## CALIFORNIA COASTAL COMMISSION

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## STAFF RECOMMENDATION

## **ON CONSISTENCY DETERMINATION**

Consistency Determination No.: CD-013-08
Staff: MPD-SF
File Date: 3/20/08
60th Day: 5/19/08
75th Day: 6/3/08
Commission Meeting: 5/9/08

**FEDERAL AGENCY:** U.S. Air Force

**PROJECT** 

**LOCATION:** Pillar Point Air Force Tracking Station, Pillar Point, San Mateo

County (Exhibits 1-2)

**PROJECT** 

**DESCRIPTION:** Western Range Instrumentation Modernization Program (Exhibit

3)

**SUBSTANTIVE FILE** 

**DOCUMENTS:** See page 16.

## **EXECUTIVE SUMMARY**

The U. S. Air Force (Air Force) proposes to modernize its radar tracking capabilities at the Pillar Point Air Force Tracking Station, north of Half Moon Bay in San Mateo County. The facilities are proposed to support tracking of Air Force launches from Vandenberg Air Force Base (VAFB) in Santa Barbara County, as well as the U.S. Defense Department's, Missile Defense Agency's (MDA's), Ground Based Mid-Course Defense (interceptor) program. The Air Force has historically used this site to track missiles from VAFB, and the Air Force has recently also been tasked with the responsibility of tracking additional MDA launches.

To modernize and improve tracking, the Air Force proposes to install two new command transmit antennas and one new telemetry antenna, modify equipment at existing buildings, remove an existing antenna, and demolish an existing building. The proposed facilities are all within or immediately adjacent to existing structures at Pillar Point. The developed portion of the station is located on a prominent knoll which is highly scenic and highly visible to public views from 360 degrees of views including Fitzgerald Marine Reserve, Highway 1, the Pacific Ocean, Pillar Point Harbor, Half Moon Bay State Beach, Montara Mountain, and many other publicly accessible locations. Given the topography, any large or tall new facilities would be highly visible.

In December 2006 the Commission reviewed an Air Force consistency determination for a large antenna and radome at the site, taller than any of the proposed improvements (CD-089-06). The Commission raised concerns about impacts to public views, but it ultimately concurred when convinced that the facility was needed, no less damaging alternatives were available, and after the Air Force agreed to provide landscaping improvements to partially screen some existing visible structures at the station. While not as tall as the recently-reviewed antenna/radome, the proliferation of additional facilities, including one new 76 ft. high telemetry antenna and two new 31 ft. high transmit antennas, raises similar view protection issues to those raised in that previous case.

Due to the visibility of these structures, the Commission staff requested additional information from the Air Force on issues such as project justification at this location, alternatives analysis, and mitigation considerations (e.g., landscape screening and building color treatment). The Air Force's response was that it reviewed a number of siting and technological alternatives, that the view impacts have been minimized to the extent practicable, and that the previous landscaping plan was the maximum screening it could accomplish without affecting mission needs at the station. Thus, no less damaging less damaging alternatives are available, further minimization or mitigation measures are not available or feasible, and the project is necessary for public safety and national security.

The Commission staff requested the Air Force to commit to removing the structures when they are no longer operationally functional or needed, which would restore the affected public views at the end of the project life. The Air Force has agreed to do so but only after it is able to obtain federal funding for the removal. The commitment to remove the structures needs to be without reservation as to availability of funding, and the Commission is therefore conditioning this consistency determination to require remove the structures in the event they are no longer functional. If the Air Force agrees to this condition, the Commission could then find that the Air Force has minimized the facilities' impact on scenic public views. As conditioned, then, the project would be consistent with the view protection policy (Section 30251) of the Coastal Act.

The project would not impose burdens on public access, and the Air Force cooperates with and assists the sponsors of the Maverick's Surf Competition. The project is consistent with the public access and recreation policies (Sections 30210-30212) of the Coastal Act.

## STAFF SUMMARY AND RECOMMENDATION

I. <u>Project Description.</u> The Air Force proposes to modernize its missile tracking at the Pillar Point Air Force Station in San Mateo County. The improvements are part of the Air Force's Western Range (WR) Modernization Program, and are intended to support the Defense Department, Missile Defense Agency's (MDA's), Ground Based Mid-course Defense interceptor program. Existing missile tracking facilities at Pillar Point are obsolete and in need of upgrading.

The Air Force states that due to the need for redundant systems, "...there must be two completely independent systems with separate power sources, no physical connection, and dissimilar software." The Air Force further states that while the redundancy requirement was previously met by a combination of radar and telemetry equipment, "Current plans for the range tracking architecture omit the radar and instead use two on-board telemetry systems to send position information; one carries ... GPS... data and the other provides inertial guidance data." The Air Force also states: "Prime and backup telemetry receiving antennas and command transmit antennas on the ground are located at the same site, thus reducing operational and maintenance costs."

The project is needed for: (1) range safety (including the need for independent systems); (2) for tracking missile launches from Vandenberg Air Force Base (VAFB) (which provides necessary support in the event the Air Force needs to destroy a launch vehicle if it deviates from its projected flight path and threatens public safety); and (3) to help implement the National Missile Defense Act of 1999, which required that the Missile Defense Agency:

...develop an integrated layered Ballistic Missile Defense System (BMDS) to defend the United States, its deployed forces, allies and friends from ballistic missiles from anywhere in the world and in all phases of flight. As the President directed, MDA is moving forward to provide a limited defensive capability against a long-range ballistic missile attack aimed at any of our 50 states. An important part of MDA's program is the realistic testing of the entire system. Dual launch tests (i.e., two targets fired from Alaska followed by two intercept missiles from the WR), require support from WR assets. The range must add a second telemetry antenna at PPAFS to track two missiles.

The project includes (Exhibit 3):

o Installation of two command transmit antennas (CT-4A and CT-4B) measuring 31-feet tall, including the 28-foot diameter radomes and 3-foot pedestals (Figure 1).

