

SECTION THIRTEEN Consideration of Program Management Measures

SECTION 13 CONSIDERATION OF PROGRAM MANAGEMENT MEASURES

13.1 INTRODUCTION

The success of the Noise Compatibility Program (NCP) requires a continuing effort to monitor compliance and identify new or unanticipated problems and changing conditions. This section reviews the 1992 NCP recommendations and identifies various alternatives recommended in the PAR2000.

13.2 REVIEW OF 1992 NCP PROGRAM MANAGEMENT MEASURES

The FAR Part 150 NCP for CRQ that was approved on June 16, 1992, recommended four program management measures. **Table 13-1** describes each measure, and indicates the FAA's Record of Approval.

Table 13-1
Program Management Measures from the 1992 NCP

Measure ID	Measure	FAA Record of Approval
PM-1	Acquire and install a permanent noise monitoring system.	Approved
PM-2	Designate a noise abatement officer.	Approved
PM-3	Continue to have the Palomar Airport Advisory Committee act as a noise abatement committee.	Approved
PM-4	Produce maps identifying the noise-sensitive areas around the airport.	Approved in conjunction with OM-4

13.2.1 Acquire and Install a Permanent Noise Monitoring System (PM-1)

The 1992 NCP recommended the acquisition and installation of a permanent noise monitoring system to validate the effectiveness of the noise abatement procedures and to quantify noise problems in surrounding neighborhoods in the future. Additional staffing would be required to operate the system and to interpret the output.

The FAA approved this measure in the 1992 NCP. However, they noted that for purposes of aviation safety, this approval does not extend to the use of monitoring equipment for enforcement purposes by in situ measurement of any pre-set noise thresholds.

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The Global Environmental Monitoring System (GEMS) was installed in 1994. It collects, analyzes, and stores aircraft operational data and noise data 24 hours per day, 7 days per week from four remote Noise Monitoring Terminals (NMTs) shown in [Figure 13-1](#). Aircraft operational data is collected from Mode-C equipment on aircraft operating at and in the vicinity of CRQ via its Passive Surveillance Radar (PASSUR) system located in Oceanside. The PASSUR is synchronized with the FAA's ASR-9 radar installation located at Camp Pendleton. The PASSUR flight tracking density data shown in [Appendix D](#) of the NEM document was the basis of the modeled flight tracks for the NEMs. The GEMS is capable of computing annual average daily aircraft CNEL from each of the NMTs and correlating noise events to flight tracking data.

The County of San Diego and Lochard Corporation had an agreement to upgrade GEMS software with no additional cost. Since the existing GEMS software is no longer being upgraded, the Airport Noise and Operations Monitoring System (ANOMS) 8 is available for installation at CRQ. ANOMS 8 is the latest version in the ANOMS series and is operated with Microsoft Windows. The estimated cost of replacing associated computer hardware, to support operation of ANOMS 8, would be \$100,000.

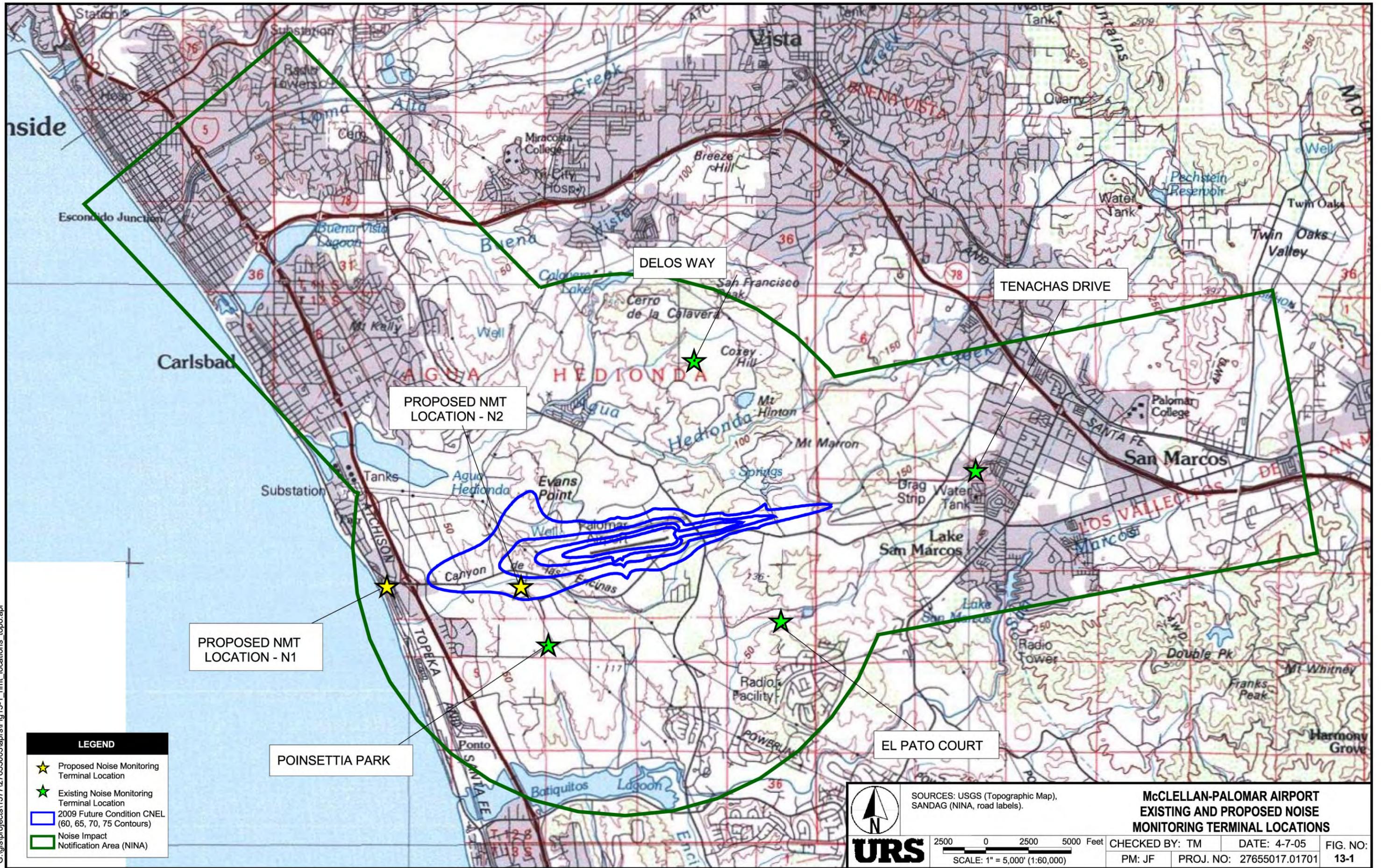
Installation of additional NMTs was considered in this NCP. Currently, four NMTs are operated around the airport. [Figure 13-1](#) shows the location of each NMT. None of the existing NMTs are within the 2004 existing condition or the 2009 future condition CNEL 60 contours. In order to collect meaningful aircraft noise data, NMTs need to be located within CNEL 60, under major flight paths, and/or in close proximity to noncompatible land uses. Two proposed NMT locations are also shown on [Figure 13-1](#). Site N1 is under the departure tracks off Runway 24 and in close proximity to residential areas along the coastline. Site N2 is under the departure track 24D6 between the CNEL 60 and 65 noise contours. The estimated cost to purchase and install is \$20,000 per NMT. The cost of additional NMTs would not be eligible for AIP funding. Noise monitoring systems, with 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.

