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FORT Volume 33 - 2005

The 2005 issue of *FORT*, the International Journal of Fortification and Military Architecture, has been published by the Fortress Study Group. The guest editor for this volume was Terry McGovern, and he has assembled a fine series of articles for this issue. The articles included in this issue are: "Canada's Coastal Fortifications of the Second World War," by Roger Sarty, "The Maginot Line: A Basic Primer," by J.E. Kaufman, "Casemates or Turrets: the Evolution of the American Casemated 16-inch Battery," by Bolling W. Smith, "The First World War Fortresses and Battle of Isonzo Front," by Aleksander Jankovic Potocnik, "The Coastal Defenses of the Naval Base of Ferrol," by Juan Vasquez Garcia, and "Defense of the Golden Gate: Battery Cavello – Survivor of the Plan of 1870," by John A. Martini. As usual with *Fort*, the articles are extensively illustrated with a large section of color photos in the 224 page issue. For information on obtaining a copy of this issue, contact Terry McGovern, 1700 Oak Lane, McLean, VA 22101-3326, tcmcgovern@att.net. For more information on the Fortress Study Group, visit their website at www.fsgfort.com.

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Trip Report from Westport-North Cove, WA

Greg Hagge

On Sunday, August 20, 2006, I visited the North Cove 155 mm GPF battery at Wash Away Beach. The sand dune is nearly gone now. The No. 1 360-degree Panama mount is on the beach about 40 feet from the bank. The center block is upside down, still within the ring. The four large footings for the BC tower are some 100 feet or more out in the water to the south. These were only about 40 feet behind and south of the No. 1 mount when still in place on the sand dune. The tide was partly in and the No. 2 mount was underwater. Currently, the eroding shoreline has moved east and is now about 45 degrees behind the former alignment of the dune.

The continuing erosion of the former vacation housing area has left a shoreline resembling the Gulf Coast after Katrina. This site can be officially classified as destroyed. Another development is the construction of a very large house on the hill behind this location to the east, just above and west of the four WW I 12-inch mortar blocks. This house does not endanger the mortar site, but it is a sign of more changes to come.



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2006 "St Babs" Conference San Francisco
October 8 to 13, 2006
Presidio of San Francisco

Mark Berhow

More than a year of planning went into this 5-day CDSG conference and tour of the harbor defenses around San Francisco Bay. The Bay Area has one of the finest collections of American seacoast fortifications from the 1850s, the Civil War, the 1870s, all phases of the early modern era (1890-1910), through the later modernization program (1936-1945). The park also has the only restored Cold War Nike missile facility. The organizers faced a number of problems setting up this meeting, not the least of which was finding a place to hold our evening meetings. Luckily, the National Park Service and the Presidio Trust let the CDSG use the Officers Club at the Presidio of San Francisco at no cost.

This was the second CDSG conference to visit San Francisco; the first, in 1987, was chaired by Milton B. (Bud) Halsey. A number of things have changed since that meeting 20 years ago, the biggest change being the army has now completely vacated all of its holdings around the bay. The vast majority of harbor defense structures are now in public parks and generally accessible. As the army began to give up its property around the bay in the late 1960s, Congress developed a plan to transfer excess property to the Department of the Interior for use as public parkland. A new national park was created in 1972 from sections of the former Forts Winfield Scott, Miley, and Funston on the south side of the entrance and Barry, Cronkhite, and Baker on the north side. The Golden Gate National Recreation Area (GGNRA) began its stewardship of the natural and historic features in the headlands with a new concept, that of an urban recreation area. An additional round of base closures in 1989 resulted in the closure of the Presidio of San Francisco in 1994, and the last army units left Fort Baker in 2002. The resulting parkland has become an amalgamation of state and federal property that stretches from Tomales Bay, 30 miles to the north, to San Mateo County, 30 miles south. The military properties have well over 2000 historic structures, which range widely in condition and age, and require updating and maintenance. In order to offset some of these costs, Congress set up a public trust in 1996 to manage the interior 80% of the Presidio with its nearly 800 buildings, with the goal of generating revenue to fund the Presidio's long term care. The

National Park Service manages the coastal areas of the Presidio, Fort Miley, and Fort Mason, as well as the whole of the Marin Headlands military reservations. The Presidio Trust seems to be on its way to self-sufficiency by 2012. The National Park Service is currently developing a conference center to utilize and maintain the newly acquired buildings at Fort Baker.

