

This appendix contains the related information documenting the County of San Diego's consultation with airport users and the Federal Aviation Administration (FAA). Following is the list of information included in this appendix.

- Distribution List
- Sample of Pilot Consultation Letter
- Pilot Responses
 - Ronald E. Lovick – President of Copy Club Carlsbad, April 29, 2005
 - Rick Baker – President of Palomar Airport Association, June 14, 2005
 - Phyllis Trombi – Past President of Gillespie Pilots Association, June 14, 2005
 - Alan Cruise – President of Oceanside Airport Association, June 30, 2005
- FAA Comments on the NCP Version 2
 - Response to Comments
- FAA Comments on the NCP Version 5
 - Response to Comments
 - FAA Review Comments

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April 25, 2005

Name

Organization

Address

City, State Zip

SUBJECT: McCLELLAN-PALOMAR AIRPORT FAR PART 150 STUDY

Dear Pilot/Aircraft Owner:

The McClellan-Palomar Airport is currently in the process of updating their FAR Part 150 Noise Compatibility Program. One aspect of the program is the evaluation of operational procedures for their potential to reduce noise exposure on residential and other noise-sensitive land uses in the vicinity of the airport.

The purpose of the noise compatibility program is to:

- To promote a planning process through which the airport operator can examine and analyze the noise impact created by the operation of the airport, as well as the costs and benefits associated with various alternative noise compatibility techniques, and
- To bring together through public participation, agency coordination, and overall cooperation, all interested parties with their respective authorities and obligations, thereby facilitating the creation of an agreed upon noise compatibility plan specifically suited to CRQ, while at the same time not unduly affecting the national air transportation system.

URS Corporation (URS), as the airport's noise consultant, is in the process of evaluating fourteen operational measures that were included in the 1992 Part 150 Noise Compatibility Program (designated OM-1 through OM-14), and eleven operational measures that were included in the PAR2000 Final Report (designated OM-15 through OM-25). These measures are briefly described in the attached table.

At the present time, we are considering six noise compatibility measures. These measures are:

- When traffic volume permits, delay the Runway 24 left turn departures until aircraft is west of I-5 (see OM-4).
- Develop a GPS Departure Procedure for Runway 24 that emulates the VFR "Alpha Departure" (see OM-5).
- Modify right turn for Runway 24 departure (see OM-15).

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- Discourage the use of the south pattern on Runway 24 for arrivals (see OM-18).
- Amend practice approach procedure (see OM-20).
- Amend "Quiet Hours" to include all aircraft except emergency flight operations (see OM-24).

In considering the approval or disapproval of recommended operational measures, the FAA takes into account whether or not there was consultation with the aircraft operators, and whether the aircraft operators showed a willingness to carry out the recommended measures for noise compatibility purposes.

If you have any questions regarding the enclosed information, or would like additional information, please contact URS directly.

Deborah Murphy Lagos, Sr. Project Manager, 813-636-2445, deborah_murphy@urscorp.com

We appreciate your interest in these issues, and welcome your comments about the six measures identified above, or any of the other measures listed in the table, whether they are in favor or opposed. Please send your comments via e-mail, mail or fax them to me by June 30, 2005, at the address below. We encourage you to distribute this information to your organization's members.

Ms. Deborah Murphy Lagos, Sr. Project Manager
URS Corporation
7650 W. Courtney Campbell Causeway
Tampa, FL 33607-1462
FAX: (813) 636-2400

Sincerely,

URS CORPORATION

Deborah Murphy Lagos
Senior Project Manager

Enclosures: Operational Measures Evaluated in the Part 150 Noise Compatibility Program
 Detailed Description of OM-4
 Detailed Description of OM-5
 Detailed Description of OM-15
 Detailed Description of OM-18
 Detailed Description of OM-20
 Detailed Description of OM-24

Operational Measures Evaluated in the Part 150 Noise Compatibility Program

Measure ID	1992 NCP Operational Measures	FAA Record of Approval
OM-1	Raise the traffic pattern altitudes.	No action. Insufficient data.
OM-2	Increase the instrument landing system (ILS) and visual approach slope indicator (VASI) angles from 3.2 degrees to 3.76 degrees.	Disapproved due to increased complexity.
OM-3	Modify the Oceanside very high-frequency omnidirectional radio range (VOR) approach to maintain higher altitudes over Carlsbad.	Disapproved due to reduced utility of the airport.
OM-4	Require visual departures proceeding to the coast from Runway 24 to turn to a 250-degree heading and fly through the gap between Solamar and Terramar.	Approved as Voluntary.
OM-5	Develop a jet standard instrument departure (SID) for Runway 24 operations to turn to a 250-degree heading, perform a thrust cutback procedure at Interstate 5, and maintain heading and altitude until at least three miles offshore.	No Action. Insufficient data.
OM-6	Conduct a test in which Runway 24 arrivals would maintain gear and flap settings from the outer marker until past Palomar West Mobile Home Park.	Approved as Voluntary.
OM-7	Require jet arrivals to Runway 24 to use the ILS.	Disapproved due to no benefit demonstrated; rules already apply.
OM-8	Specify Runway 24 as the preferential runway.	Approved as Voluntary. Consult with ATCT.
OM-9	Increase the helicopter route altitude to 1,000 feet mean sea level (MSL).	Disapproved pending data.
OM-10	Locate engine maintenance runup area to the west side of the Airport.	Disapproved due to insufficient data.
OM-11	Hold aircraft at the parking position when departure delays are high.	Disapproved due to no benefit demonstrated.
OM-12	Discourage the use of the Airport by aircraft operating at a maximum weight of 60,000 pounds or more.	Disapproved due to insufficient data.

Measure ID	1992 NCP Operational Measures	FAA Record of Approval	
OM-13	Discourage jet training operations, particularly by Stage 2 aircraft.	Approved as Voluntary but beware of Part 161.	
OM-14	Implement a voluntary Stage 2 jet departure curfew between 10 pm and 7 am.	Approved as Voluntary but beware of Part 161.	
Measure ID	PAR 2000 Operational Measures	PAR Votes in Favor	PAR Votes Opposed
OM-15	Modify right-turning Runway 24 departure	NA	NA
OM-16	Encourage arriving pilots to maintain altitude as long as practical and not descend below pattern altitude before entering the traffic pattern	13	0
OM-17	Discourage certain departure routes for aircraft that create excessive noise	12	0
OM-18	Discourage use of the more noise sensitive south pattern on Runway 24 for arrivals	1	12
OM-19	Conduct test of "Contact Clearance Delivery"	13	0
OM-20	Amend the Practice Missed Approach Procedure	13	0
OM-21	Use NMS to identify low-flying aircraft	13	0
OM-22	Consider extending runway to the east for Runway 24 departures	9	3
OM-23	Initiate a Part 161 Study	4	7
OM-24	Amend "Quiet Hours" to Include All Aircraft Except Emergency Flight Operations	11	2
OM-25	Explore ATC techniques to reduce arrival/departure deviations over residential areas	13	0

OM-4

REQUIRE VISUAL DEPARTURES TO FLY BETWEEN SOLAMAR AND TERRAMAR (OM-4)

The 1992 NCP included a recommendation to require visual departures proceeding to the coast from Runway 24 to (a) make a right turn as soon as feasible to a heading of 250 degrees, (b) fly over the vacant area between the communities of Terramar and Solamar, and (c) maintain heading until one mile past the shoreline before turning north or south. The intersection of Interstate 5 (I-5) and Palomar Airport Road can be used as a visual marker for keeping on course. It is recommended that pilots keep just to the right of this intersection. This “gap” between the communities is approximately 2,500 feet wide. This procedure would not apply to aircraft making immediate turns proceeding east, or to aircraft remaining in the traffic pattern. The 1992 NCP recommended that this procedure be the required Runway 24 departure procedure.

The FAA approved this as a voluntary measure only. This measure reflects a recommended practice that is already in effect at the airport.

It appears that a slightly modified form of the procedure was implemented following FAA’s Record of Approval. The “Alpha Departure” is published on the airport’s website as a voluntary noise abatement procedure (VNAP), and is shown in [Figure 11-2](#). It instructs jets to fly a 250-degree ground track at the best rate of climb until approximately ½ mile offshore. National Business Aircraft Association (NBAA) standard noise abatement departure procedures are recommended. It instructs piston aircraft to hold turns until reaching 800 feet MSL, with the “Alpha North” pattern preferred. On the downwind leg, climb to at least 1,000 feet AGL prior to initiating a turn to the desired course.

[Figure 11-3](#) illustrates flight track density for daytime departures on Runway 24, based on CY 2002 data collected from the airport’s Global Environmental Management System (GEMS). [Figure 11-4](#) illustrates modeled departure flight tracks for Runway 24, which were developed from the flight track density maps. The line thickness of the flight track represents the relative weighted utilization of the track, i.e., the thicker the line, the more aircraft use that track. Tracks 24D3, 24D4, 24D5, 24D7, 24D8, 24D10, and 24D11 generally follow the “Alpha Departure” procedure, and account for 57.1 percent of all departures.

