

CALIFORNIA COASTAL COMMISSION

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**F 8d****STAFF RECOMMENDATION****ON CONSISTENCY DETERMINATION**

Consistency Determination No.	CD-089-06
Staff:	MPD-SF
File Date:	11/09/06
60th Day:	1/8/07
75th Day:	1/23/07
Commission Meeting:	12/15/06

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

PROJECT
LOCATION:

Pillar Point Air Force Tracking Station, Pillar Point, San Mateo County (Exhibits 1-2)

PROJECT
DESCRIPTION:

Installation of a 44 ft. telemetry antenna enclosed by a 62 ft. diameter radome (and related utilities and interior building repairs) (Exhibits 3-5)

SUBSTANTIVE FILE
DOCUMENTS:

See page 15.

EXECUTIVE SUMMARY

The U. S. Air Force (Air Force) proposes to install a 44 ft. telemetry antenna enclosed by a 62 ft. diameter radome at the Pillar Point Air Force Station, Pillar Point, north of Half Moon Bay, San Mateo County. The Air Force has historically used this site to track missiles from Vandenberg Air Force Base in Santa Barbara County. Ten years ago the Air Force removed a previous large antenna at this same site because it was no longer functioning. The previous antenna was, and the proposed antenna would be, the most highly visible structure in the area. The antenna, radome, and support structure are located on top of a prominent knoll, and the entire site 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. Due

to this site's high public visibility and the length of time no antenna was present, 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).

In response, the Air Force provided additional information stating that the project's size and location are dictated by mission needs, that alternative locations are infeasible, that the project minimizes adverse effects on public views because it is smaller than the previously-existing antenna, and that it would "consider" but has not yet secured committed funding for landscaping improvements. Absent a firm commitment assuring landscaping improvements would be implemented, the project would be inconsistent with the public view protection policy (Section 30251) of the Coastal Act. To remedy this, a condition is needed that will assure completion of the agreements needed to assure such improvements. The Commission is therefore conditioning its concurrence to require the Air Force to commit to a process and timetable for providing specific painting and landscaping plans, which would be subject to Commission review and concurrence, to assure that appropriate colors are used, appropriate vegetation (e.g., locally grown, non-invasive, drought resistant native vegetation) will be planted and maintained for the life of the facility, with particular emphasis on the radome support structure and those buildings most highly visible within views from public areas to the north and east of the Pillar Point Station. (The radome itself is too tall to fully screen.) As conditioned the project would be consistent with Section 30251. As provided in 15 CFR § 930.4(b), in the event the Air Force does not agree with the Commission's condition of concurrence, then all parties shall treat this conditional concurrence as an objection.

If, as conditioned, the Air Force provides appropriate mitigation for visual impacts, in looking at public access issues the project would not directly affect public access, existing military restrictions are necessary and consistent with Coastal Act policies, the proposal does not pose new burdens on public access, and the project would be consistent with the public access and recreation policies (Sections 30210-30212) of the Coastal Act.

STAFF SUMMARY AND RECOMMENDATION

I. Project Description. The Air Force proposes to install a new 44-foot telemetry antenna enclosed by a 62-foot diameter radome, along with modifications to the support structure and ancillary equipment, at an existing support tower building at the Pillar Point Air Force Tracking Station (Exhibits 1-5). The Tracking Station tracks launches from Vandenberg Air Force Base in Santa Barbara County, as well as launches offshore associated with the nation's missile defense program. This site has been used by the United States military since 1940, and the U.S. Air Force has used it as a tracking station for more than 40 years. The new antenna would replace an 80-foot diameter uncovered dish antenna that was removed in 1996 because of severe corrosion and high maintenance problems. The proposed antenna's base support tower, which is the same structure that supported the previously-existing antenna, has remained in place at the site since 1996.

The antenna receives radio signals from launch vehicles and aircraft in flight to provide a variety of on-board measurements, including vehicle position and performance data. The Air Force has provided the following background discussion of the need for the facility.

GENERAL BACKGROUND

Western Range Operations

Vandenberg Air Force Base operates the Western Range, providing support for ballistic missile and space launches, as well as aircraft testing. The Western Range has also recently acquired the additional responsibility to support the Missile Defense Agency's Ground Based Mid-Course Defense (interceptor) program. A critical aspect of range operations is the need for data collection and management, which are accomplished through the use of telemetry and other range instrumentation systems. These systems are necessary for both range safety, and system development and operation.

Purpose and Need for Additional Telemetry Antenna

Safety

The most important function of telemetry systems is range safety. The telemetry system provides range safety personnel with real-time data on the position and status of a missile. Because safety requirements are built into mission objectives, the range tracking system must include "...at least two adequate and independent instrumentation data sources...maintained from T-0 (launch ignition) throughout each phase of powered flight up to the end of Range Safety responsibility".¹ To meet this requirement, there must be two completely independent systems with separate power sources, no physical connection, and dissimilar software for each system.

In the past, the redundancy requirement was met through the use of a combination of range assets – the radar system and the telemetry system. The prime system was radar, with the backup being telemetry. Future plans for the range tracking architecture omit the radar and instead use two on-board telemetry systems to send position information, with one carrying Global Positioning System (GPS) data and the other providing inertial guidance data. Prime and backup telemetry receiving antennas on the ground will be located at the same site, thus reducing operational and maintenance costs.

Missile Defense Agency

The Western Range telemetry systems also support the Missile Defense Agency (MDA). The National Missile Defense Act of 1999 requires MDA to develop an integrated

¹ Reference EWR 127-1 Section 2.5.4 - Range Tracking System Performance Requirements

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 directed by the President, 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 to realistically test the entire system. A dual launch test, which is two targets fired from Alaska followed by two intercept missiles from the Western Range, has been planned for the 3rd quarter of 2007. The dual launch test requires support from Western Range assets, and the range must add a second telemetry antenna at Pillar Point to track two missiles.