Currently, the NPS and the Presidio Trust are completing the transition from military reservations to public lands begun more than 30 years ago. The CDSG's visit in 2006 was a great opportunity to see how this transfer has progressed in these past 30 years and to hear what is being planned (or not planned) for historical preservation and interpretation in the future.

Sunday October 8

Rain greeted those arriving earlier in the week, but by Sunday the weather had cleared and the day was gorgeously sunny. Fleet Week was in progress, and the Blue Angels put on a dramatic aerial demonstration for members arriving at the Officers Club. The rest of the week would remain sunny, except for morning fog, which varied from day to day and location to location. After checking in and registering, we gathered for our first catered dinner in the Officers Club, followed by final instructions from the organizers for the next five days. This was followed by a presentation by NPS Historian Steve Haller on the current state of historic preservation and interpretation in the GGNRA. A concerted effort is underway to interpret and restore selected representative and unique structures, and he appealed for the CDSG to help in the process. This was followed by a talk by Gordon Chappel, historian for the Western Region of the NPS, on the fate of the Spanish Presidio's bronze cannons.



A Spanish cannon in front of the Presidio Officer's Club

Monday, October 9

Gathering in front of the O Club at half past seven, we entrained the group and headed to our first stop of the day, the Third-System Fort Point, at the headland now under the Golden Gate Bridge. The three-story brick fort is one of two pre-Civil War fortifications on the Pacific coast, and the only relatively unaltered one. (The fortifications on Alcatraz Island have been destroyed, altered, or covered by subsequent development of the prison there. Due to scheduling difficulties, the group could not visit Alcatraz.) The NPS had begun an overhaul of Fort Point to repair damage due to earthquakes and time, but as that effort got underway, repair work on the bridge has taken precedence. Fort

Point is currently open only on a limited basis and looks a little forlorn at this time. Much of the upper casemate level is closed and the armament displays are partially dismantled. Hopefully, once the bridge work is done, the refurbishing of Fort Point can be completed.



Fort Point

Our next stop was the ferry landing at Fisherman's Wharf for a trip to Angel Island State Park. The large island was once army property, home to Fort McDowell and the west coast's immigration and quarantine center. Upon landing, we were transported by trolley to Battery Ledyard, where the group was given leave to explore the military sites on their own. Sam Stokes and Interpreter Casey Lee drove vans to ferry members to the various locations around the island. We had plenty of time to visit Battery Ledyard (2 x 5-inch Ped), Battery Wallace (1 x 8-inch DC), Battery Drew (1 x 8-inch BC), the Angel Island mine casemate, Nike site SF-91L, Camp Reynolds (the west garrison) and the Fort McDowell (East garrison) areas. Batteries Drew and Wallace are unique single-gun emplacements of an early design unique in US seacoast defenses. Nike site SF 91L is a rare Ajax-only site with its magazines largely intact. A volunteer effort is underway to stabilize the site and develop an interpretive program. California State Parks seems to be holding their own with limited budget and staffing.



Battery Drew, Fort McDowell

Returning to the ferry landing, we caught the 3:30 return trip to Fisherman's Wharf and headed to nearby Fort Mason. This post was the closest to the heart of the city and often home to high-ranking officers stationed in the San Francisco area. From

the 1910s through the early stages of the Vietnam War, it was a port of embarkation for supplies and men shipped to the Pacific. After a quick tour of some quarters, we visited the exterior of short-lived Battery Burnham (1 x 8-inch DC) and then the restored 1898 emergency battery and the Civil War Point San Jose Battery. Uncovered after the removal of a parking area, these two sites have been fully excavated, and the Civil War battery has been restored with an 8-inch Rodman gun and carriage. We returned to the O Club for our evening buffet and presentations.