The following table indicates the number of fixed wing aircraft utilizing each track during the daytime, evening, and nighttime periods on the average annual day.

Average Daily Departures on Runway 24

Track ID	Number of Average Daily Departures				Percentage
	Day	Evening	Night	Total	
24D1	27.9	1.0	0	28.9	14.3%
24D2	27.9	1.0	0	28.9	14.3%
24D3	37.2	0	0	37.2	18.4%
24D4	37.2	2.0	0	39.2	19.4%
24D5	27.9	2.0	0	29.9	14.8%
24D6	27.9	0	0	27.9	13.8%
24D7	0	2.0	0	2	1.0%
24D8	0	2.0	0	2	1.0%
24D9	0	0	1.3	1.3	0.6%
24D10	0	0	2.9	2.9	1.4%
24D11	0	0	2.2	2.2	1.1%
TOTAL	186	10	6.4	202.4	100%

As shown in [Table 11-2](#), a total of 30.1 aircraft per day, or 14.9 percent of all fixed wing aircraft departures, are bound for destinations southeast of the airport. Approximately 93 percent of these departures utilize track 24D6, which begins at the departure end of Runway 24, continues for a distance of one nautical mile beyond the end of the runway along the extended runway centerline, then transitions to the left to a compass heading of 076 degrees passing over residential areas located adjacent to and southwest of the airport. The remaining 7 percent of these departures utilize track 24D11, which generally follows the “Alpha Departure” procedure, by delaying the left turn until reaching the coast.

An analysis of these left turn departure tracks for Runway 24 was conducted to examine the potential for reducing noise exposure to residential areas southwest of the airport. Fifty percent of aircraft currently using track 24D6 were shifted to track 24D11 to avoid residential areas southwest of the airport. The tracks are shown on [Figure 11-4](#). It was assumed that this operational procedure would be a voluntary measure only; and as such, that approximately 50 percent of aircraft currently using track 24D6 would use track 24D11 instead, when weather conditions and traffic efficiency allowed.

The *2009 Future Condition NEM, Without Program Implementation*, was used as a baseline condition for evaluating the effectiveness of this alternative. The baseline condition was only changed by adjusting Runway 24 departure track utilization. All other data elements of the *2009 Future Condition NEM, Without Program Implementation*, remained unchanged.

Figure 11-5 compares CNEL 60 and 65 dB contours of the *2009 Future Condition NEM, Without Program Implementation* to the CNEL 60 and 65 dB noise contours resulting from this alternative. The following table provides detailed information regarding the number of housing units and population within the resulting CNEL 60 dB contours. With 50 percent compliance, seven less people and three less housing units would be exposed to noise levels at or above CNEL 60 dBA.

Noise Exposure Estimates for OM-4

Noise Exposure	CNEL \geq 60 dBA		
	2009 No Action	Reduced Use of Track 24D6	Benefit
Population	413	406	7
Number of Housing Units	155	152	3

Note: There are no housing units within the CNEL 65 dBA contour.

Sources: Integrated Noise Model, Version 6.1
URS Corporation, 2005.

During the development of this alternative, the consideration of air traffic efficiency was discussed with the Airport Traffic Control Tower (ATCT) at CRQ. The ATCT's concern is the reduction of air traffic efficiency when a slower aircraft precedes a faster aircraft. If a slower aircraft remains on runway heading without executing an immediate left turn, a faster aircraft would be required to hold until the slower aircraft cleared the flight path.

The potential use and feasibility of developing a single noise abatement departure corridor along the extended Runway 24 centerline was discussed with ATCT representatives. The proposed corridor would serve to congregate all Runway 24 departures along a single straight-out path with initial turns to the north or south commencing only after the passing west of the coastline.

Current air traffic handling procedures at CRQ have been historically developed to provide the most efficient and expeditious movement of traffic. These procedures also serve to enhance the overall safety of all departures. While technically feasible from a safety and air traffic routing perspective, the consolidation of all Runway 24 departures along a single route imposes operational air traffic handling restrictions while also degrading runway peak hour and annual service volume capacity.

ATC handling procedures require that controllers provide adequate en-trail separation between all departing aircraft. If all Runway 24 departing aircraft were required to fly along an extended runway heading, ATC rules dictate that adequate separation between each successive aircraft departure be provided. This would require that ATCT personnel monitor the relative ground speed of each aircraft and the closure rates between any two aircraft. When departing low performance aircraft are followed by faster high performance aircraft, the differences in departure ground speed may require that air traffic

controllers meter the departure rates on an aircraft-by-aircraft basis. These operational requirements and restrictions may impose severe operational and capacity restrictions such as:

- Imposed departure holds,
- Departure delays,
- Departure speed restrictions,
- Increased ground movement fuel burn,
- Adverse air quality impacts, and
- Reductions in runway capacity and peak hour throughput.

However, when traffic volume is low, it would be practical for aircraft to proceed on the 250 degree heading with initial turns to the south commencing only after passing west of the coastline.

INCLUDE:

FIGURE 11-2 VOLUNTARY NOISE ABATEMENT PROCEDURE

FIGURE 11-3 FLIGHT TRACK DENSITY FOR RUNWAY 24 DEPARTURES

FIGURE 11-4 MODELED FLIGHT TRACKS FOR RUNWAY 24 DEPARTURES

FIGURE 11-5 CNEL CONTOURS FOR REDUCED USE OF TRACK 24D6

OM-5

DEVELOP A SID FOR RUNWAY 24 DEPARTURES

The 1992 NCP included a recommendation to prepare a Standard Instrument Departure (SID) with the FAA concerning instrument flight rules (IFR) jet departures from Runway 24. This procedure would provide a “gate” for initiating a climb or heading changes after initial departure altitude is reached. Aircraft would maintain a [magnetic] heading of 250 degrees and climb to a minimum altitude of 2,000 feet MSL before crossing I-5 or the Oceanside 131-degree radial, then reduce power as acceptable for safe flight, and maintain the initial heading and initial altitude of 2,000 to 3,000 feet MSL until reaching the gate at three miles past the shoreline.

This recommended procedure, in conjunction with the Runway 24 visual departure procedure described above in [OM-4](#), should eliminate most of the direct overflights of Altamira, Terramar, Solamar, and Seagate Village. The 1992 NCP indicated that a capacity analysis was performed to determine the impact of aircraft departing from Runway 24 and proceeding out over the coast on the 250-degree [magnetic] heading. It was found that the procedure would have a minimal impact on airport capacity and that the maximum number of departures that could occur per hour would be reduced from 98 to 96.

The FAA indicated no action was required at the time, because additional information and analysis was required under Section 104(b) of the Airport Safety and Noise Abatement Act (ASNA).

A Standard Instrument Departure procedure (SID) is an Air Traffic Control (ATC) requested and developed departure typically used in busy terminal areas. The SID procedures are published and are used by ATC to increase capacity of terminal airspace, effectively control the flow of traffic with minimum communication and reduce environmental impact through noise abatement procedures. The development of a SID is predicated on the availability of electronic navigational aids (NAVAIDS) that provide pre-established navigable routes between NAVAIDS or to published fixed points in space that are established by the proximal location and relative bearing between two or more NAVAIDS. Because the NAVAIDS or waypoints required to develop published navigable routes along the departure route from Runway 24 are not currently available, the development and use of a noise abatement SID for Runway 24 cannot be implemented.

The FAA and certain U.S. airport owner/operators are working with the FAA in developing alternative departure procedures that utilize emerging navigational technologies such as the Global Positioning System (GPS). The GPS is a satellite-based navigation system made up of a network of 24 satellites placed into orbit by the U.S. Department of Defense. GPS was originally intended for military applications, but in the 1980s, the government made the system available for civilian use. Using GPS, the FAA is developing a variety of arrival and departure procedures that are based on established parameters such as Area Navigation (RNAV).

RNAV is a method of navigation that permits aircraft operation on any desired course within the coverage of station-referenced navigation signals or within the limits of self contained system capability, or a combination of these. As part of the RNAV, waypoints are used as predetermined geographical positions that are defined in terms of latitude/longitude coordinates. Waypoints may be a simple named point in

space or associated with existing NAVAIDS, intersections, or fixes. A waypoint is most often used to indicate a change in direction, speed, or altitude along the desired path.

The potential for the development of a Runway 24 noise abatement departure procedure utilizing GPS and RNAV capabilities is high, however, the establishment and use of RNAV procedures for noise abatement purposes is in the early stages of development.

