of Comments

Table I-1
Second Public Meeting
Summary Of Public Written And Verbal Comments

Comment Category	Number Received
Non-standard traffic pattern, fly-over noise to north from touch and go	1
Touch and go noise to the south but noise is mostly from jets	1
Pilots could throttle back to reduce noise (as soon as they reach proper altitude)	1
Noise Exposure Maps do not included touch and go flyovers	1
Noise abatement procedures should be mandatory	1
Prohibit touch and go traffic	3
Low flying medic helicopters are intolerably loud	1
Consider PAR 2000 Recommendations and include or provide rationale for not including	1
Check planes for sound	1
When someone buys a house they should be told not just that they are near an airport, but how much air traffic they can expect	1
Many complaints are not shown in the areas on the charts. There is a disconnect between numbers and reality.	3
Low flying helicopters/small aircrafts are noisy	10
Cannot enjoy outside	1
Why are helicopters allowed to fly so low?	1
Who enforces the rules and why aren't they fined?	2
Touch and go traffic is bothersome/limit touch and go traffic (make planes fly out to sea before turning right or left)	5
Jets taking off in the middle of the night (ex. 11:00 am, 1:30 am, 4:00 am, 5:00 am, 6:00 am)	4
Designate quiet hours	2
What can the community do to alleviate situation?	1
Airplanes may not be taking required routes during take-off and landing	2
Complaints fall on deaf ears	1
Planes are not abiding by noise abatement procedures (approaches)	2
Video cameras could be used to track noise and plane identifications to fine violators	2
Airplane noise is worse during the weekends (as compared to noise during the week)	1
Limit the amount of small aircraft taking off from the airport	3

Comment Category	Number Received
Increase minimum altitude of all small aircraft	2
Require small aircraft to install noise abatement devices or require aircraft without noise abatement devices to fly at a higher altitude than aircraft with noise abatement devices.	2
Vary the flight paths throughout different neighborhoods	1
Take complaints seriously and visit neighborhoods	1
Randomly select data daily and fine offenders of altitude requirements	1
Develop/Implement a system that identifies aircraft flying at altitudes that are too low	1
Pilot education	1
Quality of life	1
Prohibit jets	1
Planes are a noise problem	1
Do not like same plans circling the air repeatedly	2
Weighted data should never be considered the same or equivalent to non-weighted data	1
Were the two types of data from same source?	1
How much error was in the data?	1
Show noise comparisons of other noise sources	1
Would like to see graphics that depict the outliers	1
Would like to see graphic that shows the white noise that disturbs the surrounding public	1
Can you show if there is a correlation between economic success of the airport and the increase in noise?	1
Display noise levels as non-weighted data in a bar graph	1
Develop a noise scale	1
Develop a timeline with regard to changes in the airport environment and noise level	1
Noise absorption/topography/buildings/vegetation	1
Show noise by altitude layers	1
Noise travel and vortices	1
Planes flying too low	1
Wants independent review of study	1
Require phasing out of older, louder planes	1
Recommend mandatory flight patterns	1

Comment Category	Number Received
Airport fees to sightseeing companies	1
Recommends formation of Citizen Advisory Committee	1
Reestablish the Office of Noise Abatement and Control in the EPA	1
Protect future homebuyers from airport noise	1
Improve disclosure for future residents	1
Improve awareness of land use and aviation	1
Do not change flight patters because of Bressi Ranch	1
Include that the Study does not include safety	1
Add that CNEL are not intended for layperson to use to determine noise levels	1
Discuss historical fatal mid-air collision	1
Discuss that homes built within 1 mile of the airport are not considered compatible by the FAA	1
Recommend overflights easements as Bressi Ranch mitigation	1
Improve full disclosure and add 45, 50, and 55 db noise contours	1
Show helicopter arrival/departure paths	1
Use Wind 245 at 8kts for noise model, not Wind 212 at 4kts	1
Interview local helicopter flight school because operations may be expanding and may be more than a minor change in helicopter fleet	1
Recommend review and ensure helicopter flights tracks are accurate	1
Believe that operation estimates are too low	1
Increase public awareness	1
Network through the local user groups for more information	1
Total:	103