Restored Civil War battery at Fort Mason

Tuesday, October 10

Our second day started with the group heading south to Fort Funston. We pulled in the fort using the old access road to Battery Davis, passing the PSR on our way to the battery. Battery Davis was the first casemated 16-inch battery built by the United States, begun in 1937. The Fort Funston area is now dog heaven, one of the few public places in the San Francisco area where dogs can be allowed off their leashes, and it was certainly full of canines and their owners, even on a Tuesday morning. Battery Davis (2 x 16-inch BC casemated) has been sealed since the early 1990s. Arrangements were made to cut open a doorway to let our group into this unique battery. While the interior has been thoroughly stripped of all salvageable material, it was nice to be able to see the interior of this prototype battery. Also visited were the Panama mounts now in the surf, several fire control stations, some AA mounts, and the remains of Nike site SF-59L; the magazines have been topped with concrete and the area is now used as a parking lot, but it is otherwise fairly intact. Two temporary batteries have been destroyed.



Battery Richmond P. Davis, Fort Funston

Rounding up the gang, we headed back north to Lands End and Fort Miley. We gathered in the Lands End parking lot and headed up the hill to Battery Chester (2 x 12 inch DC, 1 x 12-inch BC) a rather unusual pairing of barbette and disappearing carriages in one battery. The battery looks clean and well cared for, which is an improvement. Several fire control stations are in this area. Just behind Battery Chester is Battery Construction Number (BCN) 243 (2 x 6-inch BC, shielded). This WWII battery is on GGNRA property, but is used by the Veterans Administration hospital on the old garrison area of Fort Miley. The hospital uses Battery 243 for storage and is very glad to have such a secure area. The exterior is unmodified, but overgrown with trees and shrubs. The VA officials wish they could work out a deal with the NPS to use Battery Chester for storage as well.

Our short visit to Fort Miley over, we headed up to Fort Winfield Scott for the rest of the day. Our first stop was at Battery Chamberlin (originally 4 x 6-inch DC, later 2 x 6-inch Ped.). In 1977, this battery received a 6-inch gun on a disappearing carriage from the Smithsonian collection and this battery is the focus of GGNRA's interpretive program for the Endicott-era defenses. This may be the only disappearing gun that can still be tripped to have the counterweights bring the gun up into firing position. Ranger James Osborne led a group of re-enactors through a loading drill. The crew manned the crank on the carriage and brought the gun down out of battery (and the counterweight up) to put the gun into loading position. CDSG volunteers then manned the gun for a few more drills and we watched the gun go into battery (firing position) a couple more times. This is a great example of functional American seacoast artillery! The shell and powder rooms in Emplacement No. 4 adjacent to the gun now house a small museum, open on selected weekends and by special arrangement. Battery Chamberlin is a great location for further interpretative efforts by the GGNRA. The rangers also opened up the new mine casemate at Baker Beach, which still has its electric generators in place.



Battery Chamberlin, Fort Winfield Scott

Next was Battery Stotenburg-McKinnon (8 x 12-inch BLM each), the newer mortar battery on Fort Winfield Scott. A couple of years ago the battery was being abused as a compost station by the Presidio Trust, but that has all been cleaned up and now the Presidio Trust uses the interior of one set of magazines as a controlled-temperature wine-storage area rented to local restaurants and collectors. This has proven popular, and the storage space is

completely booked up. One of the power rooms is used as a tasting room for special events, with a small display on the history of the battery. The storage lockers themselves were installed in the magazine without damaging the cement walls, a great example of adaptive reuse. The exterior of the battery is unchanged and now patrolled on regular basis, while the interior is used and the historic fabric of the structure is unharmed.



Battery Stotsenburg-McKinnon, Fort W. Scott

Next was the Dynamite Battery (3 x 15-inch pneumatic guns), a unique experimental battery built essentially after the decision not to use them. The battery is a large structure with a power building and compressed-air generating building behind a large cement wall. The three emplacements are basically large cement-walled courtyards. During WWII, the HECF-HDCP for the HD of San Francisco was built within the earthworks in front of the No. 3 Dynamite gun pit. Closed to the public, this complex is in relatively good shape - the HECF-HDCP still has its gas proofing equipment and generators intact and much of the original woodwork remains (though now falling apart). Nearby Battery Saffold (2 x 12-inch BC) was used by the army after WW II as a heavy equipment repair area and is still being used by the Presidio Trust as a vehicle and equipment storage and maintenance area. Behind the Battery Dynamite complex is Fort Winfield Scott's parade ground and barracks. The buildings are generally unoccupied except for three currently used by NPS law enforcement personnel. The unkempt appearance of the buildings and parade ground is a sad hallmark of the difficulty finding tenants for this large complex. Hopefully, tenants and uses will be found for these buildings.