The four existing NMTs have been in place since 1994. The airport has two additional sets of NMT hardware which they use for spare parts while equipment is out for repair. The end of the useful life of this hardware is rapidly approaching. If eligible for AIP funding, it would be prudent to upgrade the hardware at the NMTs.

According to FAA Order 5100.38B, Change 1, Chapter 8, Paragraph 813.c, "Fixed noise monitoring equipment is ineligible where the Part 150 noise exposure maps (existing and forecast) show no noncompatible land uses." Since there is no noncompatible land use within CNEL 65 noise contour of the 2004 existing condition or the 2009 future condition, the cost of additional NMTs for CRQ is not eligible for AIP funding. 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.

Recommendation: *CRQ should upgrade their GEMS software to ANOMS 8, and upgrade computer hardware as necessary to support operation of ANOMS 8. If eligible for AIP funding, CRQ should upgrade hardware at existing NMTs and install two additional NMTs.*

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LEGEND

- ★ Proposed Noise Monitoring Terminal Location
- ★ Existing Noise Monitoring Terminal Location
- ▭ 2009 Future Condition CNEL (60, 65, 70, 75 Contours)
- ▭ Noise Impact Notification Area (NINA)



SOURCES: USGS (Topographic Map), SANDAG (NINA, road labels).



2500 0 2500 5000 Feet
SCALE: 1" = 5,000' (1:60,000)

**McCLELLAN-PALOMAR AIRPORT
EXISTING AND PROPOSED NOISE
MONITORING TERMINAL LOCATIONS**

CHECKED BY: TM	DATE: 4-7-05	FIG. NO:
PM: JF	PROJ. NO: 27655017.01701	13-1

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13.2.2 Designate a Noise Abatement Officer (PM-2)

The 1992 NCP included a recommendation to designate a noise abatement officer to administer the approved NCP.

The FAA approved this measure in the 1992 NCP.

The County of San Diego hired a dedicated noise officer at the end of 1999. Currently, the position is open, and the duties are being fulfilled by another member of the airport staff. The County is actively engaged in final contract negotiations with a contractor to fill the Noise Abatement Officer position.

The responsibilities of the Noise Abatement Officer include, but are not limited to:

- Operate the NMS;
- Manage the VNAP;
- Coordinate with the public, FBOs, and pilots to notify them of noise-sensitive areas;
- Research and respond to noise complaints; and
- Produce and present noise-related reports.

Recommendation: CRQ should hire a dedicated Noise Abatement Officer.

13.2.3 Continue the Palomar Airport Advisory Committee (PM-3)

The 1992 NCP recommended continuation of the Palomar Airport Advisory Committee (PAAC), to act as a forum for discussion of noise abatement actions.

The FAA approved this measure in the 1992 NCP.

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.

The PAAC provided input to this Part 150 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 responsibilities of the PAAC include, but are not limited to:

- To plan and recommend a noise abatement program,
- To make constructive contributions to the airport master plan, and
- To make airport users and the public aware of any developments regarding airport noise.

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Recommendation: *It is recommended that the PAAC continue to act as a forum for discussion of noise abatement actions.*

13.2.4 Produce Maps Identifying the Noise-Sensitive Areas around the Airport (PM-4)

The 1992 NCP included a recommendation to produce maps identifying noise-sensitive areas around the airport and distribute them to pilots to help them avoid these areas when possible.

These maps should be produced as often as there are significant changes in noise-sensitive land uses in the airport environs, such as when a new residential development is built. The maps should cover the entire airport environs and be printed on paper of appropriate size so pilots can easily keep the maps with other flight-related materials.

The FAA approved this measure in the 1992 NCP. Implementation of this measure should be combined with measure number 4 (OM-4) as a part of a comprehensive effort to inform pilots regarding the noise sensitive areas in the vicinity of the airport.

As stated in Board of Supervisors Policy, F-44, for the County of San Diego, the Airport Manager will produce, distribute, and promote a detailed noise abatement program for the airport. The program will contain specific flight information and a chart identifying noise sensitive areas. The noise abatement program will be updated annually and distributed to pilots. The Airport Manager will request pilot compliance with the program.

Figure 13-2 illustrates the map currently produced and distributed by the airport. It contains information regarding noise-sensitive areas, NINA, and a detailed description of the VNAP. The map was published in August 2002. The current map does not illustrate the VNAP “Alpha Departure.” Thus, the next revision of the map should incorporate the “Alpha Departure.”