One potential application of a GPS/RNAV departure procedure would involve the establishment of a waypoint west of the coastline along the extended Runway 24 centerline. As an established geographical point in space, the waypoint would be used as an initial point of course change to the north and south. The application of this noise abatement procedure would serve to provide positive course guidance while channeling all departures using this GPS/RNAV procedure along a narrow geographically-limited departure path to the coastline.

OM -15

MODIFY RIGHT TURN FOR RUNWAY 24 DEPARTURE

The PAR2000 made a proposal to change the right turning departure procedure for Runway 24. The stated purpose was to minimize aircraft noise and low-flying aircraft over homes north of the airport. The proposed track is shown on [Figure 11-6](#), and is designated 24DP1. It was described as follows: after take-off, make a climbing right 45-degree turn to a heading of 285 degrees. Fly VFR departure over Macario Canyon (east of Lego Land and west of residential area north of the airport) and make a right turn over the Aqua Hendionda Lagoon wetlands and Cannon Road (unfinished) and fly to the Vista VFR Departure Point (Courthouse buildings). Based on the track shown on [Figure 11-6](#), the PAR2000-proposed turn appears to be initiated at a point approximately 3,000 feet from the start of take-off roll.

From an aircraft performance standpoint, many of the aircraft operating at CRQ would not have gained sufficient altitude to initiate a climbing right 45-degree turn 3,000 feet from the start of take-off roll. Hence, aircraft would initiate the climbing right 45-degree turn at a myriad of distances from the start of take-off roll. This would result in aircraft flying over a much broader area than intended by this procedure, rather than minimizing overflights of homes north of the airport.

In addition, there is a helipad located on the north side of the runway, approximately 3,000 feet from the end of Runway 24. As shown, the climbing right 45-degree turn would fly directly over, or in very close proximity to this helipad. The PAR2000-proposed track also intersects, while aircraft are at low altitudes, with the helicopter departure and arrival tracks to and from the north and the helicopter Touch and Go (TNG) track. This presents an operational safety concern and should be avoided.

For this Part 150 study, the PAR2000-proposed departure path was modified to avoid the helipad and helicopter tracks, as well as make it more feasible for most aircraft to follow. Designated as departure track 24DP2, the track begins at the departure end of Runway 24, continues for a distance of 1 nautical mile beyond the end of the runway along the extended runway centerline, and then transitions to the right to a compass heading of 285 degrees passing over the Aqua Hendionda Lagoon. The course then transitions to a compass heading of 41 degrees passing over the Aqua Hendionda Creek that lies between two residential areas. The modified track is shown on [Figure 11-7](#). It was assumed all aircraft using the 24D1, 24D2, and 24D9 departure tracks would utilize 24DP2 instead. This modified right-turning departure track for Runway 24 was evaluated using the INM to identify potential noise benefits.

Discussions were held with the FAA Palomar ATCT and airport representatives regarding operational and safety issues as they specifically relate to the proposed departure track 24DP2. Two primary concerns were raised by ATCT representatives: operational safety and transference of aircraft-generated noise to land areas immediately north of the airport.

Issues related to operational safety included the ATCT controller's ability to maintain adequate visual contact with arriving or departing aircraft operating within a region of airspace located northwest of the airport.

ATCT representatives stated that, in general, it is easier, more efficient, and safer to provide positive ATC and aircraft separation within the local airport traffic pattern and terminal airspace when aircraft remain within the visual range of ATCT controllers. When aircraft operate along extended arrival, departure or airport traffic pattern entry points, visual separation and positive control become increasingly difficult.

The issue of the increased potential for mid-air collisions between arriving aircraft on tracks 24A4/24A5 and the departing aircraft on track 24DP2 was of primary concern because of a mid-air collision that occurred within the same general area in September of 2002. Examples of such potential conflicts included IFR arrival aircraft using the Oceanside VORTAC 120-degree radial as part of the published

non-precision VOR-A circling approach and VFR arrival aircraft using the FAA's standard 45-degree entry procedure to enter the airport traffic pattern. Aircraft using either of the two arrival procedures would most likely be operating at altitudes that coincide with departing aircraft on tracks 24D1, 24D2, and 24D9.

The potential for pilots to utilize terrain features such as the Aqua Hendionda Creek is at question because of the likelihood of extended periods of low visibility or low-lying fog that forms along the lowest points of the local terrain. When such meteorological conditions occur, it is doubtful that pilots operating under VFR would be able to use these types of visual landmarks for visual course guidance or dead reckoning purposes.

The *2009 Future Condition NEM, Without Program Implementation*, was used as a baseline condition for evaluating the effectiveness of this measure. The baseline condition was only changed by adjusting flight track utilization to include the use of Track 24DP2. All other data elements of the *2009 Future Condition NEM, Without Program Implementation*, remained unchanged.

All of the departure operations on tracks 24D1, 24D2, and 24D9 that were modeled in the 2009 future condition were modeled on track 24DP2 instead. As shown in **Table 11-2**, there are approximately 59.1 departures per day on these three tracks. **Figure 11-8** compares the CNEL 60 and 65 dBA contours of the *2009 Future Condition NEM, Without Program Implementation* to the CNEL 60 and 65 dBA noise contours resulting from use of track 24DP2 instead of tracks 24D1, 24D2, and 24D9.

INCLUDE:

FIGURE 11-6 RUNWAY 24 DEPARTURE TO 285° PROPOSED BY PAR2000

FIGURE 11-7 MODIFIED RUNWAY 24 DEPARTURE TO 285°

FIGURE 11-8 CNEL CONTOURS FOR USE OF TRACK 24DP2

OM-18

DISCOURAGE THE USE OF THE SOUTH PATTERN ON RUNWAY 24 FOR ARRIVALS

The PAR2000 concluded that the current CRQ arrival procedures do not restrict arrival routes to avoid noise-sensitive areas. Their recommendation was to discourage the use of the more noise sensitive approach routes to Runway 24 that over fly noise-sensitive land areas south of the airport.

Current approach routes to Runway 24 from areas south of the airport generally follow the coastline then transitions to a downwind leg that parallels the runway at an offset distance of approximately 5,000 feet. Analysis of RADAR tracks for aircraft arriving to Runway 24 reveals two distinct left “base” legs having different lengths for the final approach. Although the turn radius of each base leg is similar, the length of final approach differs and most likely represents the difference in required approach speed or required distance for establishment of landing flaps or gear setting. The close in final appears to be one nautical mile in length. The longer approach path appears to approximately twice as long. Discussions with CRQ ATCT personnel indicate that the two established left base turns to the final approach leg represent the most safe and efficient handling of arriving aircraft to Runway 24 from an air traffic handling perspective.

Proposals to extend the downwind leg of these approach paths were discussed with ATCT personnel and the following issues and/or operational concerns were raised:

- Required visibility from ATCT - Extending the downwind leg of the approach to Runway 24 will require turns to the final approach that may be beyond the visibility range of the ATCT controllers. Air traffic separation and operational safety offered by the ATCT may be serious compromised.
- Consolidation of low and high performance straight-in aircraft operations - When aircraft are vectored to the Runway 24 straight-in ILS the aircraft are initially handled by Southern California TRACON (SOCAL) prior to reaching the DEASY outer marker beacon that is located 5.1 nautical miles from the runway end along the extended runway centerline. Aircraft that are cleared for the approach by ATCT and established on the ILS glide path are descending along the 3.2-degree ILS glide path from a minimum altitude of 2,300 feet MSL. The intermixing of aircraft from the south would most likely involve aircraft entering the final approach path at various altitudes, speeds and rates of descent. These actions as well as variations in aircraft pilot technique and skill level will serve to further complicate air traffic handling of arrivals to Runway 24.
- Required coordination and handoff with SOCAL - As described above, the addition of aircraft within the final approach to Runway 24 will require additional coordination and communication between SOCAL and the ATCT as well as SOCAL and aircraft executing any of the published instrument approach procedures to the airport.

OM-20

AMEND PRACTICE MISSED APPROACH PROCEDURE

The PAR2000 recommended study and development of an amended practice “Missed Approach Procedure” for noise reduction. The current local ATCT and SOCAL Approach Control procedures for the handling of practice missed approach break-offs to the published Runway 24 ILS approach are based on two considerations, noise abatement to land areas immediately adjacent and south of the airport and to facilitate the safe and efficient separation of low-level missed approach operations from the airport traffic pattern.

When the ATCT is in operation, the majority of touch-and-go and regular airport traffic pattern operations are directed to the north side of the airport using non-standard right-hand traffic for Runway 24 and standard left-hand traffic for Runway 6. With the majority of the airport traffic pattern operations occurring north of the airport, ATCT instructs the pilot to make an immediate left turn to a compass heading of 180 degrees for traffic avoidance, climb and maintain an altitude of 3,000 feet MSL, and to contact SOCAL approach control for further instructions. While serving to mitigate noise impacts to land areas north of the airport, these actions also allow for the efficient and safe handling of recurring practice low-level missed approach operations.