- o Installation of one 76-foot tall telemetry antenna (TM-B), including the 62-foot diameter radome and three-foot tall pedestal (Figure 2).
- Modifications to ancillary equipment including: a new console, transformers and uninterruptible power source units to be installed within Building 1; and communication lines to be trenched from support facilities (Buildings 1 and 8 and 13) to each of the antennas (Figure 3 [Exhibit 3]).
- Deactivation and dismantling of the existing CT-4 antenna (Figures 3 and 4 [Exhibit 3]).
- Demolition of Building 13 (to be replaced by the new telemetry antenna) (Figure 3 [Exhibit 3]).

The Air Force plans to start installation in August 2008, and to complete it in February 2009. Testing of the systems will follow, and the Air Force estimates that it will be available to support missions in September 2009.

**II.** <u>History.</u> As noted above, the Air Force has historically used its Pillar Point facility to track rocket launches from Vandenberg Air Force Base (VAFB), and from 1969 until 1997, the site contained an 80 ft. diameter telemetry antenna (Exhibit 4). Eventually, corrosion rendered that antenna unusable, and on June 12, 1997, the Commission staff concurred with the Air Force's negative determination for the removal of the then-existing, 80 ft. tall antenna (ND-072-97). In that concurrence letter the Commission staff noted the benefits to the highly scenic area from removal of the antenna, which was by far the most visually intrusive structure at the site. Neither the Air Force's submittal in 1997 nor the Commission staff's response letter specifically discussed or provided any details for a replacement antenna.

It took the Air Force several years to obtain the necessary funding for a replacement antenna, and in the interim period the Air Force relied on temporary tracking devices at Pillar Point to track VAFB launches. After being informed by the Commission staff of the need for a federal consistency determination for a permanent replacement facility in September 2006, the Air Force submitted a consistency determination for the replacement antenna (CD-089-06). On December 15, 2006, after the Air Force agreed to modify the project to include commitments to implement landscaping to help screen coastal public views of buildings on the base, the Commission concurred with the Air Force's consistency determination. The Commission found no less damaging alternatives were available, that the project was needed for military security, and that no further mitigation was warranted beyond treatment of building color and landscaping. Since that time, the Air Force has provided landscaping plans for Commission staff review and has conducted the initial plantings (Exhibits 7-8).

**III.** <u>Federal Agency's Consistency Determination</u>. The Air Force has determined the project consistent to the maximum extent practicable with the California Coastal Management Program.

**IV.** <u>Staff Recommendation</u>. The staff recommends that the Commission adopt the following motion:

**MOTION:** 

I move that the Commission conditionally concur with consistency determination CD-013-08 that, if modified in accordance with the condition below, would be fully consistent, and thus consistent to the maximum extent practicable, with the enforceable policies of the California Coastal Management Program (CCMP).

## **STAFF RECOMMENDATION:**

Staff recommends a **YES** vote on the motion. Passage of this motion will result in an agreement with the determination and adoption of the following resolution and findings. An affirmative vote of a majority of the Commissioners present is required to pass the motion.

## RESOLUTION TO CONDITIONALLY CONCUR WITH CONSISTENCY DETERMINATION:

The Commission hereby **conditionally concurs** with consistency determination CD-013-08 by the Air Force on the grounds that the project would be fully consistent, and thus consistent to the maximum extent practicable, with the enforceable policies of the CCMP, provided the Air Force agrees to modify the project consistent with the condition specified below, as provided for in 15 CFR §930.4.

## **Condition:**

- 1. <u>Removal of structures at the end of their life cycle</u>. The Air Force will remove the structures described in this consistency determination when they are no longer operationally functional.
- V. <u>Applicable Legal Authorities</u>. The federal consistency regulations (15 CFR § 930.4) provide for conditional concurrences, as follows:
  - (a) Federal agencies, ... should cooperate with State agencies to develop conditions that, if agreed to during the State agency's consistency review period and included in a Federal agency's final decision under Subpart C ... would allow the State agency to concur with the federal action. If instead a State agency issues a conditional concurrence:
  - (1) The State agency shall include in its concurrence letter the conditions which must be satisfied, an explanation of why the conditions are necessary to ensure consistency with specific enforceable policies of the management program, and an identification of the specific enforceable policies. The State agency's concurrence letter shall also inform the parties that if the requirements of paragraphs (a)(1) through (3) of the

section are not met, then all parties shall treat the State agency's conditional concurrence letter as an objection pursuant to the applicable Subpart . . . ; and

(2) The Federal agency (for Subpart C) ... shall modify the applicable plan [or] project proposal, ... pursuant to the State agency's conditions. The Federal agency ... shall immediately notify the State agency if the State agency's conditions are not acceptable; and

...

(b) If the requirements of paragraphs (a)(1) through (3) of this section are not met, then all parties shall treat the State agency's conditional concurrence as an objection pursuant to the applicable Subpart.

## VI. Findings and Declarations. The Commission finds and declares as follows:

## **A. Public Views.** Section 30251 of the Coastal Act provides:

The scenic and visual qualities of coastal areas shall be considered and protected as a resource of public importance. Permitted development shall be sited and designed to protect views to and along the ocean and scenic coastal areas, to minimize the alteration of natural land forms, to be visually compatible with the character of surrounding areas, and, where feasible, to restore and enhance visual quality in visually degraded areas. New development in highly scenic areas such as those designated in the California Coastline Preservation and Recreation Plan prepared by the Department of Parks and Recreation and by local government shall be subordinate to the character of its setting.

The development within the Pillar Point Air Force Tracking station is located on top of a prominent knoll, and the entire site is highly scenic and highly visible to public views from all directions around the knoll, including views from Fitzgerald Marine Reserve, Highway 1, the Pacific Ocean, Pillar Point Harbor, Half Moon Bay State Beach, Montara Mountain, and many other publicly accessible locations. The site is not pristine, as it contains a complex of Air Force buildings and other antennas. Some of the same features that make it attractive to the Air Force because of unencumbered lines of sight to the west, south and north, can be considered drawbacks from a public view perspective because they render the facility highly visible.