The map should be formatted such that it can readily be inserted into a Jeppesen Airway Manual 7-ring binder, which has a page size of 8½” in height by 5½” in width, with seven holes punched along the left margin in a unique configuration. It should include all information about CRQ’s voluntary noise abatement procedures (VNAP). The map will also be incorporated into a booklet, which is discussed further in **Section 13.3.1**.

The first option is an overall size of 8½” in height by 11” in width, folded to 8½” in height by 5½” in width, with text and graphics on both sides. The estimated cost of producing 2,000 copies of the fold-out map in color on glossy 80-pound paper will be approximately \$850. The design cost would be approximately \$500. Therefore, the total cost would be approximately \$1,350. An example is shown in **Appendix L**, along with the printing price quotation.

The second option is an overall size of 8½” in height by 5½” in width, with a ¾” tab. Text and graphics will appear on both front and back. The estimated cost of producing 2,000 copies of the map in color on glossy 80-pound paper will be approximately \$950. The design cost would be approximately \$500. Therefore, the total cost would be approximately \$1,450. An example is shown in **Appendix L**, along with the printing price quotation.

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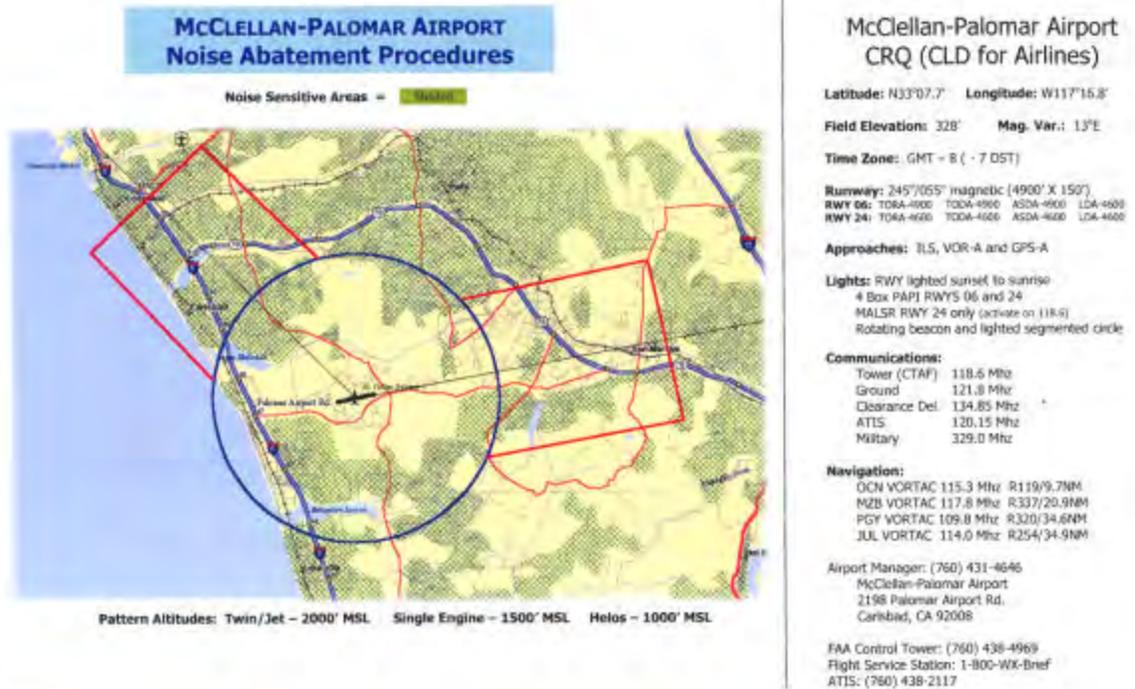
The cost of producing these maps must be borne by the County of San Diego, since producing maps is not eligible for funding through FAA Airport Improvement Program (AIP) grants.

Recommendation: *CRQ should update maps identifying the noise-sensitive areas around the airport, formatted such that they can readily be inserted into a Jeppesen Airway Manual 7-ring binder. They should be produced on glossy 80-pound paper, and have an overall size of 8½” in height by 11” in width, folded to 8½” in height by 5½” in width, with text and color graphics on both sides.*

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**Figure 13-2
Noise Abatement Procedures**

Front Page



Revised 08/02

Back Page

**McClellan-Palomar Airport (CRQ)
Carlsbad, CA (760) 431-4646**

From the Manager: As our community develops, residential noise sensitive areas near CRQ continue to expand. Please study the noise sensitive areas depicted on the reverse side of this handout. The recommended (safety permitting) noise abatement procedures presented here, help to preserve quality of life in our community and represent minimal restrictions on aircraft arriving and departing CRQ. Adherence to the arrival and departure procedures presented here will preserve your access to CRQ.

RECOMMENDED GENERAL OPERATING GUIDELINES

PATTERN ALTITUDES:

TWIN/JET: 2000' MSL
 SINGLE ENGINE: 1500' MSL
 HELOS: 1000' MSL

FIXED WING CLIMB ON 250° HEADING UNTIL OVER WATER. HOLD TURNS UNTIL REACHING VFR CORRIDORS OFF COAST.

VOUNTARY NOISE ABATEMENT PROCEDURES:

- JET TAKEOFF AND LANDING QUIET NOISE FROM 2000-4700(L)
- ALL AIRCRAFT - MULTIPLE TURN-AND-GO'S/PRACTICE APPROACHS ARE ENCOURAGED 2000-4700(L)
- COORDINATE TURN-UPS BY COORDINATION WITH THE AIRPORT MANAGER.

Revised 08/02

Runway 24

VFR Departures North or Southbound - RWY 24

- Jets** - best angle of climb on 250° heading north of Palomar Airport Rd. until over water. NBAA standard noise abatement departure procedures recommended (available from airport manager).
- Props** - Request ALPHA departure. Best angle of climb on 250°. hold turns until reaching VFR corridors off coast.