To change these established procedures would most likely increase the number of aircraft flights over land areas north of the airport, increase ATCT workload, require additional separation of aircraft flights within and near the airport traffic pattern and complicate the local hand-off of control from ATCT to SOCAL following the execution of the missed approach procedure.

OM-24

AMEND "QUIET HOURS" TO INCLUDE ALL AIRCRAFT EXCEPT EMERGENCY FLIGHT OPERATIONS

While the current voluntary noise abatement procedure (VNAP) applies to all aircraft, the quiet hours (2200-0700 local time) apply only to jet aircraft and flight training operations.

The PAR2000 recommended that all voluntary guidelines be applied across the board to all types of aircraft utilizing the airport and standard quiet hours be applied to all flight operations, emergency flight operations excepted.

The following VNAPs are published on the airport's website:

General: Voluntary procedures 2200-0700 (local)

- Jet take-off and landing "Quiet Hours."
- Flight training operations such as touch-and-goes and multiple practice approaches are discouraged during Quiet Hours.

FAA Advisory Circular 150/5020-1 indicates that curfews are an effective though costly method of controlling airport noise. Since unwanted noise is most pronounced in the late evening or early morning hours, curfews are usually implemented to restrict nighttime operations. A nighttime curfew could be in effect between 10:00 p.m. and 7:00 a.m., which corresponds to the nighttime period for the CNEL calculation, or, to be less restrictive, could be in effect between midnight and 6:00 a.m., for example. A curfew could also apply only to departures, only to arrivals, or to both departures and arrivals. A curfew could be implemented in conjunction with a restriction based on relative noisiness, to restrict use of the airport during certain nighttime hours to aircraft that generated noise levels below a specified threshold.

The prohibition of all traffic during the noise-sensitive hours (Quiet Hours) may place a significant constraint on certain businesses currently operating at CRQ. Early morning departures are often very attractive for business travelers who wish to reach their destination with a large part of the workday ahead of them. Similarly, late night arrivals are important by allowing travelers to return home without incurring the costs of another night away. In addition, air carriers need to position their aircraft so they are ready for the bank of early morning departures. This tends to mandate nighttime arrivals.

The *2009 Future Condition NEM, Without Program Implementation*, was used as a baseline condition for evaluating the effectiveness of this measure. The baseline condition was only changed by adjusting nighttime operations. All other data elements of the *2009 Future Condition NEM, Without Program Implementation*, remained unchanged.

It was presumed that 100 percent compliance with this VNAP is not likely to be achieved. It is anticipated that compliance will fall somewhere between 50 and 100 percent. Therefore, two scenarios were modeled, using the INM, to identify the potential noise benefits of this VNAP. There are a total of 18.7 fixed wing and helicopter operations per night during the average annual day. It was generally

assumed that operations that currently occur during late night hours would shift to evening, and those that occur during early morning hours would shift to daytime.

First, 100 percent of the nighttime operations that were modeled in the 2009 future condition were eliminated by shifting 50 percent of those operations to daytime (0700 – 1900) and the remaining 50 percent to evening (1900-2200). This is referred to as 100 percent compliance with Quiet Hours.

Second, 50 percent of the nighttime operations that were modeled in the 2009 future condition were eliminated by shifting 25 percent of the nighttime operations to daytime and an additional 25 percent of the nighttime operations to evening. This is referred to as 50 percent compliance with Quiet Hours.

The following table provides detailed information regarding the number of housing units and population within the resulting CNEL 60 dBA contours. Obviously, there is greater benefit with 100 percent compliance, than with 50 percent compliance. With 50 percent compliance, 59 less people and 23 less housing units would be exposed to noise levels at or above CNEL 60 dBA. With 100 percent compliance 97 less people and 38 less housing units would be exposed to noise levels at or above CNEL 60 dBA.

Noise Exposure Estimates for OM-24

Noise Exposure	CNEL \geq 60 dBA				
	2009 No Action	50% Compliance	Benefit	100% Compliance	Benefit
Population	413	354	59	316	97
Number of Housing Units	155	132	23	117	38

Note: There are no housing units within the CNEL 65 dBA contour.

Sources: Integrated Noise Model, Version 6.1
URS Corporation, 2005.



April 29, 2005

Ms. Deborah Murphy Lagos, Sr. Project Manager
 URS Corporation
 7650 W. Courtney Campbell Causeway
 Tampa, FL 33607-1462
 FAX: (813) 636-2400

Ronald E. Lovick
 President
 Copy Club Carlsbad
 2321 Dana Ct
 Carlsbad, CA 92008

Subject: KCRQ Part 150 Study Comment Period

Attention URS Corporation;

I have just been informed that the McClellan-Palomar Airport is in the process of updating their FAR Part 150 Noise Compatibility Program. One aspect of the program is the evaluation of operational procedures for their potential to reduce noise exposure on residential and other noise-sensitive land uses in the vicinity of the airport.

THIS WILL HAVE A DEVASTATING EFFECT ON ALL PALOMAR AIRPORT USERS!

You are evaluating fourteen operational measures included in the 1992 Part 150 Noise Compatibility Program, and eleven operational measures in the PAR2000 Final Report. These measures are listed with my position in the following table.

Measures	Position
Raise the traffic pattern altitudes	NO – not in the best interests of the community!
Increase instrument landing system and visual approach slope indicator angles from 3.2 degrees to 3.76 degrees	NO – not in the best interests of the community!
Modify the Oceanside very high-frequency omnidirectional radio range (VOR) approach to maintain higher altitudes over Carlsbad.	NO – not in the best interests of the community!
Require visual departures proceeding to the coast from Runway 24 to turn to 250-degree heading and fly through a gap between Solamar and Terramar	NO – not in the best interests of the community!
Develop a jet standard instrument departure for Runway 24 to turn to 250-degrees, perform thrust cutback at Interstate 5, and maintain heading and altitude until three miles offshore	NO – not in the best interests of the community!
Conduct a test of Runway 24 arrivals that maintain gear and flap	NO – not in the best interests of

settings until past Palomar West Mobile Home Park	the community!
Require jet arrivals to Runway 24 to use the ILS.	NO – not in the best interests of the community!
Specify Runway 24 as the preferential runway. Approved as Voluntary.	NO – not in the best interests of the community!
Increase the helicopter route altitude to 1,000 feet mean sea level	NO – not in the best interests of the community!
Locate engine maintenance runup area to the west side of the Airport	NO – not in the best interests of the community!
Hold aircraft at parking position when departure delays are high.	NO – not in the best interests of the community!
Discourage the use of the Airport by aircraft operating at a maximum weight of 60,000 pounds or more	NO – not in the best interests of the community!
Discourage jet training operations, particularly by Stage 2 aircraft.	NO – not in the best interests of the community!
Implement a voluntary Stage 2 jet departure curfew between 10 pm and 7 am	NO – not in the best interests of the community!
Modify right-turning Runway 24 departure	NO – not in the best interests of the community!
Encourage pilots to maintain altitude as long as practical and not descend below pattern altitude before entering traffic pattern	NO – not in the best interests of the community!
Discourage certain departure routes for aircraft that create excessive noise	NO – not in the best interests of the community!
Discourage use of the more noise sensitive south pattern on Runway 24 for arrivals	NO – not in the best interests of the community!
Conduct test of "Contact Clearance Delivery"	NO – not in the best interests of the community!
Amend the Practice Missed Approach Procedure	NO – not in the best interests of the community!
Use NMS to identify low-flying aircraft	NO – not in the best interests of the community!
Consider extending runway to the east for Runway 24 departures	NO – not in the best interests of the community!
Initiate a Part 161 Study	NO – not in the best interests of the community!
Amend "Quiet Hours" to Include All Aircraft Except Emergency Flight Operations	NO – not in the best interests of the community!
Explore ATC techniques to reduce arrival/departure deviations over residential areas	NO – not in the best interests of the community!

I understand the FAA wants to hear from aircraft operators on their willingness to carry out the recommended measures for noise compatibility purposes.

As an aircraft owner and operator at McClellan-Palomar Airport, I want to make it perfectly clear that I DO NOT support any additional restrictions of any kind at our Airport, PERIOD!