II. History. 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. 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 has had to rely 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 submittal (a negative determination or a consistency determination) for the new antenna, on September 28, 2006, the Air Force submitted a negative determination for the replacement antenna. In that submittal, and in response to questions raised by the Commission staff, the Air Force maintained that the proposed 62 ft. diameter radome (with a 44 ft. diameter antenna inside it), replacing the pre-existing (until 1997) 80 ft. diameter radar antenna, would not affect scenic views because it would be less massive than the pre-existing antenna.

On October 16, 2006, the Commission staff objected to the negative determination and informed the Air Force that a new consistency determination was needed; the Commission staff stated:

In its negative determination, the Air Force concludes that the proposed project would not adversely affect coastal uses or resources, because the proposed new antenna would be smaller than the previously-existing antenna. While the Commission staff appreciates the Air Force's timely responses to the questions we have raised, we believe the above information is incomplete, and we disagree with the Air Force's conclusion that a negative determination process is the proper procedural mechanism for review of this project. Due to: (a) the highly scenic nature of the site; (b) its high visibility from a large number of public viewpoints nearby; and (c) the approximately

10 year length of time that has elapsed since removal of the previously existing antenna, we believe there can be no question that the facility will adversely affect currently available public views, that the project would affect coastal zone visual resources, and that a consistency determination rather than a negative determination is required. This consistency determination will need to provide a greater level of analysis to address the following factors:

- 1) whether alternative locations are available, either within the Pillar Point site itself or at other coastal locations;*
- 2) whether alternative technologies are available to track launches from VAFB;*
- 3) an explanation of why the antenna needs to be elevated so high above the ground (and if so, whether it could be raised during times of use and lowered to the ground when not in use);*
- 4) whether alternative colors are feasible that might be considered for the antenna and/or its base (e.g., earth/sky tones);*
- 5) whether landscaping could screen the facility and soften the edges of structures as seen from public views from Highway 1 and other areas to the east of the facility; and*
- 6) if the facility cannot be screened, whether public access and/or public viewing improvements in the area are warranted to offset the effects on recreational quality.*

In response the Air Force submitted the subject consistency determination, with its responses to the above questions which are discussed in the findings below.

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

IV. Staff Recommendation. The staff recommends that the Commission adopt the following motion:

MOTION:

I move that the Commission conditionally concur with consistency determination CD-089-06 and determine that, as conditioned, the project described therein is fully consistent, and thus is 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-089-06 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. Submittal and Implementation of Landscaping Plans. Within three months from the date of Commission action, the Air Force will submit specific painting and landscaping plans, which would be subject to Commission review and concurrence, sufficient to assure that appropriate colors will be used (for painted buildings), and that appropriate vegetation (e.g., non-invasive, drought resistant, native plants from local stock) will be planted, and maintained for the life of the facility, with particular emphasis on screening the radome sub-structure and those buildings most highly visible within views from public areas to the north and east of the Pillar Point Station (see Exhibits 5, 7 and 9 depicting the most prominent buildings). Implementation of the visual improvements shall commence no later than one year from the date of Commission action.

V. Applicable Legal Authorities. 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.

The federal consistency regulations also provide for phased reviews; Section 15 CFR § 930.36(d) provides:

(d) Phased consistency determinations. In cases where the Federal agency has sufficient information to determine the consistency of a proposed development project or other activity from planning to completion, the Federal agency shall provide the State agency with one consistency determination for the entire activity or development project. In cases where federal decisions related to a proposed development project or other activity will be made in phases based upon developing information that was not available at the time of the original consistency determination, with each subsequent phase subject to Federal agency discretion to implement alternative decisions based upon such information (e.g., planning, siting, and design decisions), a consistency determination will be required for each major decision. In cases of phased decisionmaking, Federal agencies shall ensure that the development project or other activity continues to be consistent to the maximum extent practicable with the management program.

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.

As noted above, the entire Air Force Tracking station is situated 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, but the proposed antenna/radome would be by far the tallest man-made structure on the site (and it sits on almost the highest topographical point at the site). 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.

Due to the scenic nature of the site and the 10 year time lapse since the previous large antenna at the site, the Commission staff requested a detailed justification and alternatives analysis from the Air Force, as well as consideration of mitigation measures such as landscape screening, and color treatment.

In response to these questions, the Air Force states that the project's size and location are dictated by mission needs, that alternative locations are infeasible, that the project minimizes adverse effects on public views because it is smaller than the previously-existing antenna, and that it would "consider" but does not yet have committed funding for landscaping improvements. The Air Force states:

Justification

The Pillar Point Telemetry (TM) Station is a vital element in the total data collection capacity of the Western Range telemetry system. The location provides excellent tracking geometry for the reception of high quality telemetry data for ballistic missiles launched from Vandenberg AFB (VAFB). The telemetry data is recorded on site and relayed directly to VAFB in real time so that safety personnel can maintain real time control of missiles.

The Western Range also receives telemetry data from its facilities at VAFB. However, for ballistic missile launches the TM signals received at VAFB are attenuated from passing through the missile's exhaust during critical times of the flight. The tracking equipment at Pillar Point provides a "side view" of the missile flight and ensures that telemetry data is consistently collected. Safety requirements of the range do not allow for single points of failure in critical instrumentation, including telemetry equipment, and so two TM antennas at Pillar Point are required. This is especially important because future ballistic missile launches will use TM signals to convey tracking information from Global Positioning System equipment onboard the missile instead of using more expensive ground-based radar tracking systems.

...

The relevant portion of the Coastal Resources Planning and Management Policies that applies to the Pillar Point antenna installation, as determined by the Air Force, is Section 30251 contained within Article 6, Development. This section provides that "...scenic and visual qualities of coastal areas shall be considered and protected as a resource of public importance." It is the opinion of the Air Force that the telemetry antenna project is consistent with the policy to the maximum extent practicable.

The previous dish antenna was 80 feet in diameter and, depending on the angle of inclination, the total height of that antenna and pedestal was 130-150 feet. The radome that encloses the new antenna is only 62 feet in diameter, and the total height of the radome and pedestal is approximately 109 feet. Not only is the radome configuration considerably smaller and shorter than the former antenna, the round radome will present a simpler appearance compared to the previous large dish structure.