VFR Departures Eastbound - RWY 24

- All aircraft** request right downwind departures, hold turns until above 800' MSL. Turn downwind to parallel RWY and climb to at least 1000' AGL before initiating turn to desired course.

VFR Arrivals - RWY 24

- All fixed wing aircraft** - minimum altitude 2000' AGL until 3 miles from the field. Plan arrival path to avoid noise sensitive areas.
- All fixed wing aircraft** - maintain cruise configuration (gear and flaps up, cruise power setting) until as close to Airport as possible.
- Jets** - request ILS approach, fly slightly high approach if in VMC/VFR.
- Helos** - remain 1000' MSL and over major roads until entering airport traffic pattern. Avoid noise sensitive areas.

Runway 06

VFR Departures North or Southbound - RWY 06

- All aircraft** - request left downwind departures. Climb to 2000' MSL before turning downwind to parallel runway remain north of Palomar Airport Road, hold turns until reaching VFR corridors off coast.

VFR Departures Eastbound - RWY 06

- All aircraft** - fly runway heading, hold turns until above 800' MSL, then avoid noise sensitive areas.

VFR Arrivals - RWY 06

- All fixed wing aircraft** - minimum altitude 2000' AGL until 3 miles from the field. Plan arrival path to avoid noise sensitive areas.
- All fixed wing aircraft** - maintain cruise configuration (gear and flaps up, cruise power setting) until as close to Airport as possible.
- Helos** - remain 1000' MSL and over major roads until entering airport traffic pattern. Avoid noise sensitive areas.

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13.3 REVIEW OF PAR2000 PROGRAM MANAGEMENT MEASURES

The Palomar Airport Roundtable (PAR) submitted their Final Report to the Palomar Airport Advisory Committee (PAAC) on February 1, 2001. The Final Report included fifteen program management measures. [Table 13-2](#) describes each measure, and indicates the results of PAR2000's votes.

**Table 13-2
Program Management Measures from PAR2000**

Measure ID	Measure	Votes in Favor	Votes Opposed	Votes Abstained
PM-5	Develop an airport noise information booklet to educate the community, homeowners associations, real estate offices, media, and others.	13	0	1
PM-6	Develop an "official" web site to disseminate VNAP information and encourage other aviation web masters to provide "official" internet link.	13	0	1
PM-7	Develop a balanced airport noise information program.	13	0	1
PM-8	Continue aviator education regarding VNAP compliance.	13	0	1
PM-9	Distribute VNAP press releases to aviation media.	13	0	1
PM-10	Provide VNAP information for distribution by FBOs.	13	0	1
PM-11	Develop notification policy for VNAP non-compliant aviators.	12	1	1
PM-12	Publish a "worst offenders" list as well as recognition for the "most improved operator(s)" regarding VNAP.	4	7	3
PM-13	Appoint a permanent Environmental Noise Specialist to support noise monitoring and abatement activities.	10	2	1
PM-14	Develop and implement governmental policies to discourage airport operations that would increase noise.	10	2	2
PM-15	Request that FAA develop procedures to increase VNAP communications.	13	0	1
PM-16	Conduct ATCT workload study to support additional personnel.	13	0	1
PM-17	Increase FAA FSDO briefings concerning aircraft emergency procedures.	13	0	1
PM-18	Erect monument signs at strategic locations on airport property informing the driving public of the existence and location of CRQ.	13	0	1

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Measure ID	Measure	Votes in Favor	Votes Opposed	Votes Abstained
PM-19	Develop graphic VNAP signage	13	0	1

13.3.1 Develop an Airport Noise Information Booklet (PM-5)

The PAR2000 concluded there was a lack of airport information for residents living in the vicinity of McClellan-Palomar Airport. The PAR2000 recommended development of an airport noise information booklet to educate community, homeowners associations, real estate officers, media, and others. The McClellan-Palomar Airport Noise Information Booklet should be written in layman's terms, be developed and made available throughout the community, and address, but not be limited to, the following items:

- An aircraft noise exposure overview,
- The VNAP,
- Roles and responsibilities of those implementing the noise abatement measures,
- A layman's guide to the Noise and Flight Track Monitoring System,
- The role of the PAAC,
- The role the public can play regarding these issues,
- Economic benefits the airport provides to the community, and
- A map identifying noise-sensitive areas.

The County of San Diego will be responsible for producing the booklet. The overall size would be 8½" in height by 11" in width, folded to 8½" in height by 5½" in width, with text and graphics on both sides of each page. The booklet would contain approximately 20 pages in addition to the front and back covers. The design cost will be approximately \$3,350. The estimated cost of producing 2,000 copies of the booklet in color on glossy 80-pound paper would be approximately \$2,650. Therefore, the total cost would be approximately \$6,000. An example is shown in [Appendix L](#), along with the printing price quotation. These expenses must be borne by the County of San Diego since booklet publication is not eligible for funding through FAA AIP grants.

Recommendation: CRQ should produce an airport noise information booklet to help educate the community, homeowners associations, real estate officers, media, and others.

13.3.2 Develop an Official Web Site (PM-6)

The PAR2000 concluded that the current County of San Diego web site addresses county-wide airport activities but does not necessarily address the type of information usually sought by aviators, airport users, and the general public regarding the County's noise abatement policies and procedures. There are

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additional web sites referred to by aviation publications that also provide information but cannot be considered “official” and are not necessarily current.

The PAR2000 recommended development of an “official” web site, managed and maintained by CRQ airport noise abatement staff, to disseminate VNAP and other noise related information, including a list of “frequently asked questions” and answers.

PAR2000 also recommended contacting the web masters of existing internet sites distributing operational and other aviation-related information and encouraging them to insert an internet “link” (internet address) in their pages to the “official” CRQ internet site, which contains the latest, most up-to-date airport information.