Sincerely,



Ron Lovick
President



June 14, 2005

Ms. Deborah Murphy Lagos, Sr. Project Manager
URS Corporation
7650 W. Courtney Campbell Causeway
Tampa, FL 33607-1462
FAX: (813) 636-2400

Re: MCCLELLAN-PALOMAR AIRPORT FAR PART 150 STUDY request for comment from PAA

Dear Ms. Murphy Lagos:

The PAA is a non-profit organization representing aviation users for Palomar Airport (KCRQ). We would like to thank you for the opportunity to comment on your draft FAR Part 150 recommendations dated April 25th. In response our Land Use and Safety committees distributed the draft for a survey of our airport's private pilots, commercial pilots, flight instructors and businesses. Here are the survey results:

1. OM-4 recommends "When traffic volume permits, delay the Runway 24 left turn departures until aircraft is west of I-5." Response: We see this as a safety issue. The more non-standard procedures or recommendations we implement, the more chance for accidents. We do not support OM-4.
2. OM-5 recommends "Develop a GPS Departure Procedure for Runway 24 that emulates the VFR "Alpha Departure." Response: If this aligns GPS with non-GPS IFR departure tracks we support OM-5.
3. OM-15 recommends "Modify right turn for Runway 24 departure" (To minimize flying over homes to the north). Response: This is a potential safety hazard. Please see comments for OM-4. We do not support OM-15.
4. OM-18 recommends "Discourage the use of the south pattern on Runway 24 for arrivals." Response: Recommending shifting traffic to the north side is a mid-air collision just waiting to happen. Additionally, current language in aviation publications recommending using north side should be stricken. The airport is too busy for such recommendations and pilots/ATC should be free to decide what is safest at the time without retribution when needing to go against a "recommendation." We do not support OM-18.
5. OM-20 recommends "Amend practice approach procedure (see OM-20)." Response: ATC must retain all rights to position traffic as they see fit for the safety of all—for pilots and those on the ground. Current practices are probably the safest solution. We do not support OM-20.
6. OM-24 recommendation "Amend Quiet Hours to include all aircraft except emergency flight operations." Response: The airport is a 24hr facility. Pilots already generally do not fly late at night or early mornings except when it is necessary. Pilots who need to fly should not be regarded as 'non friendly' or feel targeted for retribution. We found the non-flying public has interpreted current "recommendations" as mandatory compliance items and thus generated inappropriate complaints. The aviation publications currently state CRQ has a "voluntary curfew" for commercial operations. This has had the unfortunate effect of being misinterpreted by the non-flying public who think the airport actually has a mandatory curfew. Residents believe they are justified in getting angry when they hear an airplane and the tower is closed. So the curfew verbiage today has become a cause of misinformation, complaints and ill-will against airport users/businesses. We recommend publications be reviewed for misleading language (voluntary curfews, prohibitions on training, discouraging use, etc.) and such statements be stricken. We also recommend an additional measure to repair the problems we have by distributing an informational sheet targeted at the non-flying-public (especially neighbors and real-estate agents) about the airport's high activity level and its 24/7 operational status. The airport should also have prominent monuments installed at street corners so that there is no question it is a significant, multi-use airport. This will help squelch misinformation or misconceptions that CRQ is a "sleepy little airport", "it closes at night" or that "pilots are not supposed to fly when neighbors are sleeping." An active campaign to reduce unreasonable expectations about aviation noise and operations may go a long way to reducing the gap between airport users and residents. We do not support OM-24.

Thank you again. If we can be of further assistance please do not hesitate to contact me.
Sincerely,

Rick Baker, President
Palomar Airport Association
Email: safety@PalomarAirportAssociation.com
cc: California Pilots Association, AOPA, San Diego Area Aviation Council, KCRQ Noise Officer



June 14, 2005

Ms. Deborah Murphy Lagos, Sr. Project Manager
URS Corporation
7650 W. Courtney Campbell Causeway
Tampa, FL 33607-1462

Via Facsimile and Mail

Re: McClellan-Palomar Airport FAR Part 150 Study

Dear Ms. Murphy Lagos,

Thank you for the opportunity you extended to the Gillespie Pilots Association to review and comment on Operational Measures recommended in your draft FAR Part 150 for McClellan-Palomar Airport. The Gillespie Pilots Association represents the more than 1,000 pilots, students, users, FBOs and aviation enthusiasts associated with Gillespie Field, a San Diego County Airport. Like our sister airport in Carlsbad, Gillespie has, and continues to struggle with the public's perception and fear of "noise," and the resultant mix of noise and safety concerns. With that, we do not support OMs that potentially compromise safety in the interest of satisfying a very small number of local homeowners who desire to have noise controlled by imposing restrictions on airport operations. Unfortunately, "voluntary" is often interpreted as "mandatory."

We consider OM-4, delaying Rwy 24 left turn departures until aircraft is west of I-5 when traffic volume permits, a safety issue because it is a non-standard procedure proposed for a very busy airport in which traffic type and volume changes rapidly. *We do not support OM-4.*

Both OM-15, modifying the right turn for Rwy 24 departures, and OM-18, discouraging the use of the south pattern on Rwy 24 for arrivals, address shifting traffic, or effectively eliminating traffic to (again) appease homeowners rather than out of concern for safety. High traffic counts for a one runway airport necessitate all decisions be made by ATC and pilots on the basis of safety. *We do not support either OM-15 or OM-18.*

The suggestion in OM-24 to amend "quiet hours" to include all aircraft except emergency flight operations will no doubt confirm the perception of a few that no airplanes are "allowed" to fly during these hours. The airport is open 24 hours per day. Flights during "quiet hours" are minimal and should not, and cannot be restricted, nor should pilots be targeted as wrong-doers. *We do not support OM-24.*

We support OM-5, developing a GPS Departure Procedure for Rwy 24 that emulates the VFR Alpha Departure, as long as the departure tracks are aligned.

Sincerely,

Phyllis Trombi, Past President
Gillespie Pilots Association
ptrombi@gillespiepilots.org



Preservation - Education - Communication
P. O. Box 172, Oceanside, CA 92049
Tel. (760) 635-3378, www.OceansideAirport.org
Chapter California Pilots Association
Member Oceanside Chamber of Commerce

June 30, 2005

Ms. Deborah Murphy Lagos, Sr. Project Manager
URS Corporation
7650 W. Courtney Campbell Causeway
Tampa, FL 33607-1462
FAX: (813) 636-2400
Via Email: Deborah_Murphy@URSCorp.com

Re: MCCLELLAN-PALOMAR AIRPORT FAR PART 150 STUDY

Dear Ms. Murphy Lagos:

The Oceanside Airport Association (OAA) is an 850-member aviation organization for pilots and non-pilots alike. Many of our members also use CRQ. We strongly support improving relations between residents and airport users. Please accept our comments for that purpose.

OM comments: We do not support OM-4 (delay Rwy 24 left turn departures until aircraft is west of I-5...). This is a safety issue because it is a non-standard procedure for GA departing SE. We do not support OM-15/OM-18 (modifying the right turn for Rwy 24.../discouraging the use of the south pattern...). CRQ's high traffic counts necessitate all judgments be made by ATC and pilots on the basis of flow and especially safety. We support OM-5 (developing a GPS Departure Procedure for Rwy 24...) as long as departure tracks are aligned with other IFR tracks. We do not support OM-24 (amend "quiet hours" to include all aircraft except emergency flight operations). This will not change the go/no-go decisions to fly late/early. These flights are not frequent but are flown for necessary business/work/training. OM-24's "recommendation" only serves to "confirm" the desires of those who want to believe that airplanes are "not allowed" during these hours.

Most of the draft recommendations will probably not result in any real change. Many of them could compromise safety, and would strengthen homeowner misconceptions—the real problem. Prospective homebuyers are being told that Palomar is part-time, not-busy and shouldn't be a buying factor. Palomar is a very busy airport and prospective homebuyers should be well informed of this fact. It is unfortunate that many homeowners in Carlsbad interpret "voluntary" or "recommended" to mean "mandatory". Instead, we recommend involving the Palomar Airport Association (PAA), as a catalyst to help improve community relations.

If you have any questions or if we can help in any way, we would be happy to be of assistance.

Sincerely,

Alan Cruise

President, Oceanside Airport Association
alan.cruise@oceansideairport.org

cc: Palomar Airport Association, SDAAC, California Pilots Association, AOPA



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

Western-Pacific Region
Airports Division

P.O. Box 92007
Los Angeles, CA 90009

July 27, 2005

Mr. Peter Drinkwater
Airport Director
Department of Public Works
County of San Diego
5555 Overland Ave, Suite 2188
San Diego, CA 92123-0461

Dear Mr. Drinkwater:

McClellan-Palomar Airport
Part 150 Noise Compatibility Program

The Federal Aviation Administration has reviewed the Part 150 Study Update, Noise Compatibility Program (NCP) Draft Version 2 that was submitted for McClellan-Palomar Airport. We are providing the enclosed changes and corrections to assist your efforts in preparing the Study to meet requirements under 14 Code of Federal Regulations (CFR) Part 150. This preliminary draft study was submitted for our initial review and we understand that the formal review document will be submitted to the FAA after review by the Palomar Airport Advisory Committee and members of the public.

FAA comments regarding Operational Measure 26; raising the traffic pattern altitude during extended traffic pattern operations, are pending and will be provided separately.

If you have any questions concerning the Part 150 process or other questions concerning the review of your NCP, please call me at 310/725-3633. Thank you for your continued interest in airport noise planning.