County of San Diego

DEPARTMENT OF PUBLIC WORKS

JOHN L. SNYDER
DIRECTOR

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Web Site: sdcdpw.org

February 11, 2005

David Kessler
Federal Aviation Administration
Western-Pacific Region
15000 Aviation Blvd.
Lawndale, CA 90261

Dear Mr. Kessler:

FAR PART 150 NOISE EXPOSURE MAPS – SUBMITTAL FOR FAA COMPLIANCE DETERMINATION

Enclosed are five (5) copies of the revised Noise Exposure Maps (NEMs), Volume I, for McClellan-Palomar Airport. These NEMs are submitted under the provisions of Title I of the Aviation Safety and Noise Abatement Act of 1979 (ASNA) and 14 CFR Part 150 and address your comments of November 22, 2004.

The County of San Diego, as owner and operator of McClellan-Palomar Airport, is submitting these NEMs for appropriate Federal Aviation Administration (FAA) determinations.

Should you have any questions regarding the enclosed document, please do not hesitate to contact me at (619) 956-4839. We appreciate your assistance in this matter.

Sincerely,

PETER DRINKWATER
Airport Director

PD:jk

Enclosures

U.S Department
of Transportation

**Federal Aviation
Administration**

Western-Pacific Region
Airports Division

P.O. Box 92007
Worldway Postal Center
Los Angeles, CA 90009

April 26, 2005

Mr. Peter Drinkwater
Airport Director
County of San Diego
Department of Public Works
5555 Overland Avenue, Suite 2188
San Diego, CA 92123-1295

Dear Mr. Drinkwater:

McClellan-Palomar Airport
Acceptance of Noise Exposure Maps

This letter is to notify you that the Federal Aviation Administration (FAA) has evaluated and accepted the Noise Exposure Maps and supporting documentation transmitted by your letter dated February 11, 2005, for the above referenced airport. In accordance with Section 103(a)(1) of the Aviation Safety and Noise Abatement Act of 1979 (the Act), we have determined that:

1. The 2004 Community Noise Equivalent Level (CNEL) noise contours and supporting documentation meet the requirements for the current Noise Exposure Map as of the date of submission as set forth in 14 Code of Federal regulations (CFR) Part 150, Airport Noise Compatibility Planning, Section 150.21(1), and are accordingly accepted under this Part.

2. The projected 2009 aircraft operations, the 2009 (Future) CNEL contours and supporting documentation are accepted as the description of the future conditions as set forth in Part 150, and are accordingly accepted under this Part.

FAA's acceptance of your Noise Exposure Maps is limited to the determination that the maps were developed in accordance with the procedures contained in Appendix A of Part 150. Such acceptance does not constitute approval of your data, information or plans.

The FAA will publish a notice in the *Federal Register* announcing the acceptance of the Noise Exposure Maps for McClellan-Palomar Airport. The FAA's acceptance of these Noise Exposure Maps under Part 150 in no way approves or endorses a Noise Compatibility Program, potential related federal funding of projects identified in such a program, or any related operating restrictions at the subject airport.

Should any questions arise concerning the precise relationship of specific properties to Noise Exposure Contours depicted on your Noise Exposure Maps, you should note that the FAA will not be involved in any

way in the determination of relative locations of specific properties with regard to the depicted noise contours, or in interpreting the maps to resolve questions concerning, for example, which properties should be covered by the provision of Section 107 of the Act. These functions are inseparable from the ultimate land use control and planning responsibilities of local government. These local responsibilities are not changed in any way under Part 150 or through FAA's acceptance of your Noise Exposure Maps. Therefore, the responsibility for the detailed overlaying of noise contours onto the maps depicting properties on the surface rests exclusively with you the airport operator, or those public agencies and planning agencies with which consultation is required under Section 103 of the Act. The FAA relies on the certification by you under 150.21 of FAR Part 150, that the statutorily required consultation has been accomplished.

