

U.S. Department of
Homeland Security

United States
Coast Guard



Commander
District Eleven

U.S. Coast Guard Island
Bldg. 50-2
Alameda, CA 94501-5100
Staff Symbol: dpw
Phone: (510) 437-2968
Fax: (510) 437-5836

10550
03 Aug 2007

MEMORANDUM

From: [REDACTED], CAPT
CGD ELEVEN (dp)

Reply to: ATON
Attn of: [REDACTED]

To: MLCPAC (te-2)

Subj: DISTRICT ELEVEN ENDORSEMENT FOR VTS SAN FRANCISCO OFFSHORE
RADAR EXPANSION PROJECT

Ref: (a) Sector SF Engineering Change Request dated 25 June 2007

1. Strongly recommend approval of the reference (a) request.
2. Expansion of the Vessel Traffic Service offshore radar surveillance will greatly enhance Sector San Francisco's Maritime Domain Awareness, ability to facilitate navigational safety, and support of Search and Rescue missions.
3. The recent incident involving an alleged collision between a freight ship and a small fishing vessel offshore from Pt. Reyes, resulting in the loss of life and property, further illustrates the need for the additional radar coverage outlined in the attached proposal.

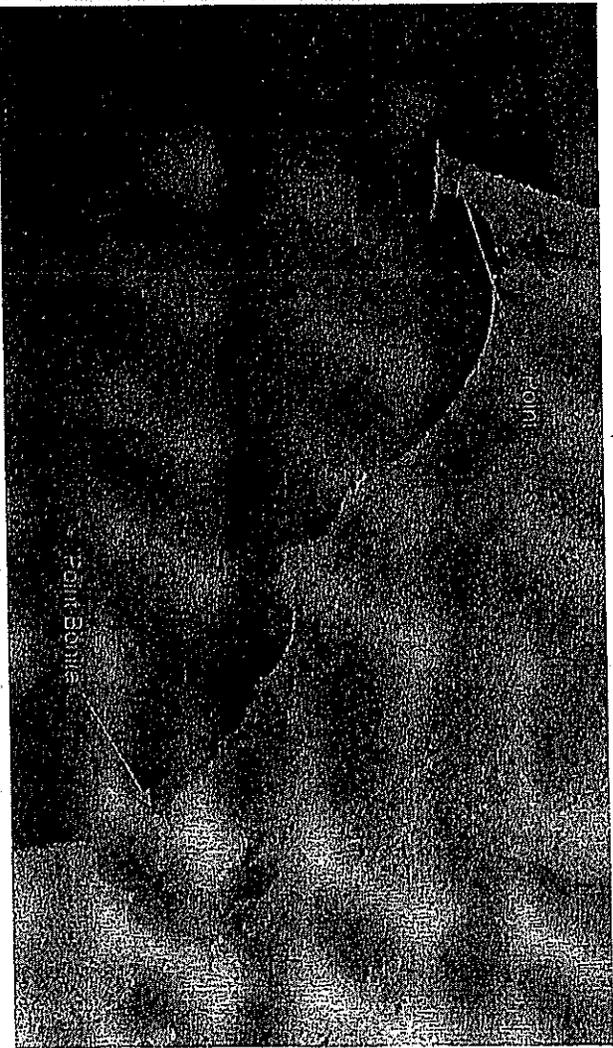
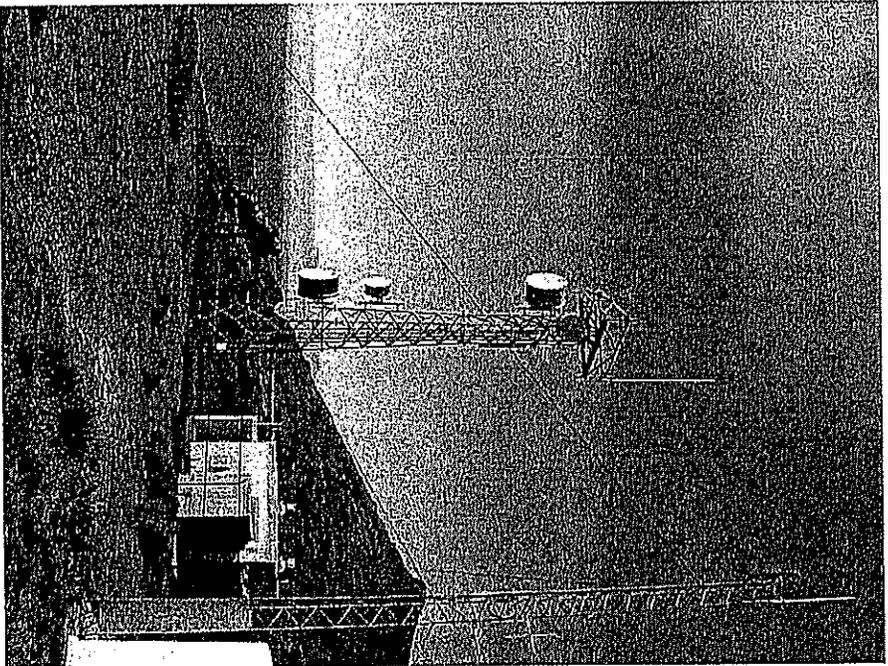
#