Sincerely,

Peter F. Ciesla
Environmental Protection Specialist

Enclosure

**U.S. DEPARTMENT OF TRANSPORTATION
Federal Aviation Administration**

Changes and Corrections

Comments on the McClellan-Palomar Airport
FAR Part 150 Study Update, Noise Compatibility Program, Draft Version 2

General Comments:

The U.S. Department of Transportation/Federal Aviation Administration (FAA) has completed its review of the, "*McClellan-Palomar Airport, FAR Part 150 Study Update, Noise Compatibility Program*" dated May 6, 2005. The following general comment is provided.

The purpose of the Part 150 Noise Compatibility Program (NCP) is to develop measures to reduce any noncompatible land uses and to prevent noncompatible land uses within the area covered by the airport sponsor's submitted Noise Exposure Maps (NEMs). Part 150 considers all land uses compatible with Community Noise Equivalent Levels of less than 65 dBA. The Part 150 standards for approving any measure for noise mitigation is based on the proposed measure being reasonably consistent with achieving the goal of reducing noncompatible land uses around the airport. This information needs to be indicated for those measures that are proposed but that do not meet this criteria.

Specific Changes and Corrections:

The following changes and corrections are being provided to the Study. Where possible, we have indicated new text changes in **bold** print and text to be deleted is shown in strike out.

1. The Table of Contents starts with Section 10, but there is no explanation of where Sections 1-9 are and why this Study starts with Section 10. A note could be included to show that this Study is the second portion of the NCP and that the corresponding Noise Exposure Map (NEM) document contains Sections 1-9 of the Study.
2. Page 11-2, first full paragraph, correct the sentence, "For example, ... there are no flights and none ~~of are~~ forecast."
3. Page 11-5, Section 11.2.3, second paragraph, spell out the first time use of the acronym "DME."
4. Page 11-6, first paragraph, Correct the second sentence to, "Based on the ... to the airport."
5. Page 11-18, the Recommendation for Measure OM-5, "CRQ should work with FAA to develop a GPS/RNAV departure procedure to emulate the "Alpha Departure" VNAP." The information in this section needs to provide information to identify how the measure will reduce or prevent noncompatible land uses in order to be considered for FAA approval.
6. Page 11-30, first section on this page uses the acronym "VMC." Spell out the first time use of the acronym and include the acronym in the List Of Acronyms and Abbreviations.
7. Page 11-33, Section 11.3.5, spell out the first time use of the acronym "ATIS" and include the acronym in the List Of Acronyms and Abbreviations.
8. Page 11-34, Section 11.3.6, second paragraph, last sentence appears to be missing a portion of the end of the sentence and needs to be completed properly.

9. Page 11-35, last paragraph, uses the acronym "GADO" and needs to be spelled out for the first time use and included in the List Of Acronyms and Abbreviations.
10. Page 11-37, top paragraph, indicates that FAA recommends that this measure to extend the runway, not be included in the Part 150 Study. It is unclear how the FAA made this recommendation. If there is no reference for this recommendation, this sentence should be deleted.
11. Tables 11-3, 11-5, 11-6, and 11-8, show the noise exposure estimates using a greater than or equal to CNEL 60 dBA noise metric. These tables need to include the noise exposure estimates for the noise contour that is equal to or greater the CNEL 65 dBA. These tables would need to show that the recommended measures contribute to reductions in the noncompatible land uses or prevent the chance of new noncompatible land uses in order to be considered for FAA approval. These Tables describe measures OM-4, OM-15, OM-24, and the text describing these measures needs to include a discussion of how the measures would contribute to reducing or preventing noncompatible land uses.
12. Page 11-49, Section 11.4.1.1, Description of Typical Traffic Pattern at CRQ, shows different altitudes than what is published in the Airport/Facility Directory (A/FD). The A/FD shows: 1003' MSL (672') for helicopters, 1503' MSL (1172') for small aircraft, and 2003' (1672') for large aircraft.
13. Page 12-1, third paragraph, references Figure 11-11 as showing the CNEL 65 dBA future conditions with program implementation. The correct figure should be Figure 11-14.
14. Figure 12-4, shows the city of Carlsbad zoning map with the 2009 future conditions NEM. The noise contour lines need to be marked to identify the 65, 70 and 75 CNEL contour lines. Also the land uses in the future 2009 NEM in Figure 11-14 do not appear to match the uses as shown in the "Planned Community" area (pink colored portion) southeast of the airport in Figure 12-4.
15. Page 13-2, second paragraph, the first sentence and the second sentence appear to contradict each other. The first sentence indicates that the County and Lochard Corporation have an agreement to upgrade the GEMS software at no cost, while the second sentence indicates the software is no longer being upgraded. The first sentence may need to be corrected to indicate that the County and the Lochard Corporation "had" an agreement.
16. Page 13-2, the second to last paragraph, last sentence indicates that the cost of additional NMT's for CRQ may be ineligible for AIP funding. This should be changed to indicate the cost of additional NMT's would not be eligible for AIP funding. Also indicate that noise monitoring systems and the related computer hardware and software are not eligible for AIP funding for airports that have compatible land uses as indicated in both the existing and future NEMs.
17. Page 13-2, last paragraph, change the second sentence to, "~~If eligible for AIP funding,~~ Hardware should be upgraded... be installed at CRQ."
18. Page 14-11, Section 14.4.1, Alternatives recommended for FAA Approval, Operational Measures, "When traffic volume permits, CRQ should instruct pilots to delay the left turn from Runway 24 until aircraft are west of I-5." Comments from FAA Air Traffic Division, Western Terminal Operations, does not support this operational measure and indicates this measure should be disapproved. The primary purpose of air traffic control is to prevent a collision and to organize and expedite the movement of air traffic. There are already redundant means in place to notify pilots of noise abatement procedures, which include, at a minimum, the A/FD and airport signage. It is not the function of air traffic to advise each aircraft of these voluntary procedures. Also no reduction or prevention of noncompatible land uses has been identified through use of this measure.

19. Page 14-11, Section 14.4.1, Alternatives Recommended for FAA Approval, Operational Measures, "CRQ should work with FAA to develop a GPS/RNAV departure procedure to emulate the 'Alpha Departure' VNAP." This measure needs to specify that the airport operator will be responsible for the cost of all environmental studies associated with the new procedure.
20. Page 14-2, Section 14.4.3, Program Management Measures, "CRQ ATCT should conduct the recommended workload study." This measure is outside the purview of the NCP statutes and regulations. This measure would not be consistent with the intent of the NCP in reducing noise impacts by reducing noncompatible uses and preventing the introduction of additional noncompatible uses at the airport and would be disapproved. All measures must be consistent with achieving the goal of reducing noncompatible uses. PAR2000's recommendation does not reasonably relate to that goal and would not be approved.
21. Page 15-1, last paragraph, needs to indicate the notification method used for the NCP consulted parties and include a copy of the notification correspondence in Appendix M.
22. Page 15-2, first paragraph, indicates that a copy of the letter sent to organizations requesting input on the operational measures, the distribution list and responses are provided in Appendix M. The letter is provided in Appendix M, however the distribution list showing the organizations and responses are not included, and will need to be added to the Appendix.
23. Appendices: Appendix K provides an index of information contained within the appendix and also the appendix has cover sheets to identify the separate contents within. A similar format for all the appendices is recommended especially since there are numerous items being placed within the Appendices and this would improve the ability to identify the various contents.

END OF COMMENTS

Response to FAA Comments on McClellan-Palomar Airport FAR Part 150 Study Update, Noise Compatibility Program, Draft Version 2

Comment - The Table of Contents starts with Section 10, but there is no explanation of where Sections 1-9 are and why this Study starts with Section 10. A note could be included to show that this Study is the second portion of the Noise Compatibility Program (NCP) and that the corresponding Noise Exposure Map (NEM) document contains Sections 1-9 of the Study.

Response - The beginning of Section 10 discusses the format of the NEM and NCP documents.

Comment - Page 11-2, first full paragraph, correct the sentence, "For example, ... there are no flights and none ~~er~~ **are** forecast."

Response - Correction/Edit to be made per comment.

Comment - Page 11-5, Section 11.2.3, second paragraph, spell out the first time use of the acronym "DME."

Response - Correction/Edit to be made per comment.

Comment - Page 11-6, first paragraph, Correct the second sentence to, "Based on the ... to the airport."

Response - Correction/Edit to be made per comment.

Comment - Page 11-18, the Recommendation for Measure OM-5, "CRQ should work with FAA to develop a GPS/RNAV departure procedure to emulate the "Alpha Departure" VNAP." The information in this section needs to provide information to identify how the measure will reduce or prevent noncompatible land uses in order to be considered for FAA approval.

Response - There are no non-compatible land uses within the CNEL 65 dBA contour, therefore reduction of noncompatible land use is not possible.