In reviewing the Air Force's previously-proposed, and now installed, antenna/radome on the site (CD-089-06), the Commission noted it was highly visible and by far the tallest Air Force structure on the site, and that it sits on almost the highest topographical point at the site (Exhibits 5 & 6). The three proposed new antennae/radomes would not be as high, because they are all shorter and set at lower elevations. The Air Force states:

PPAFS now has one telemetry antenna with a 62-foot diameter radome assembly that is approximately 109 feet tall. The new telemetry antenna would have a radome that is also 62 feet in diameter; however, the total height of this new antenna would only be 76 feet, due to a shorter pedestal. The existing command transmit antenna is mounted on a three-foot thick concrete pad, has a 15-foot diameter dish covered by a 20-foot diameter radome, and is 23 feet tall. The two new command transmit antennas would be pad mounted as well, have a 28-foot radome and be a total of 31 feet tall from the bottom of the pad to the top of the radome.

Nevertheless, due to the site's prominence from views in all directions, the structures would be highly visible and they would result in the proliferation of additional unnatural-looking structures in a highly scenic viewshed. Thus, they raise similar view protection issues to those raised in CD-089-06. In other words, they raise the need for a through alternatives analysis to determine whether visual impacts can be minimized or eliminated, and consideration of mitigation measures.

The Air Force's initial consistency determination analyzed alternative technologies, designs, and locations. The Air Force stated:

The Air Force extensively analyzed alternatives to installing multiple antennas at PPAFS through the "Spacelift Range Systems Contract (SLRSC)." After contract award, the contractor engaged the Air Force and range community in a system requirement review, system design review, and for the telemetry portion of the contract, a preliminary design review. During these planning phases, several critical system design considerations were addressed, including alternative technologies, deployment locations, antenna sizing, operational constraints, and protection from the environment.

## Alternative Technologies

During the system design review, designers did a trade analysis of multiple technologies for deployment. The contract required that fixed sites, transportable sites, and mobile assets be considered. Although not part of the contract, designers also considered airborne and space based range concepts.

Mobile and Transportable Assets: The mobile assets operation concept is to provide mission support flexibility, and backup for out-of-service fixed assets. Studies showed that mobile assets that can meet the required specification for telemetry system and command transmit sensitivity are not commercially available. Transportable assets take two weeks to prepare for mission readiness versus two days for mobile assets. Both mobile and transportable assets were ruled out by the requirement that the telemetry system and command transmit be available 24 hours a day, seven days a week to support MDA's operational requirements.

Space Based and Airborne Technologies: Space based technology was not selected because it would require deploying a very expensive satellite system that is beyond budgetary constraints and is not part of MDA's system architecture for the BMDS. Airborne technology was not selected because it also would require deploying an entirely new system, and it, too, is not part of MDA's system architecture for BMDS.

## **Deployment Locations**

The Air Force did an analysis focused on deployment locations prior to selecting PPAFS as the optimum location for the planned antennas and support equipment. The Air Force considered various criteria in its analysis of deployment locations, with the main issues being mission coverage and alternate site locations.

To ensure the WR instrumentation provides the support required for range safety and capturing vehicle performance data, the Air Force carefully considered each present vehicle trajectory and all future vehicle trajectories. During the site selection process, the system architect used software tools to plot the theoretical and actual flight paths of launch vehicles. Based on this analysis, the best possible telemetry and command transmit sites were selected to maximize flight coverage and provide the best possible support for range safety personnel and the range users. This analysis validated that PPAFS, already in use, would provide the coverage required for future missions as it has for past and present programs.

Other considerations also supported installing the new antennas at PPAFS. Vehicle link coverage requires that there are no line-of-sight constraints down to 1.5-degree elevation over the operational azimuth range (horizontal view) of the vehicle flight. This dictates coastal or elevated locations that do not have physical obstructions between the antennas and the space vehicles and missiles. Acceptable sites are extremely limited in California, if available at all, and visual resources issues would likely apply in most situations.

In addition, building another site would require duplicating very expensive infrastructure already at PPAFS, and existing systems would have to be modified to accommodate the new site. Communication links would have to be upgraded to support the higher telemetry data bandwidth and antenna dependency requirements, and the Antenna Designate System (ADS) at VAFB would have to be upgraded. The ADS uses each site's unique ID to identify its tracking data, which is what allows alternate sites to acquire the target. If a new site were introduced, the ADS software system at VAFB would need to be upgraded.

## Antenna Size and Placement

Antenna size and placement are based on mission requirements and antenna-specific criteria. Mission requirements are derived from a set of WR nominal trajectory files and ballistic time, range, azimuth, and elevation data files. Co-antenna interference, electromagnetic radiation hazards, and obscuration criteria drive the antenna location. Technical analyses performed to provide data for selecting the most cost-efficient antenna sizes considered initial system costs, minimum performance requirements for the required data rates, and possible future data bit rate requirements. The analyses concluded that telemetry antennas size would need to be a minimum of 44 feet in diameter. Likewise, command transmit antenna diameter would need to be a minimum of 15 feet in diameter.

## **Operational Constraints**

PPAFS antennas positioning was determined based on the requirement to ensure line-of-site view of the target, without interruptions from other structures at the site (Figure 4). Locations were selected to minimize the need for pedestals (thus reducing their height) to prevent shadowing by other antennas. In addition, fixed height antennas versus antennas that could be raised and lowered were selected because the latter would require specially designed antennas, with considerable set-up time. The same MDA, 24 hours/7 days/week requirement that ruled out mobile and transportable telemetry systems also ruled out an antenna that must be raised and lowered.

To help offset visual impacts from the previously reviewed antenna/radome, the Air Force's consistency determination noted:

## Improvements to PPAFS Landscape

In October 2007, 58 Monterey cypress trees (39 between 8 and 9 feet tall, and 19 between 10 and 12 feet tall) were planted to improve and somewhat block the views of the PPAFS built environment. Figure 5 is an aerial line drawing of the tree plantings in relationship to the PPAFS structures (including the planned antennas), and Figure 6 is a photograph of some of the trees taken in December 2007. Monterey cypress trees can grow up to 70 feet tall and spread up to 40 feet. As they mature, the cypress trees will improve and partially shield views of PPAFS' structures and buildings for the surrounding coastal communities. In addition, the two new command transmit antennas are lower in stature than the telemetry antennas and will be placed facing the ocean, which minimizes their visibility from the coastal communities.