Your notice of this determination, and the availability of the Noise Exposure Maps, which when published at least three (3) times in a newspaper of general circulation in the county where the affected properties are located, will satisfy the requirements of Section 107 of the Act. A sample publication announcement has been enclosed for your use.

Your attention is called to the requirements of Section 150.21(d) of Part 150, involving the prompt preparation and submission of revisions to these maps, if any actual or proposed change in the operation of the subject airport might create any substantial, new noncompatible land use in any areas depicted on the maps.

Thank you for your continued interest in Noise Compatibility Planning.

Sincerely,

for Mark A. McClardy
Manager, Airports Division

Enclosure

cc: APP-600

Issued in Washington, DC on May 3, 2005.

Randall D. Bennett,

Director, Office of Aviation Analysis.

[FR Doc. 05–9266 Filed 5–9–05; 8:45 am]

BILLING CODE 4910–62–P

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

Noise Exposure Map Notice for McClellan-Palomar Airport, Carlsbad, CA

AGENCY: Federal Aviation Administration, DOT.

ACTION: Notice.

SUMMARY: The Federal Aviation Administration (FAA) announces its determination that the noise exposure maps submitted by the County of San Diego for McClellan-Palomar Airport under the provisions of 49 U.S.C. 47501 *et. seq.* (Aviation Safety and Noise Abatement Act) and 14 CFR part 150 are in compliance with applicable requirements.

EFFECTIVE DATE: The effective date of the FAA's determination on the noise exposure maps is April 26, 2005.

FOR FURTHER INFORMATION CONTACT: Peter Ciesla, Federal Aviation Administration, Western Pacific Region, Airports Division, PO Box 92007, Los Angeles, California, 90009–2007, Telephone: (310) 725–3633.

SUPPLEMENTARY INFORMATION: This notice announces that the FAA finds that the noise exposure maps submitted by McClellan-Palomar Airport are in compliance with applicable requirements of Part 150, effective April 26, 2005. Under 49 U.S.C. 47503 of the Aviation Safety and Noise Abatement Act (hereinafter referred to as ''the Act''), an airport operator may submit to the FAA noise exposure maps which meet applicable regulations and which depict non-compatible land uses as of the date of submission of such maps, a description of projected aircraft operations, and the ways in which such operations will affect such maps. The Act requires such maps to be developed in consultation with interested and affected parties in the local community, government agencies, and persons using the airport. An airport operator who has submitted noise exposure maps that are found by FAA to be in compliance with the requirements of Federal Aviation Regulations (FAR), Part 150, promulgated pursuant to the Act, may submit a noise compatibility program for FAA approval which set forth the measures the operator has taken or proposes to take to reduce existing non-compatible uses and prevent the introduction of additional non-compatible uses.

The FAA has completed its review of the noise exposure maps and accompanying documentation submitted by the County of San Diego. The documentation that constitutes the ''noise exposure maps'' as defined in section 150.7 of Part 150 includes: Figure 5–4, Existing Conditions (2004) Noise Exposure Map and Figure 6–1, Future Condition (2009) Noise Exposure Map. The Noise Exposure Maps contain current and forecast information including the depiction of the airport and its boundaries, the runway configurations, land uses such as residential, commercial/travel/recreational, industrial/manufacturing, schools, government services, open space, and unplanned areas, and also those areas within the Community Noise Equivalent Level (CNEL) 60, 65, 70 and 75 noise contours. Estimates for the number of people and residences, within these contours for the year 2004 are shown in Table 5–12. Estimates of the future number of people and residences within the 2009 noise contours are shown in Table 6–7. Flight tracks for the existing and the five-year forecast Noise Exposure Maps are found in Figures 5–1, 5–2, and 5–3. The type and frequency of aircraft operations (including nighttime operations) are found in Table 5–1 for the existing conditions (2004) and Table 6–1 for the future conditions (2009). The FAA has determined that these noise exposure maps and accompanying documentation are in compliance with applicable requirements. This determination is effective on April 26, 2005.