Coast Artillery barracks, Fort W. Scott

Next, the group fanned out over the bluffs to visit Battery Godfrey (3 x 12-inch BC), Battery Boutelle (3 x 5-inch BP), and Battery Marcus Miller (3 x 10-inch DC). The NPS has been clearing the overgrown vegetation along the bluff and cleaning up some of the trails and ravines on the cliff. On the other side, the State Department of Transportation is rebuilding the roadway that exits off Hwy 101 to feed onto Lincoln Blvd. and the Presidio. The clear views of both the batteries and their fields of fire are much improved. We were able to enter Battery Godfrey, get a view of an old hoist system still there, and view the new hoist room that was built a little later. Further along the battery row, Battery Cranston (2 x 10-inch DC) is now a workshop for the Golden Gate Bridge District, its emplacements covered with structures, and Battery Lancaster (3 x 12-inch DC) is now essentially beneath the approach roadway to the bridge. Here and there are a few of magazines for West Battery, the 1870s battery that predated the row of Endicott batteries. A few of the brick-lined entrances and earthen traverses over the magazines can still be seen.



Battery Godfrey, Fort W. Scott

Our last stop of the day was at Battery Howe-Wagner (8 x 12-inch BLM each) an early Abbott-Quad mortar battery, the only one on the west coast. Only one emplacement remains (the other three were buried or destroyed by the army) but the magazines remain and we were able to walk through them. It is currently an emergency storage facility.

After our evening meal at the "Log Cabin," once an enlisted men's club at Fort Winfield Scott, NARA's San Bruno RG77 archivist gave a presentation on "Using Federal Archive Resources."

Wednesday, October 11

The next day began at the Marin Headlands, with the first stop at Fort Baker's Battery Cavallo. This excellent example of an extensive 1870s-era earthwork has survived, both due to its status as a habitat for endangered species and the careful care and stabilization by the NPS and its volunteers. The magazines and earthworks are in good shape, only slightly modified by the army in the 1930s to store explosives. It is only open to the public on special occasions, which minimizes wear and tear. We were shuttled up the hill to Battery Duncan (2 x 8-inch BC), which is not generally visited by the public. It is in good shape, but overgrown with brush and poison oak. Next was Battery Yates (6 x 3-inch Ped), a nice, unusually large 3-inch battery on the tail that leads up to Battery Cavallo on the bluff.



Battery Cavallo, Fort Baker

Back in the caravan, we headed up the hill to the other side of Hwy 101 and Battery Spencer (3 x 12-inch BC), one of the most-visited seacoast batteries due to its commanding view of the Golden Gate Bridge and San Francisco. Along the way are the remains of Battery Ridge, the 1870s emplacements armed during 1893. The NPS has cleaned up the area and is working to keep pedestrian traffic on the paths, off the historic parapets, and away from the cliffs. The fire control stations below Spencer were off limits and so not visited. Heading down the road to Kirby Cove, we stopped briefly at Battery Orlando Wagner (2 x 5-inch BP) before stopping in the parking lot at Kirby Cove. This area is open to the public, but not to vehicles unless arrangements are made to use the camping and picnic areas there. The NPS was clearing some of the non-native vegetation in the area, a common task these days throughout the GGNRA. Kirby Cove has Battery Kirby (2 x 12-inch DC), an interestingly sited water-level battery, and gun blocks for two re-sited 3-inch guns of an anti-motor torpedo boat battery, as well as two 90 mm AMTB gun blocks. While having lunch, we watched the carrier USS *Nimitz* leave the Golden Gate.