The Air Force also performed extensive analyses to consider alternatives to the antenna installation at Pillar Point through the "Spacelift Range Systems Contract (SLRSC)." Following contract award, the contractor engaged the customer 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 performed 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 concept of operation is to provide flexibility in mission support and backup for out-of-service fixed assets. Studies showed that there are no commercially available mobile assets that can meet the required specification for telemetry system sensitivity. Transportable telemetry assets take two weeks to prepare for mission readiness vs. two days for mobile assets. Both mobile and transportable assets are ruled out by the requirement that the telemetry system be available 24 hours a day, 7 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 would also require the deployment of an entirely new system, and it too is not part of MDA's system architecture for BMDS.

Deployment Locations

The Air Force performed an analysis focused on deployment locations prior to the selecting the Pillar Point Air Force Station as the optimum location for the new 44-foot telemetry antenna and telemetry receiving hardware/software. Several considerations were included in this analysis, with the prime issues being mission coverage and alternate site locations.

To ensure the Western Range instrumentation provides the support required for range safety and capturing vehicle performance data, the Air Force must carefully consider each vehicle trajectory that is currently supported as well as vehicle trajectories the system will be required to support in the future. During the site selection process, the system architect employs software tools that plot the theoretical and actual flight paths of launch vehicles. Based on this analysis, the best possible telemetry site can be selected that maximizes flight coverage and provides the best possible support for range safety personnel and the range users. From a system architecture perspective, the analysis performed for future missions validated that the Pillar Point site, already in use, would provide the coverage required for future missions as it has for past and current programs.

Other considerations also supported the installation of the new antenna at Pillar Point. 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 antenna and the missile. Acceptable sites would be extremely limited in California, if available at all, and the visual resource issue would likely apply in most situations.

Also, building another site would require duplicating very expensive infrastructure already in place at Pillar Point, 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 the antenna slaving 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 Sizing

A technical analysis was performed to provide data to aid in the selection of the most cost-efficient antenna size. Considerations were initial system costs, minimum performance requirements for the required data rates, and possible future data bit rate requirements. The analysis concluded that for 10 Mbps telemetry data links, the G/T (a figure of merit for the sensitivity of a receiving system) for the antenna would need to

be $> 21.7 \text{ dB/K}^0$ to properly ensure the reception of data. This meant that the antenna size would need to be at least 44 feet in diameter. (Improvements in technology have made it possible to decrease antenna size while maintaining the required sensitivity. For example, the 80-foot dish antenna that was removed from Pillar Point had a G/T figure of merit of 20.7 dB/K^0 , which is less than the G/T figure of the 44-foot antenna replacing it.)

Multipath mitigation was also a primary consideration for selecting the antenna size. Multipath is a phenomenon in which a single transmitted signal arrives at a receiving site via multiple paths. The direct signal route is the straight line path from the source to the receiver; secondary paths are longer because they arrive by an indirect route. Signals with a continuous wave carrier can have various phase relationships with the direct signal depending on their path length. When in phase, the indirect path adds to the direct signal and, when out of phase, it cancels portions of the direct signal. At low data rates of a few kilobits per second, multipath interference is insignificant. However as the bit rates increase, multipath will cause more and more errors, eventually degrading the data and making it useless. A proper sized antenna mitigates multipath interference.

Operational Constraints

The Coastal Commission had questioned if there are alternate locations for the antenna within the Pillar Point site, the need for the height of the antenna, and whether it could be raised for use and lowered when not in use. Within the Pillar Point site, use of the existing pedestal provides line-of-site view of the target without interruptions from other structures on the site, and the pedestal provides the height necessary so that the new antenna is not shadowed by the other antennas. If the new antenna were moved to another location on the site, it would shadow the other antennas at the facility.

Raising and lowering the antenna would require a specially designed antenna, with considerable setup time. The same MDA, 24 hours/7 days/week requirement that ruled out mobile and transportable telemetry systems also rules out an antenna that must be raised and lowered.

Protection from the Environment

An antenna without a protective radome that could meet the 15-year life cycle requirement was considered. Antenna systems are precision instruments, and the biggest constraint is designing the antenna to withstand the harsh Pacific coast environment - - the primary cause of failures in current systems. Dry-air systems would need to be included in the system design and electronic equipment would have to be designed to withstand corrosive salt air. These design considerations along with increased maintenance would increase costs and decrease system availability, resulting in decreased mission capability.

Proper material selection for the radome is a key element for it to meet performance requirements. This radome is constructed of pentagonal and hexagonal shaped panels of a sandwich type construction with a foam core and high-strength reinforced plastic laminate skins. The materials were selected based on their RF attenuation characteristics. Panel edges are electromagnetically tuned to ensure the enclosure has a minimal effect on the reception efficiency of the antenna. Painting radomes presents maintenance problems not acceptable for the Pillar Point mission. The radome must be painted with special paint at the factory, and lifecycle maintenance would require repainting every 10 years. Repainting this type of radome structure requires disassembly and removal of the radome, and it must be shipped back to the factory. Due to the work and expense and downtime involved, it is very rare that radomes of this type are painted. The MDA requirement for 24/7 operational capability also makes painting the radome unacceptable from mission standpoint requirements. While the radome cannot be painted, it is possible to paint the pedestal supporting the radome a color that blends in with the background as seen from areas east of the facility.

5. CONCLUSION

The Air Force performed thorough analyses on alternatives to the new antenna at Pillar Point. The final design reflects mission requirements. The new radome will be smaller and less visually obtrusive than the previous large dish antenna. It is the opinion of the Air Force that the action is consistent with the California Coastal Act to the maximum extent practicable.

We understand the Commission's desire to protect views and enhance visual quality. The Air Force will consider planting landscaping to screen the facility and soften the edges of structures from view vantage points east of the facility. There are landscaping constraints, including the avoidance of buried utilities or communication lines; also the line-of-site for existing or new microwave or RF paths cannot be obscured. Funding has not been programmed for landscaping and obtaining funds cannot be assured.