The Air Force's consistency determination concluded:

## **CONCLUSION**

The Air Force performed thorough analyses on alternatives to the two RTS command transmit antennas and the single telemetry antenna. The final design reflects mission objectives requirements. Although the three antennas will visually add to the PPAFS skyline, they will be significantly smaller in stature than the 106-foot tall TM-A telemetry antenna and radome constructed in December 2006.

The 58 Monterey cypress trees we planted in October 2007 will help improve the look of the PPAFS built environment, including the planned antennas. The Air Force planted more trees than were realistically needed to improve the landscape because we were concerned some of them would not reach full maturity. PPAFS and VAFB staff regularly monitor tree growth. If a significant number of trees do not successfully take root, they will be replaced.

During the federal consistency process for the TM-A telemetry antenna in 2006, (CD # -089-06), the Air Force and California Coastal Commission (CCC) staff explored the potential of improving the look of the built environment at PPAFS by painting buildings and structures a different color. We both determined that the existing beige colors adequately blend with the landscape. The CCC inquired if the Air Force could paint the white radome a different, less stark color. However, the white color maintains the radome's functional requirements. The radomes for these planned antennas must also be white.

In response to the above, and the Air Force's initial consistency determination for the proposed structures, the Commission staff requested additional information. The Air Force responded as follows [the responses in *italics* follow the information requests]:

## **Alternative Systems.**

<u>Commission staff request</u>: The consistency determination states the system needs to be ready at all times. Since launches from VAFB are predictable, and since we presume the Air Force would be aware in advance of MDA tests (which would also, we presume, be relatively infrequent), it is not clear why this degree of readiness is required. Please elaborate on this need.

Air Force Response: Although Pillar Point Air Force Station (PPAFS) is not part of the operational MDA system, it is required to support MDA testing. Testing and other range activities are normally scheduled well in advance of the need date. In MDA's case, there are plans for future test scenarios to be conducted with very short-notice coordination in order to simulate no-notice missile intercepts.

## Alternative Technology.

<u>Commission staff request</u>: The consistency determination states radar/telemetry is being replaced by telemetry only. It is unclear why redundancy can no longer be achieved through a combination of radar and telemetry. Please explain.

Air Force Response: The long term plans for the Western Range call for the use of telemetry only to track vehicles. Telemetry supports both Global Positioning System (GPS) and inertial navigation system data. Safety requirements dictate there must be two independent sources of the tracking data. Currently, radar is one source and inertial navigation telemetry is the second source. Radars are being phased out in lieu of GPS tracking (via telemetry stream from launch vehicles) due to increased accuracy and reliability.

## **Alternative Locations.**

<u>Commission staff request</u>: Could the second, redundant system be located at VAFB? If not, please explain why not.

Air Force Response: The core reason for using PPAFS as a site for range assets is to avoid signal interference due to flame attenuation on westerly launches. When a launch vehicle travels west, the sensors at Vandenberg AFB can experience interference because they must 'look through' the heat from the exhaust plume. PPAFS is able to have line of sight contact with these vehicles from the side and follow their flight paths. The updated TM antenna at PPAFS will ensure continued redundancy within the site to provide support to the launches described here.

## **Alternatives within Pillar Point.**

<u>Commission staff request</u>: How much flexibility, if any, does the Air Force have in siting the three new antennas at the site? Are there alternative configurations that could be further used to minimize the overall visual impact? What constraints dictate distances between the antennas, or distances from other buildings on the site? Could the two transmit ("CT-4") antennas, for example, be within the road and developed area, rather than outside it?

Air Force Response: The placement of the antennas is based on many factors, including physical space needs, proximity to control buildings, use of existing infrastructure, and phased use of currently operational systems and new systems. Placing the new the CT antennas outside the circle road and down the hill on the west side of the facility accomplishes several requirements. The CT placement ensures no interference or populated structures will be affected by the beam strength or operation azimuth (sweep). Moving the CT antennas inside the road / developed area would necessitate high towers for the beams to avoid existing buildings and equipment. Also,

CT placement on far side of the site allows use of natural rise at center of station to partially obscure the radomes used to protect the new CT antennas.

The TM-B location allows the older 40' telemetry antenna to remain in operation until the 44' TM-B is completed. The old 40' antenna must remain in operation until TM-B is up and operational (maintaining telemetry system redundancy at Pillar Point). TM-B will be on a shorter pedestal than TM-A, helping to reduce visual impact. TM-B is being placed inside the circle road at a previously disturbed site (Bldg 9 site).

## Mitigation.

<u>Commission staff request</u>: As noted above, the Air Force is planting vegetative screening for the previous radome we concurred with. Are there opportunities for additional screening? Are there other measures the Air Force could undertake to improve public views in the area?

- (1) When the Air Force set out to design landscaping at PPAFS as a condition of CD-089-06, we first reviewed the existing plant types at the site and nearby locations to determine an appropriate palette of planting that would adapt to the local climate. Given that a small grove of Monterey cypress trees currently exists at the site, we decided to expand upon those trees using the same species. Once mature, the height of the cypress trees would create the desired visual improvements for softening and screening the built structures. We then analyzed the public view corridors around PPAFS to determine the optimum locations for planting the trees. From this analysis, we developed a landscaping perimeter. The landscaping perimeter was then evaluated for obstacles, including radar and telemetry line-of-site interference, topography, and existing buried infrastructure (e.g. com, electrical and water lines). Once all these factors were considered, the final landscaping perimeter was designed to create the maximum feasible extent of visual coverage.
- (2) Although it is not feasible or beneficial to expand the planting of trees at PPAFS, the Air Force is currently taking measures to control invasive plants and protect native plant communities and sensitive species at PPAFS. The establishment of invasive plant species at PPAFS both detracts from the native landscaping while simultaneously encroaching upon habitats for native species. Capeweed, iceplant, Italian thistle, Jubata grass, and several other invasive plants have settled into the current ecosystem at PPAFS. In May 2007, the Air Force developed a draft Invasive Plant Species Management Plan (Plan) (Atch 2) to address all known invasive plant species occurring at PPAFS and their impacts on sensitive species and natural ecosystems. The Plan takes into consideration integrated pest management and discusses management practices to prevent increased infestation by these species. The Plan provides Air Force resource managers a framework for implementing an effective, long-term management program to control invasive plant species at PPAFS. The Plan supports the goals of the supplement to the Vandenberg AFB Integrated Natural Resources Management Plan for Pillar Point AFS (Supplement) to provide an adaptive

management approach to ecosystem and natural resources management for the control of invasive plants, in accordance with Air Force Instruction (AFI) 32-7064 (United States Air Force [USAF] 2004). The adaptive management approach proposed in this Plan is a six-step process (Hoshovsky and Randall 2000):