These aviation-related web sites include, but are not limited to:

- Boeing Company’s Airport Noise Regulations
(<http://www.boeing.com/commercial/noise/flash.html>)
- Aircraft Owners and Pilots Association;
(www.aopa.org)
- National Business Aviation Association;
(www.nbaa.org)
- Landings;
(www.landings.com)
- AirNav;
(www.airnav.com)
- PilotAge;
(www.pilotage.com)
- California Pilots Association;
(www.calpilots.org)
- Palomar Airport Association;
(www.PalomarAirportAssociation.com)
- Pacific Coast Flyers;
(www.pacificcoastflyers.org)
- Experimental Aircraft Association, North San Diego County Chapter; and
(www.eaa286.org)
- San Diego Area Aviation Council.
(www.sdaac.org)

Several of these web sites currently have internet links to the existing CRQ web site.

The CRQ staff will be responsible for developing the official website. The website will be developed in accordance with current County standards. The cost of developing and maintaining the web site must be

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borne by the County of San Diego since web site development is not eligible for funding through FAA AIP grants.

Recommendation: (1) CRQ should develop an official website to disseminate VNAP and other noise related information, including a list of “frequently asked questions” and answers. The website will be developed in accordance with current County standards. (2) CRQ should also contact web masters of aviation-related web sites and request an internet link to the CRQ web site.

13.3.3 Develop a Balanced Airport Noise Information Program (PM-7)

The PAR2000 concluded that the general media covers newsworthy airport-related topics dealing primarily with commercial aviation information such as holiday traffic, parking, or the occasional incident. Proactive efforts, such as that of the recent public roundtable regarding aircraft-related noise issues, drew only slight mention. There are many existing publications that advise pilots regarding the airport and its operations as well as ones that refer their readers to various web sites for information updates. Airport-related publications, however, often address noise issues from strictly an aviation perspective. Currently, there is no public relations presence to regularly and objectively inform, advise, and educate the public and the aviation community regarding noise information related to CRQ.

PAR2000 recommended developing a balanced public relations strategy to disseminate information to the news media that integrates all sides of the complex noise issues and the efforts to manage them more effectively.

Currently there is no public relations staff position at the airport. However, the Department of Public Works, Division of Management Services, is responsible for news releases and other publications regarding airport issues. The Department publishes a quarterly newsletter called “Plane News,” which is the official newsletter for all San Diego County Airports. Bill Polick is currently the Public Information Officer for the Department of Public Works.

Recommendation: CRQ staff should continue to coordinate with the DPW PIO to disseminate information to the news media that integrates all sides of the noise issues and the airport’s efforts to manage them more effectively.

13.3.4 Continue Aviator Education Regarding VNAP Compliance (PM-8)

PAR2000 observed that local FAA Flight Standards District Office (FSDO) staff conducts regular monthly safety briefings at area airports including CRQ. Pilot associations such as the Aircraft Owners and Pilots Association (AOPA), the National Business Aviation Association (NBAA), North County Community Airports Association (NCCAA), and others also meet on a regular basis to share information pertinent to their activities.

PAR2000 recommended that the Environmental Noise Specialist assist in expanding awareness of the VNAP and other noise-related issues surrounding CRQ Class D airspace by attending and/or otherwise participating in aviation association meetings and briefings.

Several aviation associations have regular meetings, including:

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- Caltrans Division of Aeronautics holds four meetings per year, two in Southern California and two in Northern California. The meetings rotate from airport to airport and are held on the third Thursday of the month on a quarterly basis. (www.dot.ca.gov).
- Experimental Aircraft Association, North San Diego County Chapter meets the first Thursday of the month at 7 PM at the AFR Hangar at CRQ (www.eaa286.org).
- The International Organization of Women Pilots – The “Ninety-Nines,” Palomar Chapter meets the second Tuesday of the month at 7 PM at Mission West Executive Aircraft Center at CRQ (www.sws99s.org).

Recommendation: CRQ staff should continue attending and/or participating in aviation association meetings to expand awareness of the VNAP and other noise-related issues.

13.3.5 Distribute VNAP Press Release to Aviation Media (PM-9)

PAR2000 recognized that communicating with pilots arriving and departing from CRQ regarding VNAP is crucial. As the majority of the airport’s traffic consists of aircraft not based on the airport, the difficulty in communicating with itinerant pilots is exacerbated by the very nature and benefit of airports and aviation – they often arrive from long distances at irregular intervals and odd hours. There are many existing publications to advise pilots about the airport and its operations, including the importance of the VNAP.

PAR2000 recommended contacting the editors of pilot-oriented publications and providing them with periodic press releases on CRQ’s VNAP. The press releases should also contain information directing pilots to access an “official” internet address for current airport information.

Following is a listing of several pilot-oriented publications:

- Plane & Pilot Magazine (www.planeandpilotmag.com/)
- Private Pilot Magazine (www.privatepilotmag.com/)
- Woman Pilot Magazine (www.womanpilot.com/)
- AOPA Pilot Magazine (www.aopa.org/pilot/)
- Pilot Getaways Magazine (www.pilotgetaways.com/)
- Professional Pilot Magazine (www.propilotmag.com/)

The County of San Diego will be responsible for developing press releases regarding VNAP and other noise abatement information.

Recommendation: CRQ should coordinate with the DPW PIO to periodically distribute VNAP press releases to aviation media.

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13.3.6 Provide VNAP Information for Distribution by FBOs (PM-10)

PAR2000 recognized that many aircraft owners/operators who patronize the FBOs at CRQ arrive/depart the area without being informed of the latest information regarding VNAP because such information is not readily available.

PAR2000 recommended that VNAP information be provided to the FBOs on a regular basis for best means distribution. The County of San Diego will be responsible for periodically providing the latest noise information to the FBOs for their distribution to aircraft owners/operators.

The Fixed Base Operators at CRQ currently include, but are not limited to:

- Western Flight (www.westernflight.com/);
- Jetsource (www.jetsource.com/);
- Magellan Aviation;
- Civic Helicopters;
- Ocean Air; and
- Palomar Airport Center.

Recommendation: CRQ should periodically provide updated VNAP information for distribution by FBOs.