Comment - Page 11-30, first section on this page uses the acronym "VMC." Spell out the first time use of the acronym and include the acronym in the List Of Acronyms and Abbreviations.

Response - Correction/Edit to be made per comment.

Comment - Page 11-33, Section 11.3.5, spell out the first time use of the acronym “ATIS” and include the acronym in the List Of Acronyms and Abbreviations.

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Comment - Page 11-35, last paragraph, uses the acronym “GADO” and needs to be spelled out for the first time use and included in the List Of Acronyms and Abbreviations.

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Comment - Page 11-37, top paragraph, indicates that FAA recommends that this measure to extend the runway not be included in the Part 150 Study. It is unclear how the FAA made this recommendation. If there is no reference for this recommendation, this sentence should be deleted.

Response - Correction/Edit to be made per comment.

Comment - Tables 11-3, 11-5, 11-6, and 11-8, show the noise exposure estimates using a greater than or equal to CNEL 60 dBA noise metric. These tables need to include the noise exposure estimates for the noise contour that is equal to or greater the CNEL 65 dBA. These tables would need to show that the recommended measures contribute to reductions in the noncompatible land uses or prevent the chance of new noncompatible land uses in order to be considered for FAA approval. These Tables describe measures OM-4, OM-15, OM-24, and the text describing these measures needs to include a discussion of how the measures would contribute to reducing or preventing noncompatible land uses.

Response - There are no non-compatible land uses within the CNEL 65 dBA contour, therefore reduction of noncompatible land use is not possible, and cannot be quantified. That is the reason benefits are quantified within the CNEL 60 dBA. It is not foreseen that these measures would prevent new non-compatible land uses within the CNEL 65 dBA. A note has been added to each table indicating there are no housing units within the CNEL 65 dBA contour.

Comment - Page 11-49, Section 11.4.1.1, Description of Typical Traffic Pattern at CRQ, shows different altitudes than what is published in the Airport/Facility Directory (A/FD). The A/FD shows: 1003' MSL (672') for helicopters, 1503' MSL (1172') for small aircraft, and 2003' (1672') for large aircraft.

Response - Correction/Edit to be made per comment.

Comment - Page 12-1, third paragraph, references Figure 11-11 as showing the CNEL 65 dBA future conditions with program implementation. The correct figure should be Figure 11-14.

Response - Correction/Edit to be made per comment.

Comment - Figure 12-4, shows the city of Carlsbad zoning map with the 2009 future conditions NEM. The noise contour lines need to be marked to identify the 65, 70 and 75 CNEL contour lines. Also the land uses in the future 2009 NEM in Figure 11-14 do not appear to match the uses as shown in the "Planned Community" area (pink colored portion) southeast of the airport in Figure 12-4.

Response - Correction/Edit to be made per comment to mark contour lines.

Figure 12-4 illustrates zoning, and Figure 11-14 illustrates land use. The pink area on Figure 12-4 indicates "P-C Planned Community" zoning. The corresponding area on Figure 11-14 includes "R1- Residential," "OS – Open Space," "M1-Industrial/Manufacturing," and "P1- Schools." With the exception of OS-Open Space and some R1-Residential, the land use designations indicate future land use, since the area is currently undeveloped or undergoing development. This area is described in the last paragraph on page 12-14.

Comment - Page 13-2, second paragraph, the first sentence and the second sentence appear to contradict each other. The first sentence indicates that the County and Lochard Corporation have an agreement to upgrade the GEMS software at no cost, while the second sentence indicates the software is no longer being upgraded. The first sentence may need to be corrected to indicate that the County and the Lochard Corporation "had" an agreement.

Response - Correction/Edit to be made per comment.

Comment - Page 13-2, the second to last paragraph, last sentence indicates that the cost of additional NMT's for CRQ may be ineligible for AIP funding. This should be changed to indicate the

cost of additional NMT's would not be eligible for AIP funding. Also indicate that noise monitoring systems and the related computer hardware and software are not eligible for AIP funding for airports that have compatible land uses as indicated in both the existing and future NEMs.

Response - Correction/Edit to be made per comment.

Comment - Page 13-2, last paragraph, change the second sentence to, "~~If eligible for AIP funding,~~ Hardware should be upgraded... be installed at CRQ."

Response - Correction/Edit to be made per comment.

Comment - Page 14-11, Section 14.4.1, Alternatives recommended for FAA Approval, Operational Measures, "When traffic volume permits, CRQ should instruct pilots to delay the left turn from Runway 24 until aircraft are west of I-5." Comments from FAA Air Traffic Division, Western Terminal Operations, does not support this operational measure and indicate this measure should be disapproved. The primary purpose of air traffic control is to prevent a collision and to organize and expedite the movement of air traffic. There are already redundant means in place to notify pilots of noise abatement procedures, which include, at a minimum, the A/FD and airport signage. It is not the function of air traffic to advise each aircraft of these voluntary procedures. Also no reduction or prevention of noncompatible land uses has been identified through use of this measure.

Response - Comment Noted. There are no non-compatible land uses within the CNEL 65 dBA contour, therefore reduction of noncompatible land use is not possible, and cannot be quantified. It is not foreseen that this measure would prevent new non-compatible land uses within the CNEL 65 dBA.

Comment - Page 14-11, Section 14.4.1, Alternatives Recommended for FAA Approval, Operational Measures, "CRQ should work with FAA to develop a GPS/RNAV departure procedure to emulate the 'Alpha Departure' VNAP." This measure needs to specify that the airport operator will be responsible for the cost of all environmental studies associated with the new procedure.

Response - Correction/Edit to be made per comment.

Comment - Page 14-2, Section 14.4.3, Program Management Measures, "CRQ ATCT should conduct the recommended workload study." This measure is outside the purview of the NCP statutes and regulations. This measure would not be consistent with the intent of the NCP in

reducing noise impacts by reducing noncompatible uses and preventing the introduction of additional noncompatible uses at the airport and would be disapproved. All measures must be consistent with achieving the goal of reducing noncompatible uses. PAR2000's recommendation does not reasonably relate to that goal and would not be approved.

Response - Comment Noted. There are no non-compatible land uses within the CNEL 65 dBA contour, therefore reduction of noncompatible land use is not possible, and cannot be quantified. It is not foreseen that this measure would prevent new non-compatible land uses within the CNEL 65 dBA.

Comment - Page 15-1, last paragraph, needs to indicate the notification method used for the NCP consulted parties and include a copy of the notification correspondence in Appendix M.

Response - At the start of the Part 150 Study, a letter was sent to parties identified to notify them of the Part 150 Study Update, and to request their participation / input. A copy of the letter was provided in Appendix H of the NEM documentation. Additional contact was made during the NCP, and is described in the first paragraph on page 15-2.

Comment - Page 15-2, first paragraph, indicates that a copy of the letter sent to organizations requesting input on the operational measures, the distribution list and responses are provided in Appendix M. The letter is provided in Appendix M, however the distribution list showing the organizations and responses are not included, and will need to be added to the Appendix.

Response - Distribution list and responses are provided in this version of the NCP document.

Comment - Appendices: Appendix K provides an index of information contained within the appendix and also the appendix has cover sheets to identify the separate contents within. A similar format for all the appendices is recommended especially since there are numerous items being placed within the Appendices and it is difficult to identify the separate contents.

Response - Correction/Edit to be made per comment.



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

Western-Pacific Region
Airports Division

P.O. Box 92007
Los Angeles, CA 90009

May 12, 2006

Mr. Peter Drinkwater
Airport Director
Department of Public Works
County of San Diego
5555 Overland Ave, Suite 2188
San Diego, CA 92123-0461

Dear Mr. Drinkwater:

McClellan-Palomar Airport
Part 150 Noise Compatibility Program

The Federal Aviation Administration (FAA) has reviewed the Part 150 Study Update, Noise Compatibility Program (NCP) Version 5, that was submitted for McClellan-Palomar Airport. The Study has gone through FAA Regional office review and we are requesting that the enclosed changes and corrections be made to the Study to clarify the NCP measures being proposed. Page inserts reflecting the updated information may be sent to us for inclusion in the NCP document. Once the document is updated, we will publish a Federal Register notice announcing the 180-day timeframe for approval of the NCP, which includes a 60 day period for final public comments, pursuant to Federal Aviation Regulation Part 150.

If you have any questions concerning the Part 150 process or other questions concerning the review of your NCP, please contact Mr. Pete Ciesla at 310/725-3633. Thank you for your continued interest in airport noise planning.