- 1. Establish management goals and objectives for the site.
- 2. Determine which plant species or populations, if any, block or have potential to block attainment of management goals and objectives.
  - 3. Determine which methods are available to control the invasive species.
- 4. Develop and implement a management plan designed to move conditions toward management goals and objectives.
- 5. Monitor and assess the impacts of management actions in terms of effectiveness in moving toward goals and objectives.
  - 6. Reevaluate, modify, and start the cycle again.
- (3) Once completed, the PPAFS Invasive Species Management Plan, as well as the PPAFS Integrated Natural Resources Management Plan, will be submitted to the appropriate regulatory agencies for review. The CCC will receive official copies at that time. For now, we thought it appropriate to inform the Coastal Commission of our plans for invasive plants eradication for the purposes of this consistency determination. With the invasive plant species removed, invasive seeds will no longer spread to adjacent properties and the landscape at PPAFS will take on an improved, native appearance. Vandenberg AFB intends to request funds to implement the Plan in fiscal year 2009.

In its concurrence with the previously reviewed large Air Force telemetry antenna at Pillar Pt. (CD-089-06)(Exhibits 5-6), the Commission found the antenna consistent with Section 30251 after determining: (1) that the facility was necessary for Air Force tracking functions; (2) that no feasible less damaging locations, designs, or technologies were feasible or available; and (3) that while the antenna could not be screened, the Air Force had committed to partial mitigation in the form of landscaping to screen several structures from public views (and building painting treatment where appropriate). Thus, the Commission found that no additional measures were available that would further minimize or mitigate the project's visual impacts. The Air Force has since implemented the agreed-to plantings based on the landscaping plans approved by the Executive Director, including, as agreed, "appropriate vegetation (e.g., non-invasive, drought resistant, native plants from local stock), [to] ... be planted and maintained for the life of the facility, with particular emphasis on the radome structure and those buildings most highly visible within views from public areas to the north, northeast, and east of the Pillar Point Station ..." (Exhibits 7-8).

For the currently proposed additional facilities, the only structures raising visual issues are the 3 antenna/radome facilities. None would be as tall as the previously-concurred with antenna/radome. The Air Force has again documented the need for the project, and, given the additional analysis the Air Force has provided, the Commission agrees that no less environmentally damaging alternatives are available. The Air Force has also shown that additional landscaping beyond that described in the previous paragraph is not feasible, when unobstructed Air Force sight line needs are taken into consideration. As noted above, the Air Force states:

The landscaping perimeter was then evaluated for obstacles, including radar and telemetry line-of-site interference, topography, and existing buried infrastructure (e.g. com, electrical and water lines). Once all these factors were considered, the final landscaping perimeter was designed to create the maximum feasible extent of visual coverage.

Finally, the Commission staff has requested that the Air Force commit to removing the structures when they are no longer operationally functional or needed, which would restore the affected public views at the end of the project life. The Air Force has agreed "... to remove the structures in the event they are no longer functional and at the point when federal funding has been secured to do so." The Commission believes the commitment needs to be without reservation as to availability of funding, and is therefore conditioning this consistency determination to require removal of the structures in the event they are no longer functional. The Commission therefore concludes that, if the Air Force agrees to this condition, the Commission could find that the Air Force has minimized the facilities' impact on scenic public views and that the project would be consistent with the view protection policy (Section 30251) of the Coastal Act.

- **B.** Public Access and Recreation. Sections 30210-30212 of the Coastal Act provide for the maximization of public access and recreation opportunities, acknowledging that such access needs to be managed to take into account natural resource, military security, and public safety needs. Section 30212.5 provides that where appropriate and feasible, public facilities, including parking areas or facilities, "shall be distributed throughout an area so as to mitigate against the impacts, social and otherwise, of overcrowding or overuse by the public of any single area." Section 30213 provides for the protection of lower cost visitor and recreational facilities. Section 30214 provides that:
  - (a) The public access policies of this article shall be implemented in a manner that takes into account the need to regulate the time, place, and manner of public access depending on the facts and circumstances in each case including, but not limited to, the following:
    - (1) Topographic and geologic site characteristics.

- (2) The capacity of the site to sustain use and at what level of intensity.
- (3) The appropriateness of limiting public access to the right to pass and repass depending on such factors as the fragility of the natural resources in the area and the proximity of the access area to adjacent residential uses.
- (4) The need to provide for the management of access areas so as to protect the privacy of adjacent property owners and to protect the aesthetic values of the area by providing for the collection of litter.