13.3.7 Develop Notification Policy for VNAP Non-compliant Aviators (PM-11)

PAR2000 recognized that the County of San Diego maintains a Noise Monitoring System (NMS) that can detect pilots operating outside the VNAP guidelines. When identified and contacted by the NMS operator, pilots are made aware of non-compliant activity and no further action is taken.

PAR2000 recommended there be conscientious monitoring for non-compliant aviators; that they be faithfully contacted by the NMS operator and that instances of non-compliance be regularly tracked and logged. A follow-up written reprimand should be issued to all verified repeat offenders. Reprimands should escalate in severity for chronic offenders.

FAA Order 5100.38B, Change 1, Chapter 8, Paragraph 813.d, defines the use of noise monitoring systems as follows;

A noise-monitoring proposal should not be an end in itself, nor an instrument for enforcement of a noise rule or procedure. Rather, noise monitors should provide an ongoing stream of useful products and data in support of the overall noise compatibility program. A primary justification should be to provide information necessary to carry out other noise compatibility projects in the approved NCP, or to monitor progress in achieving noise compatibility objectives. Some sample uses of noise monitoring data include:

- Selection of dwelling units or other structures for noise insulation;

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- *Pre- and post-insulation interior/exterior noise measurement;*
- *Compliance with a monitoring requirement of State noise law;*
- *Aiding implementation of other noise compatibility projects; or*
- *Providing noise data for future revision of the NCP.*

Recommendation: *No further action is warranted.*

13.3.8 Publish a List of “Worst Offenders” as Well as Recognition for the “Most Improved Operator(s)” Regarding VNAP (PM-12)

PAR2000 recognized that although the majority of users of CRQ are regularly in compliance with the VNAP, these procedures are voluntary as opposed to mandatory, relying strictly on “good faith” for compliance. Without pecuniary penalties or other punishment to discourage violators, at least some form of public accountability may help dissuade aviators who are chronically VNAP non-compliant as well as serve to recognize and commend those pilots who have made a concerted effort to improve.

PAR2000 considered, but did not vote in favor of recommending publication of a “Worst Offenders”-type list along with a “Most Improved Operator(s)” category updated quarterly to identify and distinguish non-compliant pilots operating within CRQ airspace from the majority of users who are regularly in compliance as well as to acknowledge those aviators who have reformed.

Recommendation: *No further action is warranted.*

13.3.9 Appoint a Permanent Environmental Noise Specialist (PM-13)

PAR2000 recognized that in order to properly manage environmental noise policies and regulations at CRQ, a full-time, professional staff is required to plan, implement, monitor, and communicate aircraft noise-related tasks. The noise impact of more than 250,000+ annual aircraft operations on the adjacent North County communities will continue to swell as the area continues to develop and air traffic increases. The impact will require the skills of a full-time professional staff.

PAR2000 recommended funding and filling a position at CRQ for a full-time Environmental Noise Specialist to serve as a liaison between the community and the airport and be an ombudsman in the resolution of noise-related issues.

As described in PM-2, [Section 13.2.2](#), the County of San Diego hired a dedicated noise officer at the end of 1999. Currently, the position is open, and the duties are being fulfilled by another member of the airport staff. The County is actively engaged in final contract negotiations with a contractor to fill the Noise Abatement Officer position.

The responsibilities of the Noise Abatement Officer / Environmental Noise Specialist include, but are not limited to:

- Operate the NMS;

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- Manage the VNAP;
- Coordinate with the public, FBOs, and pilots to notify them of noise-sensitive areas;
- Research and respond to noise complaints; and
- Produce and present noise-related reports.

Recommendation: *CRQ should hire a dedicated Noise Abatement Officer / Environmental Noise Specialist.*

13.3.10 Develop and Implement Governmental Policies (PM-14)

PAR2000 suggested that airport management should be encouraged to find tenants that would not increase noise to the surrounding community.

The recommendation by PAR2000 was to enact policies specific to CRQ to prevent the introduction of activities that would expand the noise contours of the airport as depicted in the Comprehensive Land Use Plan (CLUP).

Enacting policies specific to CRQ to prevent the introduction of activities that would expand the noise contour would be subject to FAR Part 161. [Section 11.3.9](#) discusses the feasibility of conducting an FAR Part 161 Study.

Since the County of San Diego accepts federal grant funding from the Airport Improvement Program, they are required to comply with the *Assurances for Airport Sponsors*. According to the *Economic Nondiscrimination* paragraph in the *Assurances for Airport Sponsors*, the airport sponsor “will make the airport available as an airport for public use on reasonable terms and without unjust discrimination to all types, kinds and classes of aeronautical activities, including commercial aeronautical activities offering services to the public at the airport.” Preventing the introduction of activities that would expand the noise contours of the airport would violate this airport grant assurance.

Recommendation: *No further action is warranted.*

13.3.11 Request FAA Develop Procedures to Increase VNAP Communications (PM-15)

PAR2000 recognized that FAA Air Traffic Control Tower personnel working within the increasingly busy CRQ Class D airspace have referred pilots to contact airport management for information regarding the VNAP. While those pilots who do contact airport management are advised regarding the VNAP, others may not find this practical. Aircraft pilots operating within CRQ Class D airspace may or may not be aware of VNAP information as updated and distributed via publications, web sites, distributions, mailings, or other means.

The PAR2000 made the following recommendations:

- FAA should develop procedures to increase disclosure of VNAP to pilots while on the ground or airborne.

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- As practical, ATCT personnel indicate/advise when pilot requests are in conflict with VNAP.
- Amend the Automated Terminal Information Service (ATIS) to refer listeners to another frequency disclosing the VNAP as updated.
- FAA and the County of San Diego conduct a frequency sweep and/or study and apply to the Federal Communications Commission (FCC) for a dedicated low-power frequency over which to broadcast noise abatement information as updated.
- The ATIS should indicate the dedicated frequency for VNAP information. After hours, the VNAP information should be broadcast by the Automated Surface Observation Station (ASOS).