Sincerely,

John P. Milligan
Supervisor, California Standards Section

Enclosure

**U.S. DEPARTMENT OF TRANSPORTATION
Federal Aviation Administration**

Changes and Corrections

Comments on the McClellan-Palomar Airport
FAR Part 150 Study Update, Noise Compatibility Program, Draft Version 5

General Comments:

The U.S. Department of Transportation/Federal Aviation Administration (FAA) has reviewed the *McClellan-Palomar Airport, FAR Part 150 Study Update, Noise Compatibility Program*, dated March 24, 2006. The following general comments are provided:

1. The measures being recommended in the study should be identified by their identification numbers in the Section 11, 12 and 13 summaries and also in the discussion of recommended measures in Section 14. The text for the recommended measures should also be worded consistently within the Sections. This will prevent confusion and ensure the measures being proposed are clearly presented.
2. The measures being carried over from the previous Noise Compatibility Study (NCP) should be identified within Chapter 11 as measures being recommended to be continued. These measures also need to be included in the table in Section 14, listing all the proposed NCP measures.

Specific Changes and Corrections:

The following changes and corrections are being provided to the Study. Where possible, new text changes are indicated in **bold** print and text to be deleted is shown in strike out.

1. Page 10-2, second paragraph uses the acronym "PR" and does not explain what the acronym is. The first time use of an acronym needs to be spelled out.
2. Page 11-52, correct the typographical error, "The City of San Marcos ... pattern is extended."
3. Page 12-1, Section 12.1, third paragraph, add an additional sentence between the fourth and fifth sentences: "As shown in Figure 11-14, there are no noncompatible land uses within the CNEL 65 dBA of the 2009 Future Condition, With Program Implementation. **Note there are also no noncompatible land uses without program implementation.** Thus, corrective or remedial actions are not warranted in this NCP."
4. Page 12-23, Section 12.4, Measure LUM-1 is missing from the list of recommended measures and needs to be added.
5. Page 14-1, Section 14.1, first paragraph, change the second sentence to, "The County is ... ~~which gained~~ **listed in the FAA Record of Approval dated approval-effective** June 16, 1992, and include the following:"
6. Page 14-1, Section 14.1, the recommended measures listed in this section should include the identification number from Section 11. This text indicates these measures are recommended to be continued from the previous NCP, however, there is no indication in Section 11 to continue these measures. The recommendation within Section 11 for these measures and in the Section 11 Summary should indicate that the these measures are recommended to be continued. These measures also need to be included on the recommended NCP measures in Table 14-1.

Note that Measure OM-4 is being recommended for continuation as well as including a new recommended measure. To prevent confusion, the two separate measures should be clarified.

7. Page 14-2, change the first paragraph to, "The five measures described above were approved by the FAA in their Record of Approval dated ~~June 16~~ July-20, 1992. In addition, the following operational measures ~~was~~ were implemented at the airport subsequent to the 1992 NCP."
8. Page 14-5, Section 14.2.2, is missing Measure LUM-1 from the list and needs to be included.
9. Page 14-15, Table 14-1, the measures continued from the previous NCP need to be added to the table. Measure OM-14 should be corrected to be shown as Measure OM-24.
10. Page 14-17, Table 14-2, Summary of Noise Exposure Estimates, needs to include a note below the table indicating that there are no housing units within the CNEL 65 dBA contour.
11. Page 14-12, Section 14.6, revise the text in the first sentence to, " FAR Part 150 ... which is forecast for the ~~accepted~~ 2009 Future Condition **NEM** ... a revised NEM."
12. Page 14-12, Section 14.7, revise the text in the second sentence to, "The result of this planning process is a ~~revised~~ noise exposure map **with program implementation, which is provided for informational purposes**, and a recommended NCP." The title for this Section should be changed to "Objective of the Noise Compatibility Program."
13. The NCP checklist in Appendix J needs to be updated to reflect the inclusion of new material in Appendix P and Appendix O. The checklist also needs to delete text indicating that the airport operator is requesting FAA to make a new map finding.

END OF COMMENTS

Response to FAA Comments on McClellan-Palomar Airport FAR Part 150 Study Update, Noise Compatibility Program, Draft Version 5

General Comments:

1. The measures being recommended in the study should be identified by their identification numbers in the Section 11, 12 and 13 summaries and also in the discussion of recommended measures in Section 14. The text for the recommended measures should also be worded consistently within the Sections. This will prevent confusion and ensure the measures being proposed are clearly presented.

Response – Summary sections in Sections 11, 12, and 13 were modified to identify the measure numbers. In addition, recommendations in Section 14 were also numbered.

2. The measures being carried over from the previous Noise Compatibility Study (NCP) should be identified within Chapter 11 as measures being recommended to be continued. These measures also need to be included in the table in Section 14, listing all the proposed NCP measures.

Response – The measures recommended for the continuation from the 1992 NCP is mentioned in Section 11.5. Also, they were added to Section 14.

Specific Changes and Corrections:

1. Page 10-2, second paragraph uses the acronym “PR” and does not explain what the acronym is. The first time use of an acronym needs to be spelled out.

Response – The sentence was modified to “Primary Commercial Airport (PR).”

2. Page 11-52, correct the typographical error, “The City of San Marcos ... pattern is extended.”

Response – Correction was made.

3. Page 12-1, Section 12.1, third paragraph, add an additional sentence between the fourth and fifth sentences: “As shown in Figure 11-14, there are no noncompatible land uses within the CNEL 65 dBA of the 2009 Future Condition, With Program Implementation. **Note there are also no noncompatible land uses without program implementation.** Thus, corrective or remedial actions are not warranted in this NCP.”

Response – The sentence was added.

4. Page 12-23, Section 12.4, Measure LUM-1 is missing from the list of recommended measures and needs to be added.

Response – LUM-1 was added to Section 12.4.

5. Page 14-1, Section 14.1, first paragraph, change the second sentence to, “The County is ... ~~which gained~~ **listed in the FAA Record of Approval dated** ~~approval effective~~ June 16, 1992, and include the following.”

Response – Correction was made.

6. Page 14-1, Section 14.1, the recommended measures listed in this section should include the identification number from Section 11. This text indicates these measures are recommended to be continued from the previous NCP, however, there is no indication in Section 11 to continue these measures. The recommendation within Section 11 for these measures and in the Section 11 Summary should indicate that the these measures are recommended to be continued. These measures also need to be included on the recommended NCP measures in Table 14-1. Note that Measure OM-4 is being recommended for continuation as well as including a new recommended measure. To prevent confusion, the two separate measures should be clarified.

Response

Recommendations under Sections 11.2.1, 11.2.4, 11.2.6, 11.2.8, 11.2.13, and 11.2.14 were revised to indicate the continuation from the 1992 NCP.

Section 11.5, Summary, was revised accordingly.

Section 14, Table 14-1, was revised accordingly.

The recommendation under Section 11.2.4, OM-4, mentions two different recommendations.

7. Page 14-2, change the first paragraph to, “The five measures described above were approved by the FAA in their Record of Approval dated **June 16** ~~July 20~~, 1992. In addition, the following operational measures **was** ~~were~~ implemented at the airport subsequent to the 1992 NCP.”

Response – Correction was made.

8. Page 14-5, Section 14.2.2, is missing Measure LUM-1 from the list and needs to be included.

Response – LUM-1 was added to Section 14.2.2 and Table 14-1.

9. Page 14-15, Table 14-1, the measures continued from the previous NCP need to be added to the table. Measure OM-14 should be corrected to be shown as Measure OM-24.

Response – On Going Measures were added to Table 14-1. OM-14 in Table 14-1 was modified to OM-24.

10. Page 14-17, Table 14-2, Summary of Noise Exposure Estimates, needs to include a note below the table indicating that there are no housing units within the CNEL 65 dBA contour.

Response – The sentence was added.

11. Page 14-12, Section 14.6, revise the text in the first sentence to, “FAR Part 150 ... which is forecast for the **accepted** 2009 Future Condition **NEM** ... a revised NEM.”

Response – Correction was made.

12. Page 14-12, Section 14.7, revise the text in the second sentence to, “The result of this planning process is a revised noise exposure map **with program implementation, which is provided for informational purposes**, and a recommended NCP.” The title for this Section should be changed to “Objective of the Noise Compatibility Program.”

Response – Correction was made and the title was changed.

13. The NCP checklist in Appendix J needs to be updated to reflect the inclusion of new material in Appendix P and Appendix Q. The checklist also needs to delete text indicating that the airport operator is requesting FAA to make a new map finding.


Response – Appendix J was updated.



Pete.Ciesla@faa.gov
05/26/2006 05:06 PM

To Susumu_Shirayama@urscorp.com
cc
bcc

Subject McClellan-Palomar NCP




History:  This message has been forwarded.





Hi Susumu,




Thanks, I've reviewed the updated NCP document. I've attached the NCP pages that have recommended changes.

On the cover letter and certification letter, I'm not sure why the request to make a new compliance finding on a new NEM with program implementation, since the previously approved future NEM does not have any non-compatible land uses. Also the new MEM with program implementation is based on a measure OM-4(2) that would not be approved by the FAA. Let me know if you have any questions on the comments.

Pete

  
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