For the large radar the Commission recently authorized, the Commission found:

As discussed above, the Coastal Act provides for balancing maximum public access in a manner consistent with public safety and military security needs. The Commission has recognized legitimate military security and public safety needs in numerous past reviews of construction projects at Air Force and other military bases. The Commission has traditionally found that absent new burdens on public access, no new public access requirements are normally required. The Pillar Point facility is closed to the public for military security reasons, and unlike Vandenberg Air Force Base, for example, where very little public access in the region is available, Pillar Point is a very small base and the areas surrounding Pillar Point provide extensive public access opportunities. In addition, the Commission notes that the Air Force tolerates fairly extensive public access at Pillar Point in the areas surrounding its fenced-in building complex, during the extremely popular "Maverick's" surfing contest, which generally occurs once per year. The timing of the event is scheduled only 1-2 days before the event and the best viewing of the surfing well offshore is from higher elevations onshore. Consequently many viewers stand or sit on the eroding bluff face below the Air Force's complex, which accelerates bluff erosion. In response to Commission staff questions about whether the Air Force could improve access management during the event, the Air Force stated:

In your letter, you asked about public access or viewing improvements. We realize Pillar Point Air Force Station is located in an ideal location to view the Mavericks big wave contest, and we have been supporting the event since it began. Every year we allow access onto the Pillar Point for contest officials, public safety personnel, and media representatives. Last year we had about 160 visitors on the station for the event. Recent security reviews have caused the Air Force to consider reducing the number of visitors to about 80 for the 2007 event. We must maintain proper security under all circumstances. While we have provided access to limited numbers of visitors for the event, the Air Force cannot safely manage full public access to the station. The station is too small, we don't have enough security personnel, and the risk to mission critical equipment is too great to open the gates to all viewers who may want to enter

the site. Allowing managed access to contest officials, public safety personnel, and media representatives is as much access as can reasonably be provided.

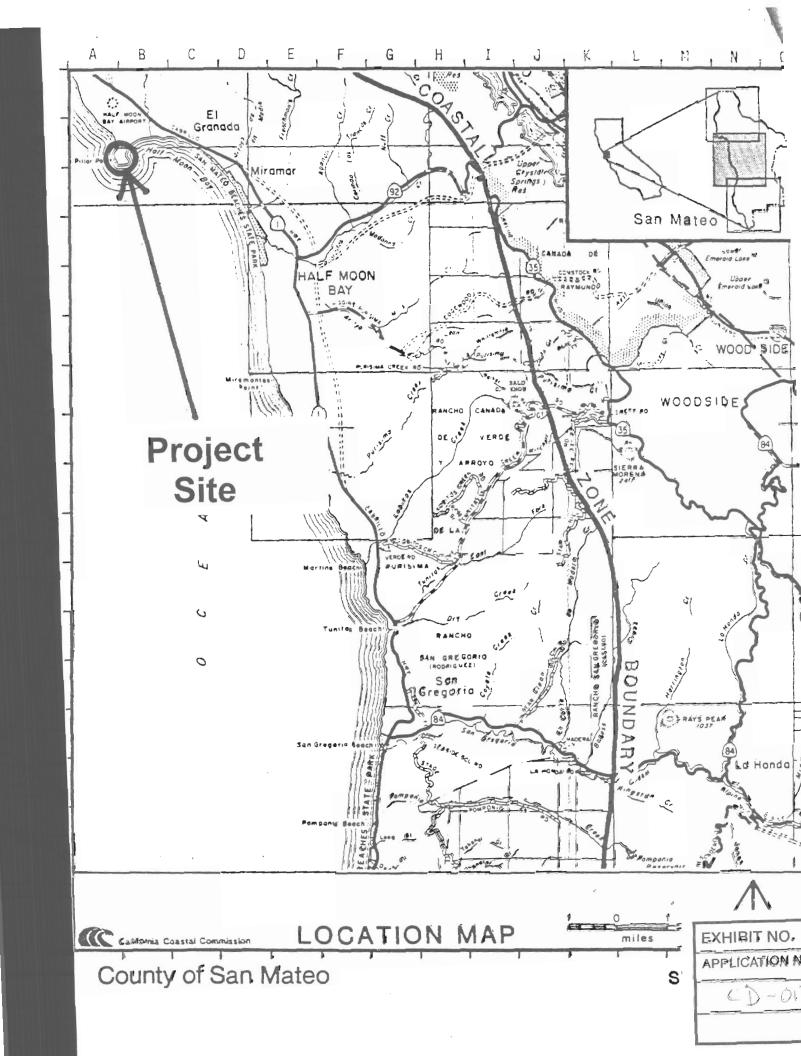
## The Air Force also responded:

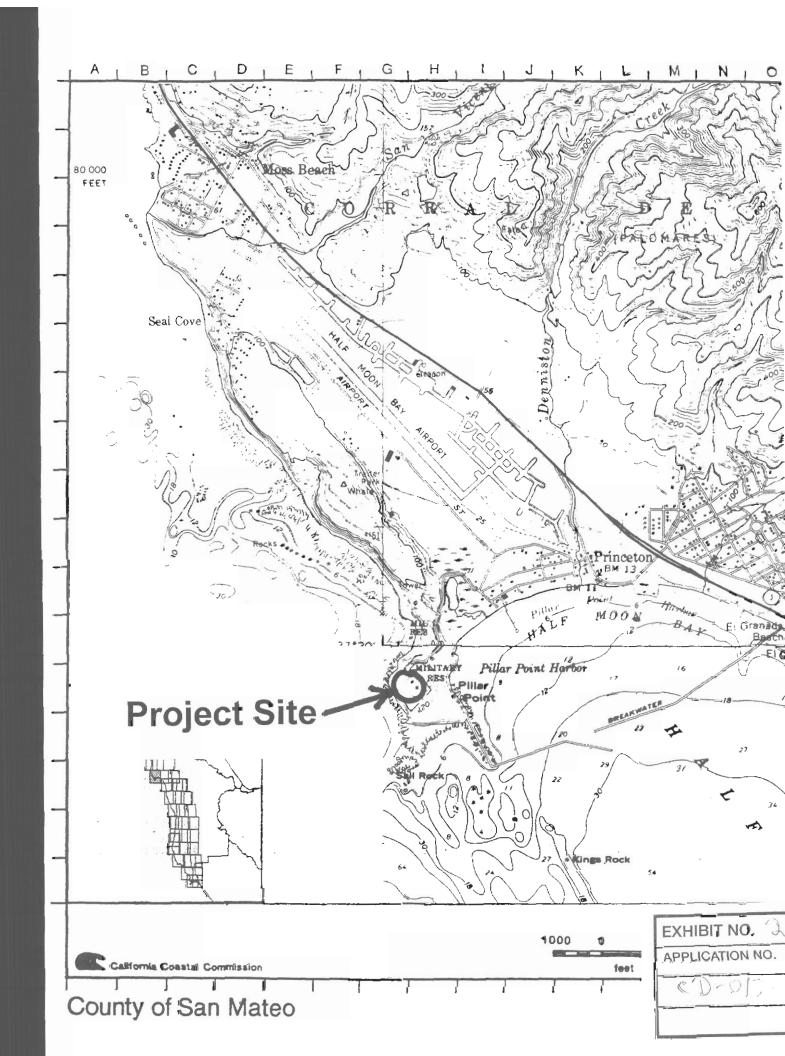
(1) Regarding public access, it is the Air Force's position to cooperate with the Maverick's Surf Competition to foster good community relations while, at the same time, safeguarding our mission, equipment, and personnel at PPAFS. The Air Force currently has procedures in place to facilitate the access of Maverick's officials, media, and participants. Once the Maverick's association announces the commencement of the event each year, the Air Force has 24 hours to coordinate public access, conduct security checks on visitors, secure all equipment, and transport additional security and public affairs staff to PPAFS from Vandenberg AFB. As the Maverick's event has grown more popular over the years, the Air Force has developed an excellent working relationship with the Maverick's officials as well as local police, fire, and emergency services to ensure the event is safely carried out. Apart from the Maverick's Surf Competition, the Air Force is not able to accommodate visitors wishing to come to PPAFS for recreational purposes.