FAA's determination on an airport operator's noise exposure maps is limited to a finding that the maps were developed in accordance with the procedures contained in appendix A of FAR Part 150. Such determination does not constitute approval of the applicant's data, information or plans, or a commitment to approve a noise compatibility program or to fund the implementation of that program. If questions arise concerning the precise relationship of specific properties to noise exposure contours depicted on a noise exposure map submitted under section 47503 of the Act, it should be noted that the FAA is not involved in any way in determining the relative locations of specific properties with regard to the depicted noise contours, or in interpreting the noise exposure maps to resolve questions concerning, for example, which properties should be covered by the provisions of section 47506 of the Act. These functions are inseparable from the ultimate land use control and planning responsibilities of local government. These local responsibilities are not changed in any way under Part 150 or through FAA's review of noise exposure maps. Therefore, the responsibility for the detailed overlaying of noise exposure contours onto the map depicting properties on the surface rests exclusively with the airport operator that submitted those maps, or with those public agencies and planning agencies with which consultation is required under section 47503 of the Act. The FAA has relied on the certification by the airport operator, under section 150.21 of FAR Part 150, that the statutorily require consultation has been accomplished.

Copies of the full noise exposure map documentation and of the FAA's evaluation of the maps are available for examination at the following locations:

Federal Aviation Administration, Community and Environmental Needs Division, APP–600, 800 Independence Avenue, SW., Washington, DC 20591.

Federal Aviation Administration, Western-Pacific Region, Airports Division, Room 3012, 15000 Aviation Boulevard, Hawthorne, California 90261.

Mr. Peter Drinkwater, Airport Director, County of San Diego, Department of Public Works, 5555 Overland Avenue, Suite 2188, San Diego, CA 92123–1295.

Questions may be directed to the individual named above under the heading **FOR FURTHER INFORMATION CONTACT.**

Issued in Hawthorne, California on April 26, 2005.

Mia Paredes Ratcliff,

Acting Manager, Airports Division, AWP–600, Western-Pacific Region.

[FR Doc. 05–9305 Filed 5–9–05; 8:45 am]

BILLING CODE 4910–13–M

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

Notice of Intent To Rule on Application 05–05–C–00–DAY To Impose and Use the Revenue From a Passenger Facility Charge (PFC) at Dayton International Airport, Dayton, OH

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Notice of intent to rule on application.

SUMMARY: The FAA proposes to rule and invites public comment on the application to impose and use the

Affidavit of Publication

MCCLENNAN-PAOMAR AIRPORT

ATTN: DANIEL THOMPSON

2192 PALOMAR AIRPORT ROAD

CARLSBAD, CA 92011

STATE OF CALIFORNIA} ss.
County of San Diego}

The Undersigned, declares under penalty of perjury under the laws of the State of California: That....She is a resident of the County of San Diego. THAT....She is and at all times herein mentioned was a citizen of the United States, over the age of twenty-one years, and that .....She is not a party to, nor interested in the above entitled matter; that ....She is..... Chief Clerk for the publisher of .....

The San Diego Union-Tribune

a newspaper of general circulation, printed and published daily in the City of San Diego, County of San Diego, and which newspaper is published for the dissemination of local news and intelligence of a general character, and which newspaper at all the times herein mentioned had and still has a bona fide subscription list of paying subscribers, and which newspaper has been established, printed and published at regular intervals in the said City of San Diego, County of San Diego, for a period exceeding one year next preceding the date of publication of the notice hereinafter referred to, and which newspaper is not devoted to nor published for the interests, entertainment or instruction of a particular class, profession, trade, calling, race, or denomination, or any number of same; that the notice of which the annexed is a printed copy, has been published in each regular and entire issue of said newspaper and not in any supplement thereof on the following date, to-wit:

MARCH 23, 26 and APRIL 04, 2007

Chief Clerk for the Publisher

Affidavit of Publication of

Legal Classified Advertisement

Ad # 158970

Ordered by: DANIEL THOMPSON

Sample NEM Notice 1/4/07

Pursuant to Section 107(a) & (b) [Title 49, United States Code, Section 47506] of the Airport Safety and Noise Abatement Act of 1979, as amended, notice is hereby given that on April 26, 2005, the Federal Aviation Administration completed its evaluation of, and formally accepted the Noise Exposure Maps (NEM) for McClellan-Palomar Airport, located in Carlsbad, California. The NEM were prepared pursuant to Title 14, Code of Federal Regulations, Part 150 (14 CFR Part 150). The completed noise exposure maps and supporting documentation are available to the general public in the reference section of the Carlsbad City Library, 1775 Dove Lane, Carlsbad, California.

RECEIVED
APR 05 2007
PALOMAR A/P

PROOF OF PUBLICATION
(2010 & 2011 C.C.P.)

This space is for the County Clerk's Filing Stamp

STATE OF CALIFORNIA
County of San Diego

I am a citizen of the United States and a resident of the County aforesaid: I am over the age of eighteen years and not a party to or interested in the above-entitled matter. I am the principal clerk of the printer of

North County Times

Formerly known as the Blade-Citizen and The Times-Advocate and which newspapers have been adjudicated newspapers of general circulation by the Superior Court of the County of San Diego, State of California, for the City of Oceanside and the City of Escondido, Court Decree number 171349, for the County of San Diego, that the notice of which the annexed is a printed copy (set in type not smaller than nonpariel), has been published in each regular and entire issue of said newspaper and not in any supplement thereof on the following dates, to-wit:

March 12th , 21st & 30th , 2007

I certify (or declare) under penalty of perjury that the foregoing is true and correct.

Dated at **SAN MARCOS** California

This 30th , Day of March, 2007

Signature
Jane Allshouse
NORTH COUNTY TIMES
Legal Advertising

Proof of Publication of

Pursuant to Section 107(a) & (b) [Title 49, United States Code, Section 47506] of the Airport Safety and Noise Abatement Act of 1979, as amended, notice is hereby given that on April 26, 2005, the Federal Aviation Administration completed its evaluation of, and formally accepted the Noise Exposure Maps (NEM) for McClellan-Palomar Airport, located in Carlsbad, California. The NEM were prepared pursuant to Title 14, Code of Federal Regulations, Part 150 (14 CFR Part 150). The completed noise exposure maps and supporting documentation are available to the general public in the reference section of the Carlsbad City Library, 1775 Dove Lane, Carlsbad, California.
NCT 2035868 • 03/12, 03/21, 03/30/2007

McClellan-Palomar Airport
FAR Part 150 Study Update

Noise Compatibility Program
Version 6

Volume 1 of 2

Prepared For:

McClellan-Palomar Airport

URS Project No. 27653003.01301

Approved by FAA

December 5, 2006

NOVEMBER 18, 2004

PALOMAR AIRPORT ADVISORY COMMITTEE
2198 Palomar Airport Road
Carlsbad, California 92008
Phone: (760) 431-4646

MINUTES

THURSDAY, NOVEMBER 18, 2004

Chairperson Ramona Finnila called the meeting to order at 7:06 p.m. on November 18, 2004, in the Carlsbad City Council Chambers, 1200 Carlsbad Village Drive, Carlsbad, California.

MEMBERS PRESENT
Chairperson Ramona Finnila
Vice-Chairperson Tim Hutter
John Christensen
Robert Fuselier
Ginna Reyes
Howard Williams

MEMBERS ABSENT
Chuck Collins
Bob Gates
Hugh Lyttelton
Tom Ricotta

Members present did represent a quorum.

COUNTY STAFF PRESENT

Floyd Best
Olivier Brackett
Dee Dee Phillips
Willie Vasquez

ROLL CALL AND INTRODUCTIONS

APPROVAL OF MINUTES

The minutes for the month of October 2004 were approved.

PUBLIC COMMENT ON ITEMS NOT ON THE AGENDA

There was no public comment.