As noted above, in response to Commission staff questions the Air Force has indicated a willingness to consider alternative paint treatment for some of the more visible buildings, and while the antenna/radome itself is too tall and visible from too many areas to fully screen, to consider planting landscaping around several of the most visible Air Force buildings at Pillar Point. The Commission believes assurance of these measures are necessary to enable it to find that the project's adverse visual effects would be minimized. The Commission recognizes that the Air Force's mission needs dictate locating this facility at Pillar Point, and also that the facility is less tall than the previous radar antenna at the same location. However, given the highly scenic nature of the entire Pillar Point complex, the fact that this facility would be by far the tallest structure at Pillar Point, and the ten-year period that has elapsed since the previous antenna was present, the proposed project represents a visual intrusion onto public views and that mitigation is necessary to at least partially offset its impacts.

The Commission believes the appropriate mitigation would be landscaping and painting to screen buildings where feasible, and notes that the Air Force is considering these. However, absent a definitive commitment and specific painting and landscaping plans, the Commission is unable to find that the Air Force has minimized the project's visual impacts or that the project as proposed would be consistent with the public view protection policy (Section 30251) of the Coastal Act. The Commission is therefore conditioning its concurrence to require the Air Force to commit to a process and timetable for providing specific painting and landscaping plans, which would be subject to Commission review and concurrence (pursuant to the "phased review procedures – see page 7), to assure that appropriate colors are used, appropriate vegetation (e.g., non-invasive, drought resistant, native plants from local stock) will 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 (in particular the prominent buildings shown in Exhibit 9). Only as conditioned can the Commission find the project consistent with Section 30251.

As provided in 15 CFR § 930.4(b), in the event the Air Force does not agree with the Commission's condition of concurrence, then all parties shall treat this conditional concurrence as an objection.

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.

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.

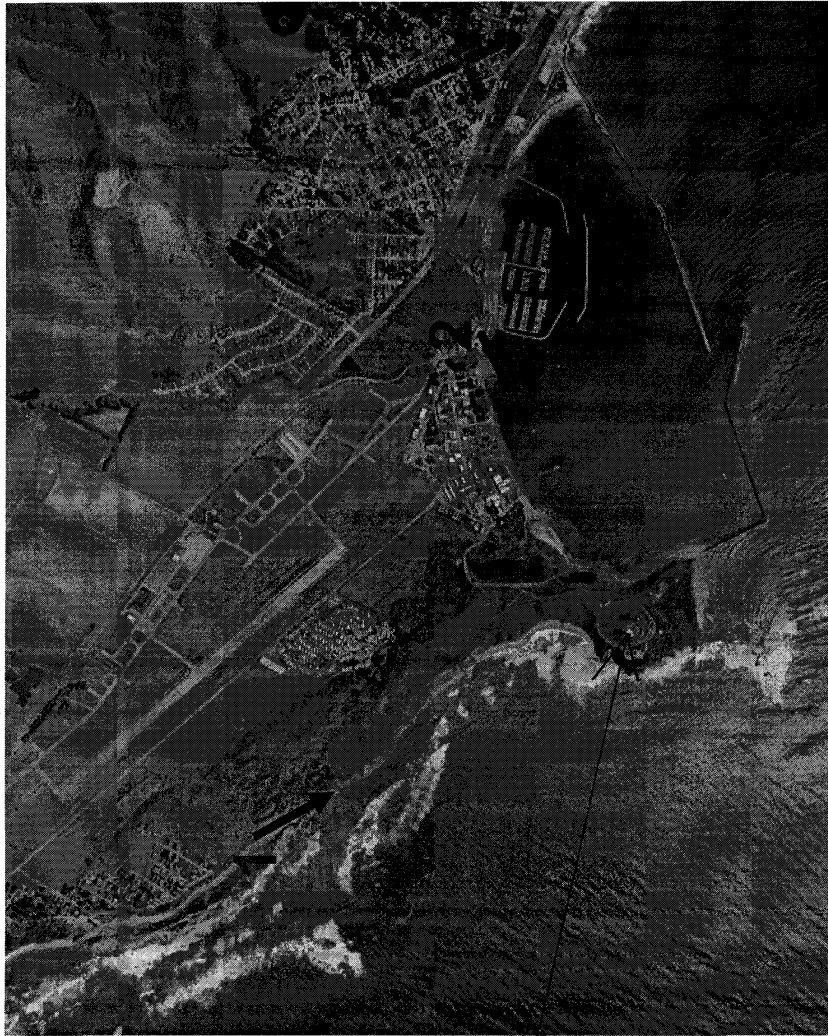
Given that, as discussed in the previous section of this report, and as conditioned, the Air Force will be providing appropriate mitigation for visual impacts, and, further, that the project would not directly affect public access, the Commission finds that the existing military restrictions are necessary 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).