Given that, as discussed in the previous section of this report, and as modified, the Air Force will be providing appropriate mitigation for visual impacts, and, further, that the project would not directly affect public access, the Commission finds that the existing military restrictions are necessary and consistent with Coastal Act policies, that the Air Force's proposal does not pose new burdens on public access, and that the project is therefore consistent with the public access and recreation policies (Sections 30210-30214) of the Coastal Act.

## VII. SUBSTANTIVE FILE DOCUMENTS:

- 1. Negative Determinations ND-076-06 and ND-072-97 (Air Force, Pillar Point).
- 2. Consistency Determinations for federal agency communications towers CD-10-04 (FAA, Santa Barbara Airport), CD-010-79 (Navy, Point Loma, San Diego), CD-025-01 (Navy, Point Loma), CD-004-79 (Navy, Big Sur, Monterey Co.), CD-041-85 (Navy, Centerville Beach, Humboldt Co.), CD-028-86 (Coast Guard, Morro Bay), and CD-100-98 and CD-160-97 (Coast Guard, Big Sur).





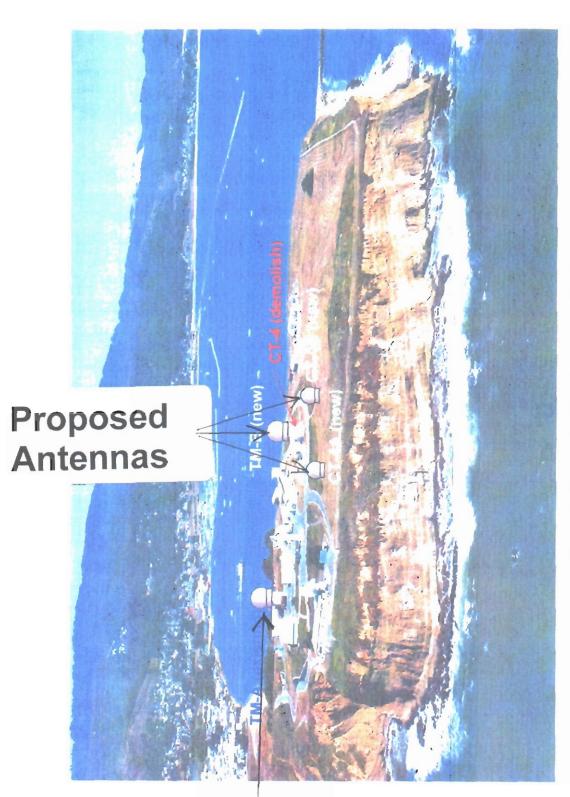


Figure 4: Conceptual Photograph of Skyline

Existing Antenna

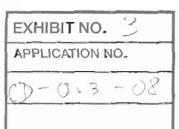


Figure 3: Modifications and new antennas proposed for Pillar Point.