Battery Kirby, Fort Baker

Next along the ridge was BCN 129, the third and last 16-inch gun battery built for the San Francisco harbor defenses. This battery was not completed; although the guns were brought in, they were never mounted. Due to the terrain, the battery has a unique layout, with a number of extra tunnels. One entrance to



BCN 129, Fort Baker

the interior was cut open, allowing us inside this battery, which was a real treat. Heading downhill, we stopped briefly at Batteries Rathbone-McIndoe (2 x 6-inch Ped each) before heading down to visit Battery Mendell (2 x 12 inch DC) at Point Bonita in Fort Barry. Battery Mendell's concrete has benefited from restoration work. Point Bonita has a number of interesting fire control and searchlight stations, and a mine casemate, as well as the admin area of Nike Site SF-88 (now used as a day camp).

Our last stop of the day was Battery Wallace (2 x 12-inch BCLR). The only 12-inch long-range battery built on the west coast, it was casemated during WWII. The interior, normally locked, was opened and we were able to see not only the interior of this battery but its stored wealth of Nike parts, pieces, and equipment, the legacy of many volunteers' work on the restoration of Nike site SF-88L. It was a veritable treasure trove of



The casemates of Battery Wallace, Fort Barry, with Hill 129 in the distance

parts and electronics obtained by volunteers and park staff from around the US.

Heading back to the Presidio, we gathered for dinner at the O Club. The evening presentations were open to the public and co-hosted by the Presidio Trust. John Martini gave a presentation on "Third System, Civil War, and Post-Civil War Fortifications of SF Bay."

Thursday, October 12

We headed back over across the bridge to Fort Barry to finish visiting the batteries there. First stop was Battery Alexander (8 x 12-inch BLM), a nice late-Endicott mortar battery. After a quick tour of the normally locked interior, we walked down the row to visit Batteries Smith-Guthrie (2 x 6-inch Ped each) and Battery O'Rourke (4 x 3-inch Ped) before heading to Fort Cronkhite on the other side of Rodeo Lagoon.

Fort Cronkhite was a separate coast artillery post, created when Battery Townsley was constructed just before WWII. Many of the 700-series barracks, mess halls, latrines, and office buildings remain, used by various organizations. Adjacent to the WWII buildings are cinderblock admin buildings for Nike Site SF-87, located a little further east. Heading uphill, we parked behind Battery Townsley (2 x 16-inch BC) a casemated 16-inch battery built by the US Army at about the same time as Battery Davis at Fort Funston. Work has begun on lighting and repainting the interior of the battery, a legacy of deceased CDSG member Chuck Wofford, who left money towards this project in his will. Again, the interior of this battery is unique and a number of interesting artifacts remain, as well as soldier graffiti. The NPS plans to open this battery for special tours. We also got inside Battery Townsley's PSR room, which is relatively intact.



Overhead trolley rails of Battery Townsley, Fort Cronkhite

After lunch the group was given a free afternoon to visit sites not on the formal agenda. Some visited a few Fort Cronkhite garrison structures and then headed over to Point Bonita and to other locations around Fort Barry. Others headed back to Fort Baker, where they were given a tour of a number of the buildings on the post. The buildings are in transition, as funds are raised to revamp and update the structures for use as a retreat and conference center. The group was able to see the interior of the 1930s torpedo storehouse, the 1930s mine cable tank, the guardhouse,

the post exchange (with its original bowling alley), a barracks, the administration building, and duplex officers' quarters. The structures are in good shape, but many have been altered for use as offices and need to be updated. Other members headed back across the Golden Gate Bridge to sites not visited, such as the cemetery batteries (Baldwin, Sherwood, Slaughter, and Blaney), the buildings and quarters around the Presidio (now being rented and/or refurbished), Battery Livingston-Springer at Fort Miley, BCN 244 at Milagra Ridge, and a series of fire control stations south of San Francisco. A few members found the congenial confines of the Presidio Bowling Center a great place to have a beverage and get caught up with one another.



Fort Baker Parade Ground



Fort Baker Cable Tank

That evening was the CDSG Banquet, a nice sit-down affair, followed by a very brief and to-the-point business meeting. Several presentations finished the evening.