Photo Locations



PROJECT
SITE

EXHIBIT NO. 1
APPLICATION NO.
CD-89-06

PROJECT
SITE

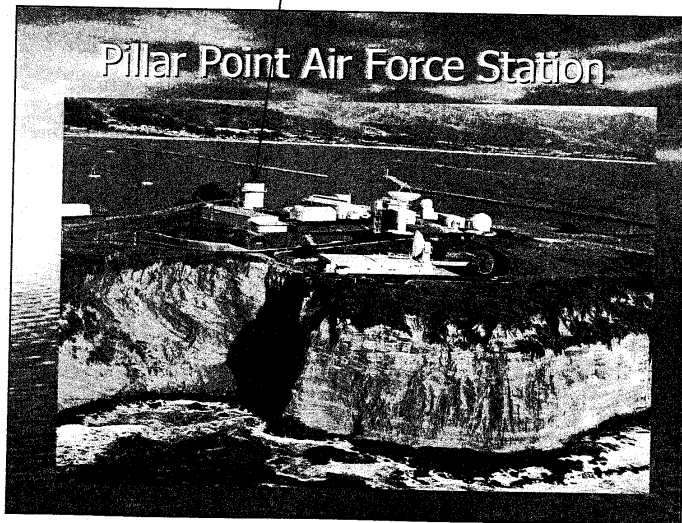
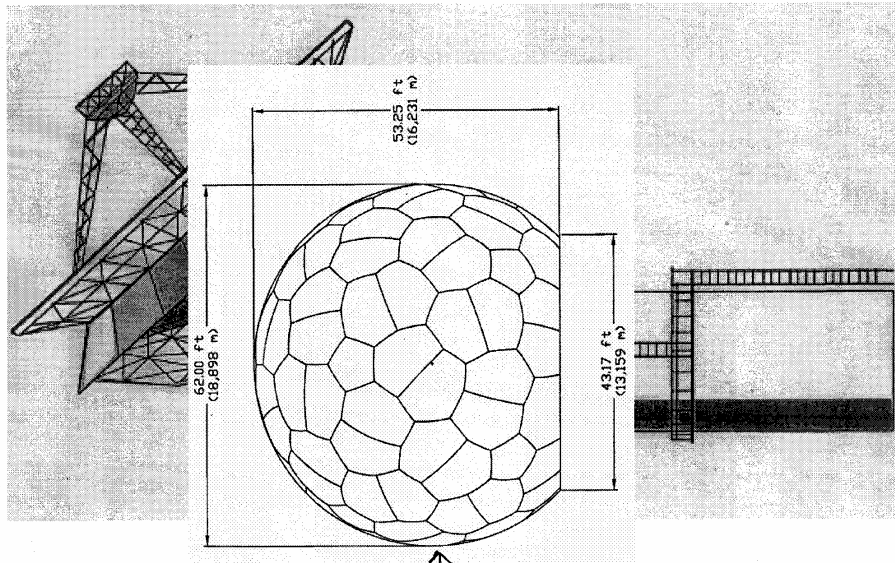


EXHIBIT NO. 2
APPLICATION NO.
CD-89-06



PROPOSED
NEW RADOME

OLD
RADAR

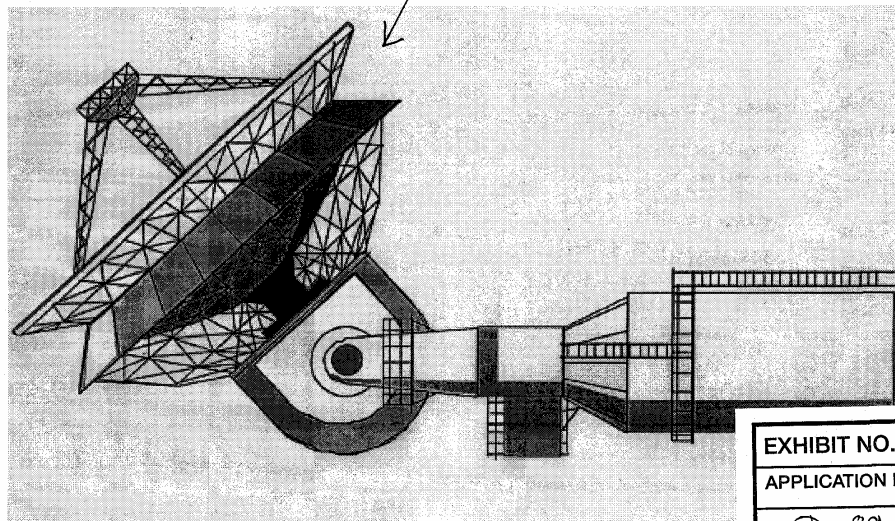
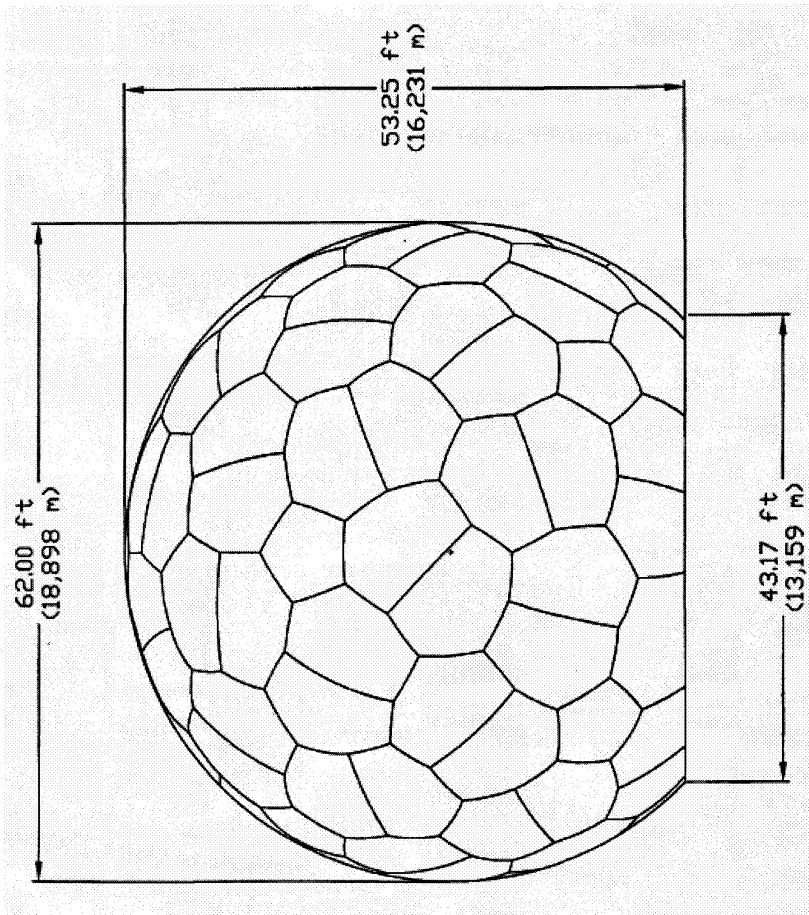