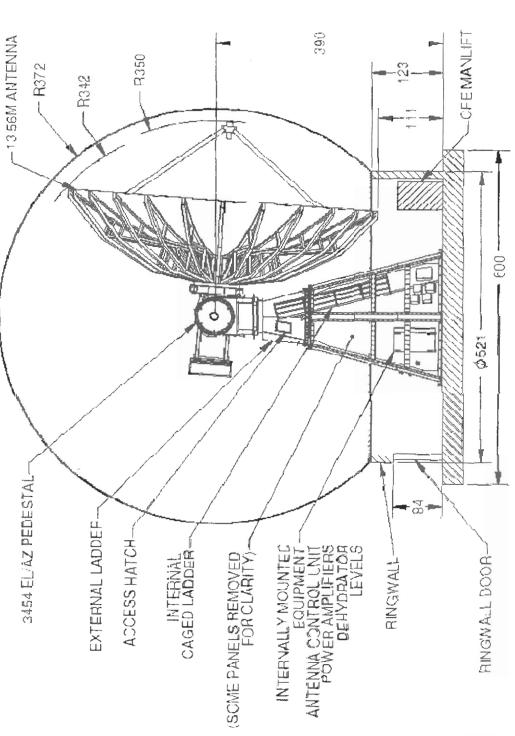


Figure 2: Telemetry Antenna Concept with Ringwall/Radome Assembly

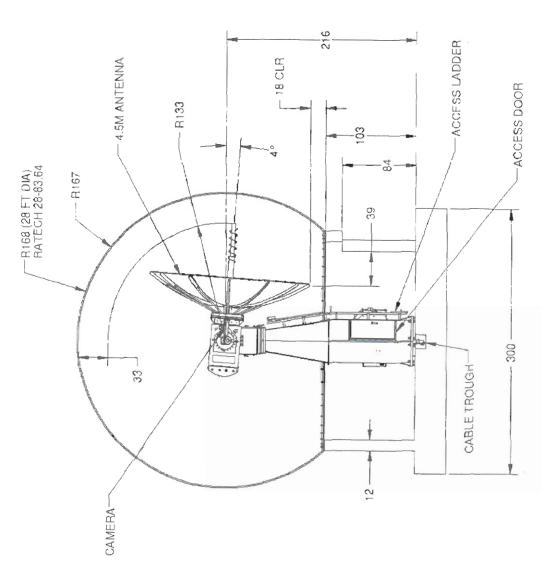


Figure 1: Command Transmit Antenna Concept with Ringwall/Radome

## Pillar Pt., Historic Photo

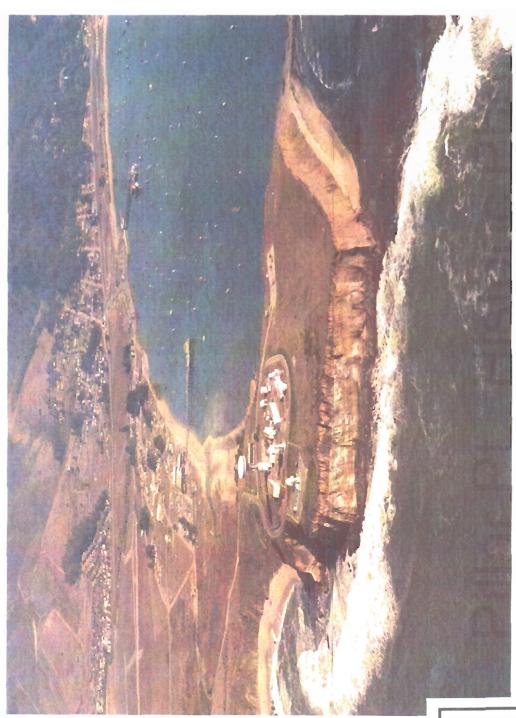
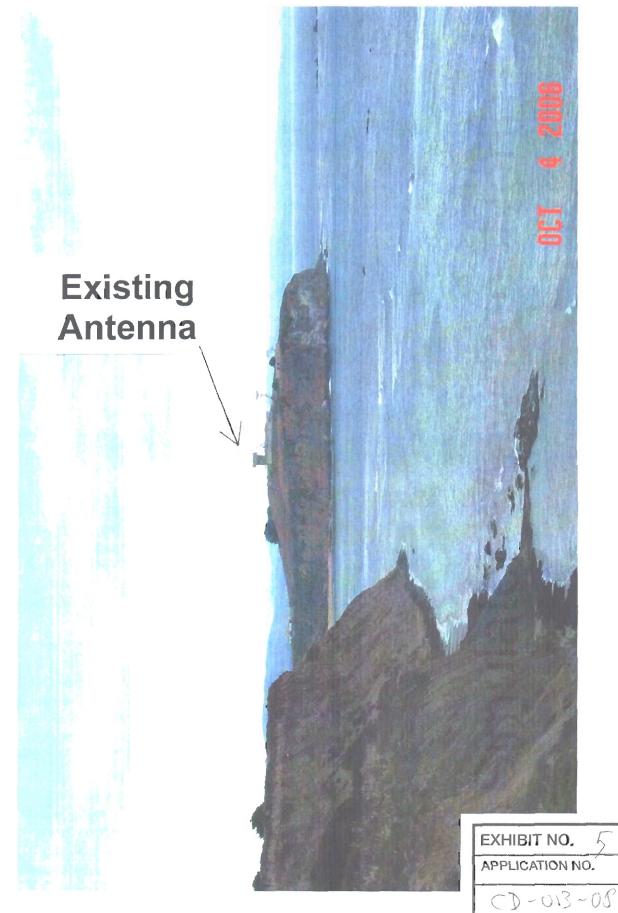


EXHIBIT NO. 4

CD-013-08

# Simulated View from North



## Simulated View from Southeast **Existing** Antenna EXHIBIT NO. APPLICATION NO. -013-08

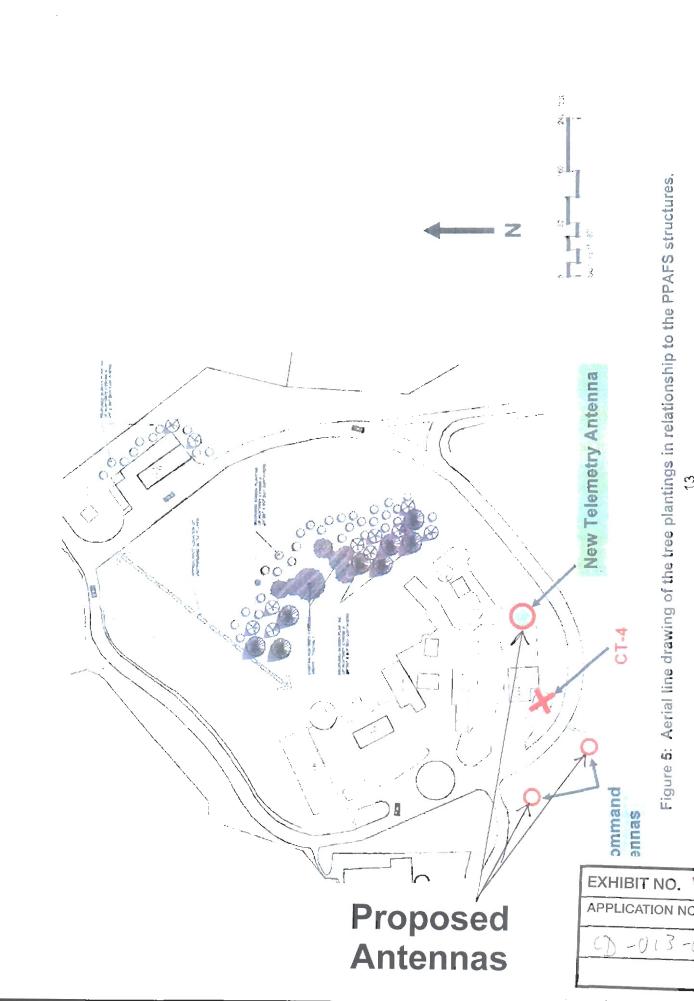






Figure 6: Appearance of newly planted Monterey cypress trees