Friday, October 13

The last day started with the majority of the group gathering at Battery Townsley for a 2-mile hike up Wolf Ridge. The roadway has been closed for number of years, partially destroyed by earthslides. We followed the coastal trail up to the spine of the ridge (and 89 stair steps), visiting a number of fire control stations along the way. On the ridge are an SCR-296A radar site, a 120 mm AA site (1950s), a fixed 3-inch AA site, a concrete

powerhouse, and a number of WWII trenches and prepared 40 mm AA and .50 cal MG defense sites. On top of the ridge are the pads and buildings for the integrated fire control (IFC) radars of Nike site SF-88C.

Returning down the hill, the last stop of the conference was at Nike site SF-88L, the restored Nike launch area at Fort Barry. This truly impressive site is the only “functioning” Nike site remaining in the US. After deactivation, the army turned the site over directly to the NPS, and it has been restored and maintained by volunteers, led initially by the local chapter of the Motor Vehicle Collectors Club (MVCC) and for many years by the redoubtable Bud Halsey. We were led on our tour by John Porter, the NPS ranger in charge of the site. The site has in its collection a set of working radars and control trailers, and a working magazine and launch rail elevator. It is truly impressive to see a Nike Hercules missile brought up out of the magazine and raised to launch position. We were able to ride the magazine elevator down into the magazine and view the eight missiles in the “box.” This site is a must see for those interested in Cold War continental defense, after coast artillery, and is to be commended for its hands-on displays.

This was an impressive, well organized, CDSG conference. We had a paid attendance of 102, an excellent turn-out. Only two organizing committee members had ever been to a CDSG conference, but they kept a tight itinerary and arranged for us to see numerous locations generally closed to the public. Five days was not enough time to see everything, but most of the other sites could be visited on your own time if you were interested. The trip reminded us how diverse and numerous the military-heritage structures are around the Golden Gate, and how accessible they are compared to the east coast. The state of preservation is impressive, due to both milder weather and the care and administration of the sites by first the military and then the Department of the Interior.



Radars and missile at Nike site SF-88L

The CDSG owes Bob Holloway, Greg Jennings, John Martini, James Osborne, John Porter, Sam Stokes, and Tim Tyler a HUGE debt of gratitude for sticking in there and getting this meeting pulled together. The meeting crew managed to put together a fine program, deal with problems, while adroitly fielding ques-



tions from the membership. Job well done, guys! The meeting crew overcame lodging, meal, and scheduling problems to create a cohesive program. In addition, they have done the CDSG a real service by getting participants from the agencies that hold the keys to properties we would be visiting. It is important for the CDSG to have outside speakers participate in our meeting, and to show them that we are listening to what they are saying and interested in what they are doing at these sites, something that perhaps we as a group have not done as successfully as we might have. I know the membership will join in expressing our appreciation for the effort the SF Meeting committee made to pull this meeting together. Thank you!

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Hezbollah Defends the Lebanese Coast

Charles H. Bogart

In July 2006, open warfare broke out between Hezbollah and Israel. Hezbollah struck at Israel from Gaza and Southern Lebanon with infiltration and rocket attacks, mainly from within Lebanon. With the Lebanese government unable or unwilling to shut down Hezbollah's rocket sites, Israel struck back at Hezbollah sites in Lebanon. Land, air, and naval forces sealed off the areas from which the rocket attacks originated and then infantry was sent in to destroy the sites. Meanwhile, the Israeli Navy was assigned to blockade the Lebanese coast and destroy Hezbollah assets along the coast. To carry out these two missions, the Israeli Navy deployed a number of warships along Lebanon's Mediterranean coast.

Among the ships assigned to blockade duty off Beirut, Lebanon, was the INS *Hanit*, a Sa'ar V-class inshore missile ship. The *Hanit*, one of three sister ships, entered Israeli service in 1994. She is 85.64 meters long, with an 11.88-meter beam and a designed draft of 3.17 meters, displacing 1,227 metric tons. A combined diesel and gas turbine power plant provides a maximum speed of 33 knots and a cruising range of 4000 nautical miles. She is armed with eight RGM-84 Harpoon SSMs (surface-to-surface missiles), two Barak SAM (surface-to-air missiles) vertical launch containers (64 missiles), and a Vulcan Phalanx close-in weapon system, in addition to an armed Dauphin helicopter.