The Clearance Delivery Controller (CDC) could disclose VNAP information to pilots prior to their departure. The CDC's responsibility is to deliver aircraft identification, clearance limits, departure procedure, route of flight, altitude, departure frequency, and transponder code. The local controller is primarily responsible for separating aircraft operating within the airport traffic area and those landing on any of the active runways, arranging inbound aircraft into a smooth and orderly flow of traffic, and sequencing departing aircraft into a flow. ATCT could indicate or advise pilots when requested departure routes are in conflict with the VNAP. Issuing information regarding noise abatement procedures or noise-sensitive areas around the airport is not their primary responsibility. However, when traffic is not congested, it may be feasible to deliver such information.

The establishment of another frequency to disclose the VNAP information is technically feasible. However, traditionally, the FAA does not use VHF communication frequencies to broadcast noise abatement procedures. The airport staff investigated the possibility of getting a dedicated frequency. The FAA ATC Spectrum Engineering Services denied the request, indicating there were no frequencies available.

FAA Order 7110.65P, Section 2-9-3, Paragraph h, states "other perishable items that may appear only for a matter of hours or a few days on the ATIS message" will be included in ATIS broadcast as appropriate. ATIS is not utilized for permanent or on-going information broadcast purposes. Therefore, broadcasting another frequency on the ATIS is not appropriate.

In January 2005, the FAA disapproved a Part 150 NCP recommendation to incorporate noise abatement advisory information on the ATIS recording at Ft. Lauderdale Executive Airport (FXE). The Record of Approval indicated that Revised Order 7110.65, ATC, no longer provides for noise abatement advisories. FAA Order 7110.65P, Section 2-9, Automatic Terminal Information Service Procedures, is included in [Appendix K](#).

The ASOS program is a joint effort of the National Weather Service (NWS), the Federal Aviation Administration (FAA), and the Department of Defense (DOD). The ASOS serves as the nation's primary surface weather observing network. ASOS is designed to support weather forecast activities and aviation operations and, at the same time, support the needs of the meteorological, hydrological, and climatological research communities. According to the National Oceanic and Atmospheric Administration (NOAA), the ASOS routinely and automatically provides computer-generated voice

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observations directly to aircraft in the vicinity of airports, using FAA ground-to-air radio. It is the designated weather information communication tool for pilots. Thus, incorporating noise abatement procedure information into the ASOS is not practical.

Section 11.3.5 discusses contacting clearance delivery and use of ATIS for VNAP information.

Recommendation: *When feasible, CRQ ATCT personnel should encourage the use of the VNAP.*

13.3.12 Conduct ATCT Workload Study to Support Additional Personnel (PM-16)

PAR2000 recognized that as the busiest airport in the County of San Diego, workload of ATCT at CRQ is the highest in the entire county. While the safety record of this facility and staff has been extraordinary, the extra work burden implied in certain of the recommendations made in PAR2000 shall fall ever more heavily on these same personnel.

PAR2000 recommended that the FAA undertake a workload study to:

- Evaluate the present tower design, operator workload, and overall effectiveness of the ATCT operations;
- Make recommendations to improve overall effectiveness in order to support noise abatement recommendations as adopted by the County Board of Supervisors in support of this report;
- Evaluate ATCT radio communications to determine their present effectiveness and to recommend improvements to accommodate additional frequency capacity for future operational growth; and
- Preserve the continuing safety and efficiency of operations while promoting noise abatement procedures at CRQ.

Recommendation: *CRQ ATCT should conduct the recommended workload study.*

13.3.13 Increase FAA Flight Standards District Office Briefings Concerning Aircraft Emergency Procedures (PM-17)

PAR2000 recognized that the local FAA Flight Standards District Office (FSDO) staff conducts regular monthly safety briefings at area airports including CRQ. Though noise abatement remains the focus of PAR2000, the community did express its general concern regarding aircraft emergency procedures as incidents of aircraft landing on or near highways were reported.

PAR2000 recommended that the FAA FSDO conduct regular briefings regarding best emergency procedures for pilots operating in or near CRQ Class D Airspace.

This measure is regarding safety, not noise.

Recommendation: *No further action is warranted.*

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13.3.14 Erect Monument Signs at Strategic Locations (PM-18)

The PAR2000 concluded that present and future Carlsbad residents may not know that the city has an airport or where it is located. The airport may not be obvious to people driving past it.

The PAR2000 recommended that monument signs be strategically located, on airport property, to inform drivers of the existence and the location of the airport.

City of Carlsbad Municipal Code, Title 21 Zoning, Chapter 21.41 Sign Ordinance, Section 21.41.020 indicates a “monument sign” means a freestanding sign, which is supported by a base that rests upon the ground and of which the display or copy is an integral part of the design. In accordance with the provisions of Section 21.41.095, if the airport is considered an industrial use in the M zone, then each monument sign can have a maximum overall size of 50 square feet, a maximum height of 6 feet above the average grade, and the letters on the sign can be up to 8 inches in height. The signs must include the airport’s address. The signs can be located at primary project entrances or at other strategic locations.

In accordance with the provisions of Section 21.41.080, corporate logos and graphics may be used in conjunction with monument signs. Illumination from or upon any sign shall be shaded, shielded, directed or reduced so as to minimize light spillage onto the public right-of-way or adjacent properties. Externally illuminated signs shall be lighted by screened or hidden light sources. Each monument sign shall include landscaping around the base of the sign, at a minimum ratio of two square feet for every one square foot of sign area, so as to protect the sign from vehicles, improve the appearance of the installation and screen light fixtures and other appurtenances.

A sign permit is required in accordance with the provisions of Section 21.41.050. The application for a sign permit shall be made in writing on the form provided by the planning department and shall be accompanied by the required fee. Such application shall set forth and contain the following information:

- A drawing to scale showing the design of the sign, including dimensions, sign size, colors (applies to commercial message signs only), materials, method of attachment, source of illumination and showing the relationship to any building or structure to which it is proposed to be installed or affixed or to which it relates;
- A site plan, including all dimensions, drawn to scale indicating the location of the sign relative to the property line, rights-of-way, streets, sidewalks, vehicular access points and existing buildings or structures and off-street parking areas located on the premises;
- The number, size, type, and location of all existing signs on the same building, lot, or premises; and
- Any structural information and plans necessary to ensure compliance with the latest adopted building code and electrical code.