EXHIBIT NO. 3
APPLICATION NO.
CD-89-06

Pillar Point A 62-foot Radome Dimensions

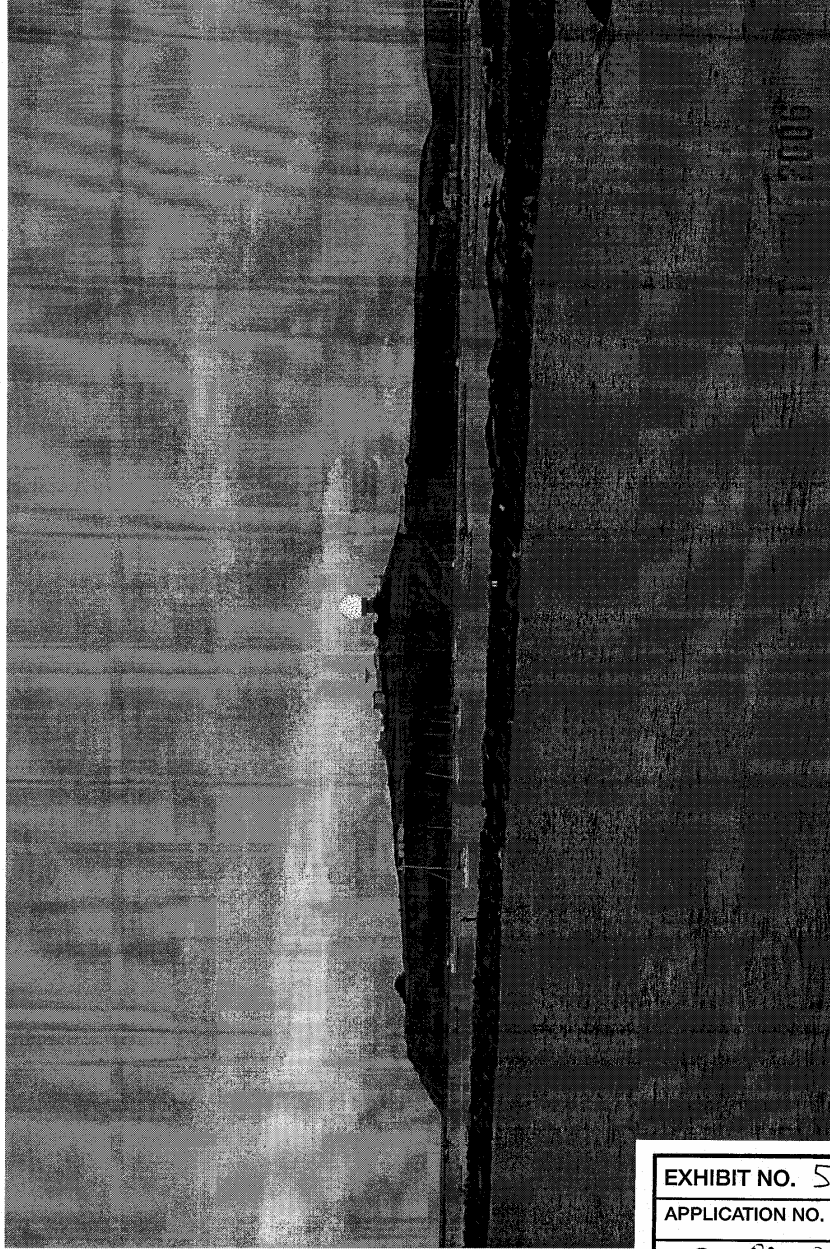


6



EXHIBIT NO. 4
APPLICATION NO.
CD-089-06

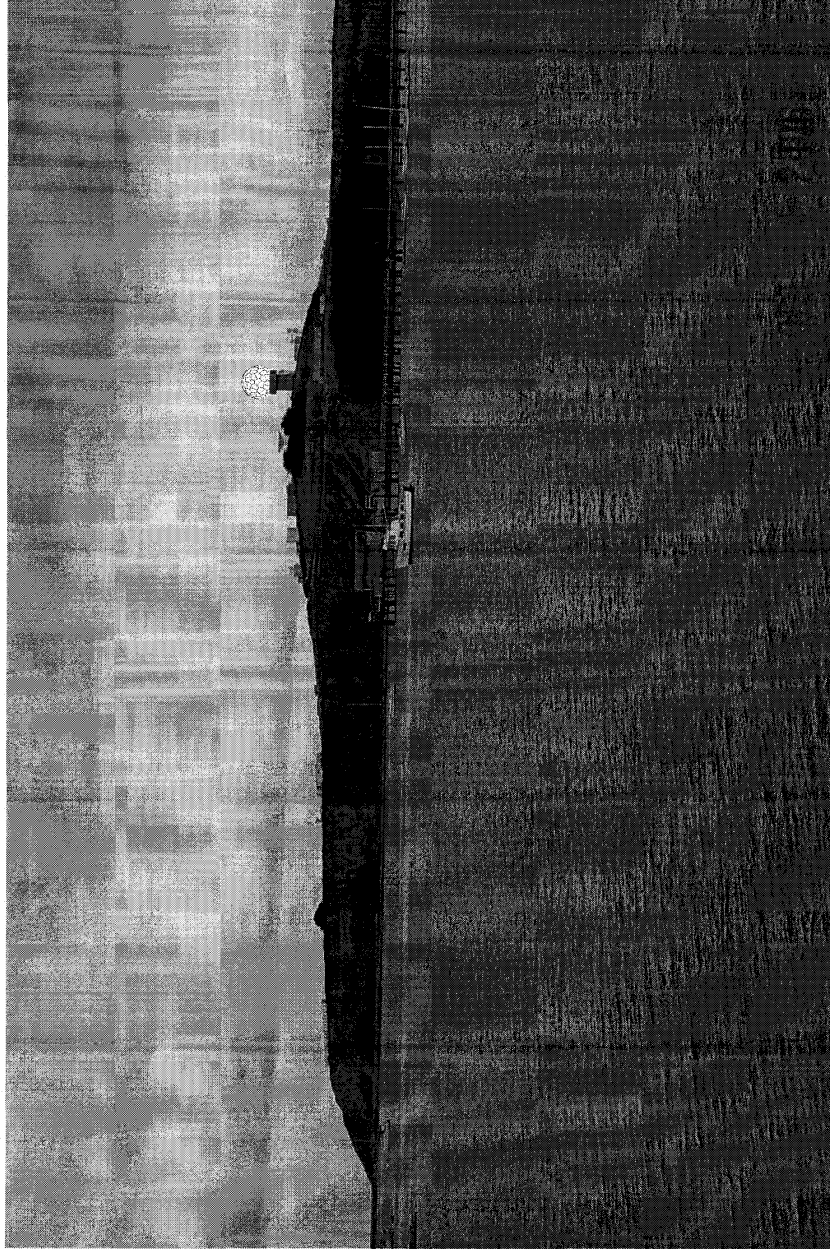
Location 3 from "4100 North Cabrillo Highway"
Beach House Hotel (south side on beach)