ENCLOSURE (24)

VTS San Francisco Radar Expansion Project

- VTS San Francisco is requesting the addition of two remote radar sites. These two sites will augment our Point Bonita radar site, which monitors the approach for inbound / outbound oceangoing vessels. The new sites will be to the north (Point Reyes) and to the south (Pillar Point). The addition of these two sites will provide VTS with the following enhancements:
 - Redundancy
 - In the event of a Point Bonita causality these two sites could provide overlapping coverage
 - Increased radar coverage
 - Point Reyes will allow the VTS to see targets behind the Point Reyes land mass
 - Pillar Point will allow the VTS to see targets in Half Moon Bay
 - Finer target resolution
 - Vessels are generally seen at a head on aspect when approaching the Point Bonita radar. The additions of these two radars will allow an abeam target aspect for increased detection / tracking capabilities.

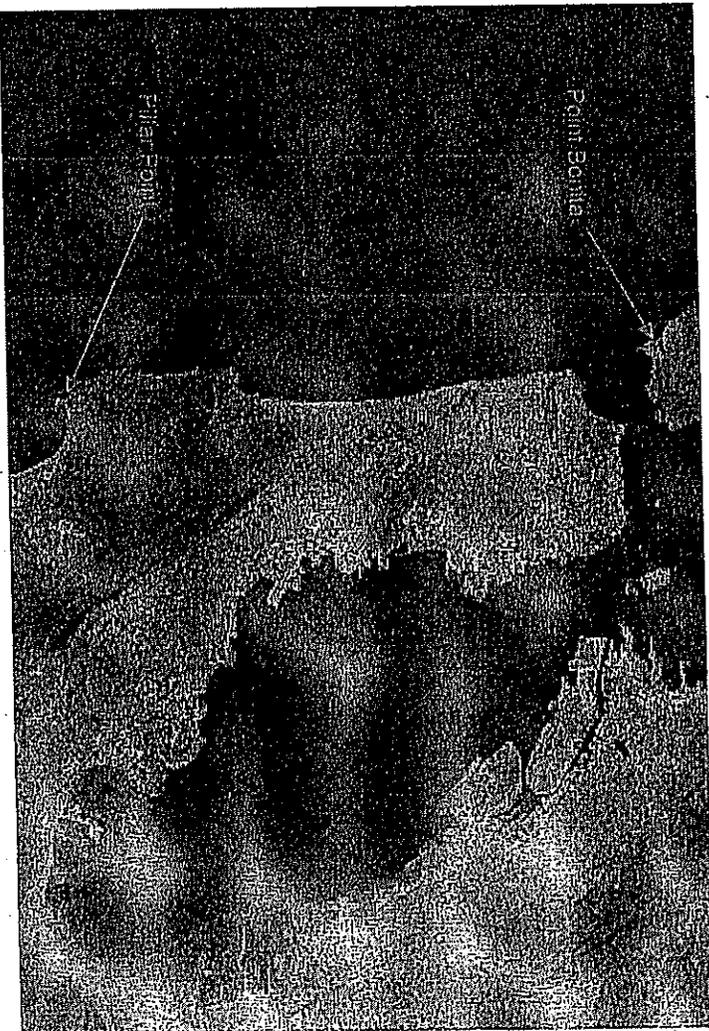
Point Reyes



- Coast Guard property
- May be able to use existing tower
- Terma Radar

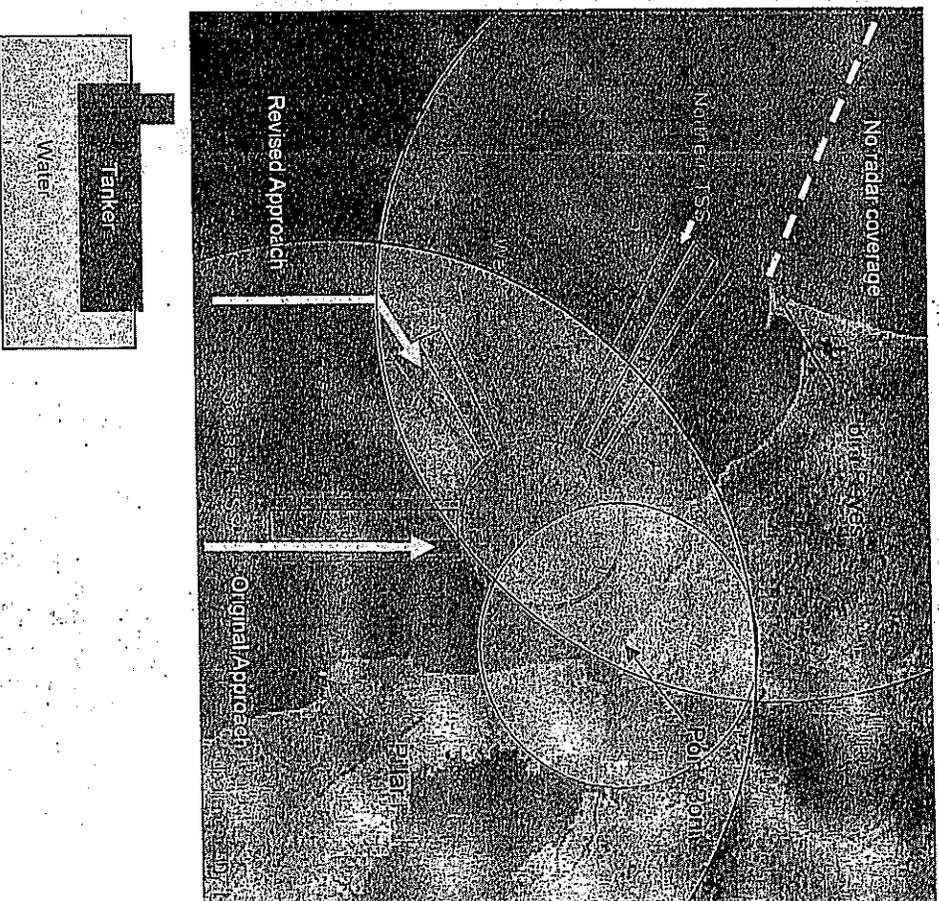
Pillar Point

- Vandenberg AFB remote site
- Existing pad for tower construction
- Tower approximately 70 feet
- Would require MOU with AF
- Terma Radar



Traffic Approach

- When our current radars were installed, the SF Bay traffic pattern was closer to shore, and afforded a larger target for the radar. However, in the late 1990s, the ocean approaches to SF Bay were revised, which changed the orientation of incoming vessels to a bow-on aspect and reduced their target size. This factor made it harder for our radars to pick up the contacts, especially with loaded tankers riding low in the water.
- No radar coverage behind Point Reyes
- The Point Bonita radar must run in long pulse for the best resolution of distant targets. Consequently, close target resolution suffers. This poses a threat to our port security mission that heavily relies on having the ability to see small targets on radar. Having the two additional radars would allow Point Bonita to run in short pulse increasing small target detection.



POC

- CWO



Coast Guard Sector San Francisco EMO

415 556 2950 x 106

415 871 9061 cell