Monument signs could be erected on airport property along El Camino Real and Palomar Airport Road, in accordance with the provisions of City of Carlsbad Municipal Code, Title 21 Zoning, Chapter 21.41 Sign Ordinance, to inform drivers of the existence and location of the airport.

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The approximate cost of designing, producing, and erecting one monument sign is \$5,000.

Recommendation: CRQ should erect monument signs on airport property along El Camino Real and Palomar Airport Road, in accordance with the provisions of City of Carlsbad Municipal Code, Title 21 Zoning, Chapter 21.41 Sign Ordinance, to inform drivers of the existence and location of the airport.

13.3.15 Develop Graphic VNAP Signage (PM-19)

PAR2000 recognized that many aircraft owners/operators either based or transiting CRQ may or may not be aware of VNAP information as updated and distributed via publications, web sites, distributions, mailings, or other means.

PAR2000 recommended development and prominent display of graphic VNAP signage depicting landmarks and other operational data.

The VNAP logo has been developed and finalized. The airport will produce signs, stickers, etc. using the logo.

Recommendation: CRQ should produce signs, stickers, etc. using the VNAP logo, and prominently display and utilize them as appropriate.

13.4 REVIEW OF OTHER PROGRAM MANAGEMENT MEASURES

Other program management measures were considered in this section. They are described in [Table 13-3](#).

Table 13-3
Other Program Management Measures

Measure ID	Measure
PM-20	Conduct VNAP Training Class
PM-21	Adopt "Fly Friendly" Program

13.4.1 Conduct VNAP Training Class (PM-20)

Conducting VNAP training classes for local pilots would help familiarize them with the noise issues around the airport. The classes should be held by the County of San Diego bi-annually. The booklet, which is recommended in PM-5, [Section 13.3.1](#), would be provided to pilots.

During the training classes, the following information would be presented:

- Current VNAP;

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- Noise-sensitive areas;
- Complaint analysis (type of complaint, location, time, etc.); and
- Flight density map regarding VNAP.

Recommendation: CRQ should conduct bi-annual VNAP training classes.

13.4.2 Adopt “Fly Friendly” Program (PM-21)

The Citizens for Palomar Airport Noise Reduction made a presentation to the PAAC at their November 2004 meeting. A copy of the presentation is included in [Appendix N](#). The proposed “Fly Friendly” program seeks to improve compliance with the existing VNAP, including the “Alpha Departure” procedure and “Quiet Hours,” and have pilots take responsibility for their own compliance.

The “Fly Friendly” program includes suggestions that are similar to many of the recommendation included in this NCP relative to pilot and community outreach and education. The program would rely on funding from the County and the City of Carlsbad. Members of the community have volunteered to assist with community outreach. A logo design has been completed.

The PAAC adopted the “Fly Friendly” program at their April 21, 2005 meeting.

Recommendation: CRQ should continue to implement the recently adopted “Fly Friendly” Program.

13.5 SUMMARY

This section summarizes the program management measures described in [Section 13](#). The following measures are recommended for inclusion in the NCP:

- PM-1 CRQ should upgrade their GEMS software to ANOMS 8, and upgrade their computer hardware as necessary to support operation of ANOMS 8. If eligible for AIP funding, CRQ should upgrade hardware at existing NMTs and install two additional NMTs.
- PM-2 & PM-13 CRQ should hire a dedicated Noise Abatement Officer.
- PM-3 The Palomar Airport Advisory Committee (PAAC) should continue to act as a forum for discussion of noise abatement actions.
- PM-4 CRQ should update maps identifying the noise-sensitive areas around the airport, formatted such that they can readily be inserted into a Jeppesen Airway Manual 7-ring binder. They should be produced on glossy 80-pound paper, and have an overall size of 8½” in height by 11” in width, folded to 8½” in height by 5½” in width, with text and color graphics on both sides.
- PM-5 CRQ should produce an airport noise information booklet to help educate the community, homeowners associations, real estate officers, media, and others.

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- PM-6 1) CRQ should develop an official website to disseminate VNAP and other noise related information, including a list of “frequently asked questions” and answers. The website will be developed in accordance with current County standards. 2) CRQ should also contact web masters of aviation-related web sites and request an internet link to the CRQ web site.
- PM-7 CRQ staff should continue to coordinate with the DPW PIO to disseminate information to the news media that integrates all sides of the noise issues and the airport’s efforts to manage them more effectively.
- PM-8 CRQ staff should continue attending and/or participating in aviation association meetings to expand awareness of VNAP and other noise-related issues.
- PM-9 CRQ should coordinate with the DPW PIO to periodically distribute VNAP press releases to aviation media.
- PM-10 CRQ should periodically provide updated VNAP information for distribution by FBOs.
- PM-15 When feasible, CRQ ATCT personnel should encourage the use of the VNAP.
- PM-16 CRQ ATCT should conduct the recommended workload study.
- PM-18 CRQ should erect monument signs on airport property along El Camino Real and Palomar Airport Road, in accordance with the provisions of City of Carlsbad Municipal Code, Title 21 Zoning, Chapter 21.41 Sign Ordinance, to inform drivers of the existence and location of the airport.
- PM-19 CRQ should produce signs, stickers, etc. using the VNAP logo, and prominently display and utilize them as appropriate.
- PM-20 CRQ should conduct bi-annual VNAP training classes.
- PM-21 CRQ should continue to implement the recently adopted “Fly Friendly” Program.

These recommendations, along with operational recommendations described in [Section 11](#) and land use recommendations described in [Section 12](#), are summarized in [Section 14](#), Recommended Noise Compatibility Program.