5

EXHIBIT NO. 5
APPLICATION NO.
CD-89-06
simulation

Location 2 from "390 Capistrano Avenue"
(Half Moon Bay Brewing Company)



4

Exh. 5, p. 2

Location 1 from "Pillar Point Bluff"



3

EXH. 5, p. 3

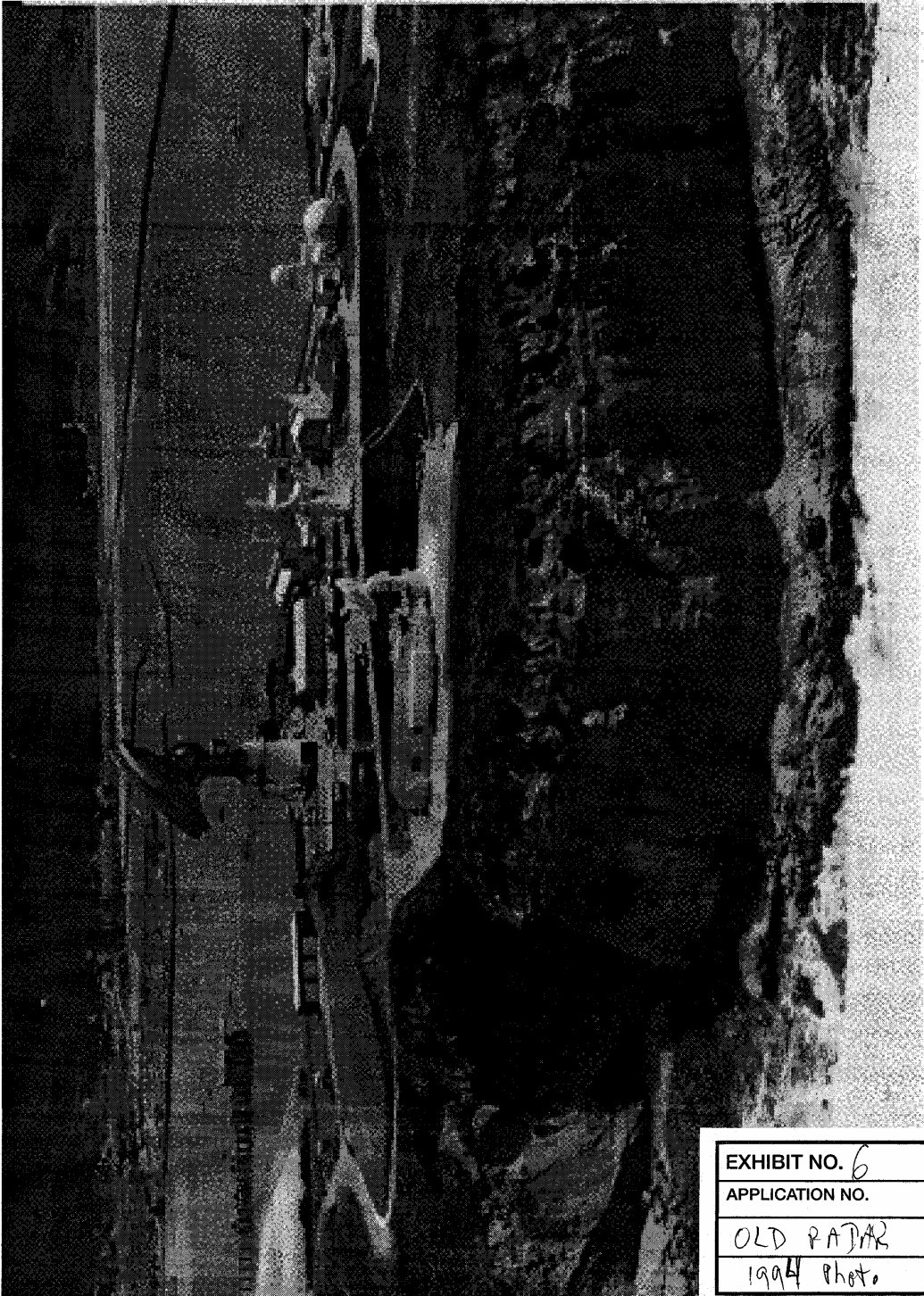
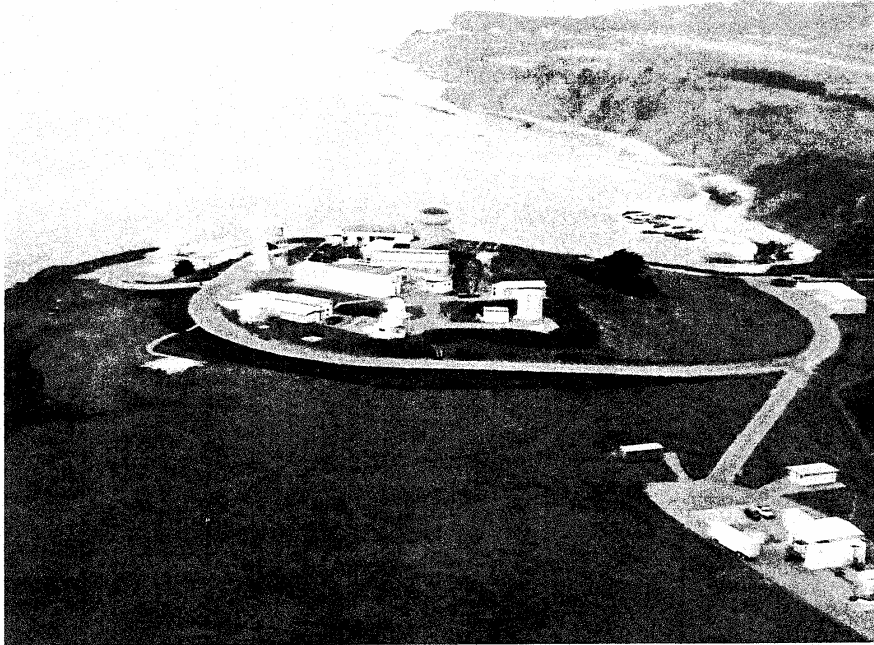


EXHIBIT NO. 6
APPLICATION NO.
OLD RADAR
1994 photo

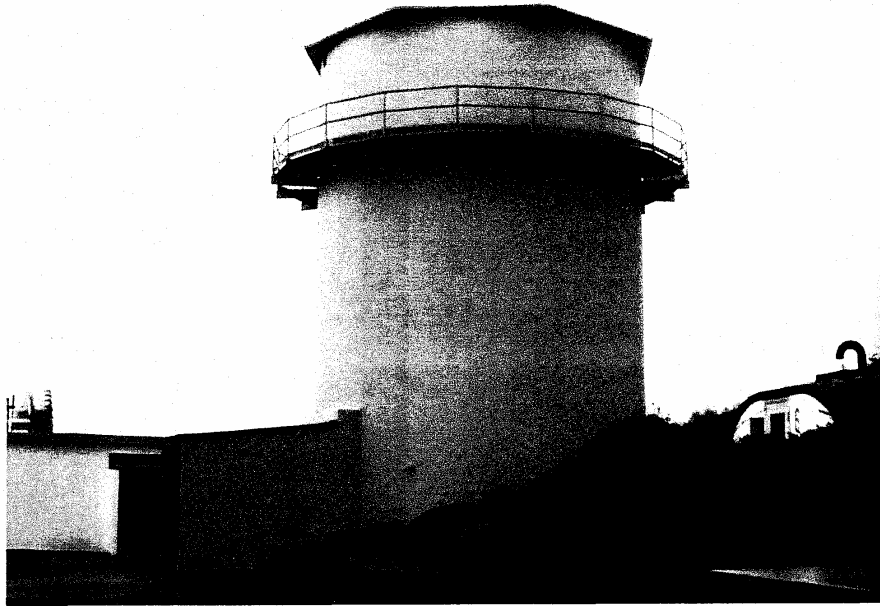


PHOTOGRAPH 1

DATE Tue 3 Nov 98
TIME Ca. 1300 hrs
PHOTOGRAPHER James Carucci
FILE NAME Aerial1.jpg (163KB)

COMMENT: Pillar Point Air Force Station. View to north. Aerial photograph taken from helicopter.

EXHIBIT NO. 7
APPLICATION NO.
CD-89-06



PHOTOGRAPH 2

DATE Tue 3 Nov 98
TIME Ca. 1430 hrs
PHOTOGRAPHER James Carucci
FILE NAME PPFaci22. jpg (95KB)

COMMENT: Pillar Point Air Force Station. View to northwest. Facility 22 is the base of the 80 foot telemetry antenna which was decommissioned and removed in 1996. According to CEVNC files, Facility 22 was constructed in 1969, and the antenna base (shown here) is 45 feet tall. The original antenna mounted here was in use from 1969 until 1996. The new proposed antenna, to be placed within a 62-foot diameter radome, would have less massing and visual impact, overall, than the original 80-foot diameter radar dish. Because the original antenna was considered eligible for the National Register of Historic Places based on Cold War criteria, the replacement antenna would be eligible as well, because its function would be the same as the original 80 foot antenna.

EXHIBIT NO. 8
APPLICATION NO.
CD-89-06

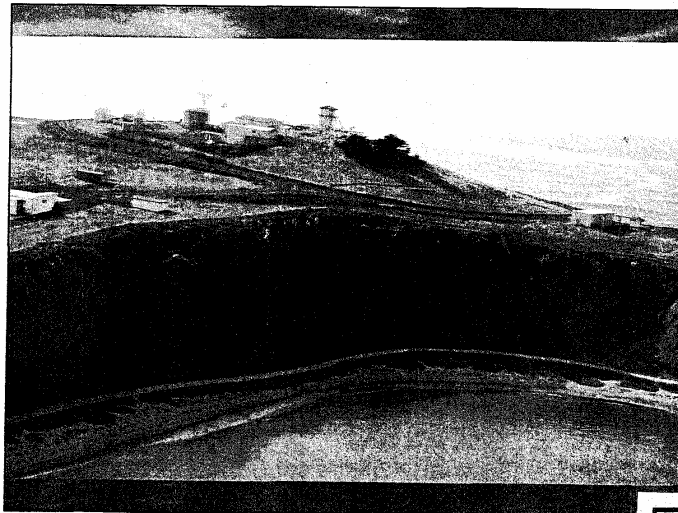
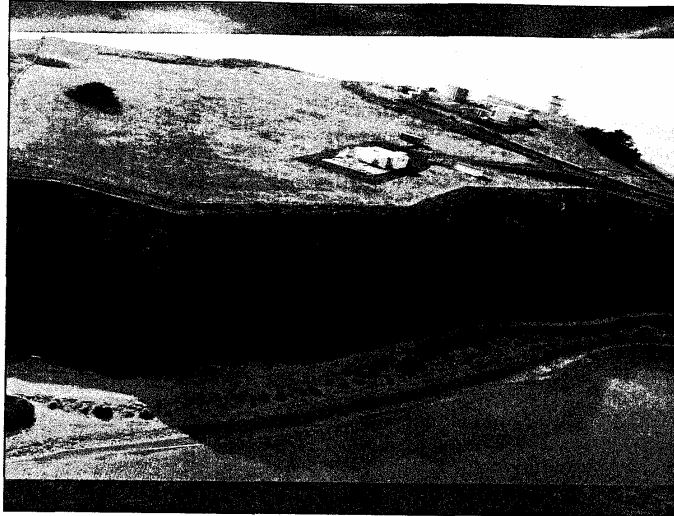


EXHIBIT NO. 9
APPLICATION NO.
CD-89-06