Reported hit location of the C-701 in left circle. Both circles are diesel exhaust for the two diesel engine rooms.



Diesel exhaust on the port side of a Sa'ar V



Diesel exhaust on the starboard side of a Sa'ar V



INS Hanit going out to sea three weeks after being hit. Note the area of fresh paint and the missing hanger door and crane

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CDSG St. Babs 2006 Planning Committee Tour of the San Mateo County Coastline

Photographs and text (c) 2005, Tim Tyler

This is a long-overdue write-up on a San Mateo County Coastline Magical Military History Tour. Efforts to put this tour together actually started early in 2005, at a CDSG St. Babs 2006 (San Francisco) Planning Committee meeting. We knew the Pillar Point Air Force Station, a radar tracking annex of Vandenberg AFB, was the site of the WW-II-era Pillar Point Military Reservation. Since it has remained a secure military site since WW-II, we thought there was great potential for some relatively undisturbed HDSF remains on the site, and it was worth a try to arrange a visit.



Veni, Vidi, Vici! (L to R, Tim Tyler, Sam Stokes, James Osborne, Greg Jennings, John Voss)

Around February, I emailed the Historian's Office at the 30th Space Wing, the host wing for Vandenberg AFB, as an initial point of contact that should be able to appreciate our interest in visiting the site. I made general references to CDSG and all but one of us were not only CDSG members, but also on the 2006 St. Babs Planning Committee. The historian, Jeffrey Geiger, seemed open to the idea, but said he did not believe there was much left. I explained that even if there was nothing left, we would appreciate an opportunity to verify that for ourselves, and hopefully take some photos. He passed on the request to the Vandenberg AFB Public Affairs Deputy Chief, Lt. Lucas Ritter, who ran the request up the flagpole; I understand that it went to the commander of the 14th AF (30th Space Wing's parent command, also at Vandenberg), MG Bill Shelton. Finally, in mid-spring, the request was approved, and I decided that it would be fun to visit other old military sites along the San Mateo County coastline along with Pillar Point.

July 28 was selected for the visit. The group needed to be small (I had told Vandenberg it would be a "small number"), so I invited Sam Stokes, Greg Jennings, and James Osborne, all of the St Babs 2006 Planning Group, plus a military aviation friend of mine, John "Boss" Voss. For security purposes, Vandenberg

AFB required a list of full names, DOBs, and SSNs in advance of the visit.

As I put together an itinerary for the July 28 grand expedition, I figured we would do a few quick sites on the way to Pillar Point, and then hit other sites further south along San Mateo County. I went to the NARA branch in San Bruno to try to research some of the targets in advance, but alas, they had minimal records, and the records they did have belonged to the War Assets Administration, mostly pertaining to how much the land and improvements cost the government. Nonetheless, I did learn a few interesting details, as well as getting two installation layout maps. Obviously, they had nothing on Pillar Point MR, since it remains in federal hands, but the spectacular National Park Service Golden Gate National Recreation Area's Presidio Archives did inherit much HDSF paperwork from the army, and I obtained a Pillar Point Military Reservation layout map from them. The plan was to depart San Mateo at approximately 8AM for our first stop at 8:30AM, to get to Pillar Point by around 11:15AM. After everything with Pillar Point AFS had been arranged, I was finally put into direct contact with the Site Manager there, Mr. Hulmut Erhard.

First Stop: FORMER HDSF SITE #28B, MILAGRA RIDGE MILITARY RESERVATION and the minor remains of Nike SF-51's launch battery.



Looking up the road from just inside the gate. Water reservoir compound on the left

Normally, you can only drive partway up a narrow access road before you reach a heavy NPS gate and have to park and walk in, so I was very happy that we had GGNRA Ranger James Osborne to unlock the gate. It turned out the Milagra Ridge gate was already open, so we drove in, being careful not to run over any coyotes, frogs, Mission Blue butterflies, or other endangered species, as well as common species like humans or dogs. The gate was probably unlocked by the guy working at the North Coast County Water District reservoir site along the west side of the access road just a couple hundred feet in from the gate. According to Al Grobmeier, WW-II era Milagra MR consisted of:

Milagra Military Reservation, HDSF Site 28

Milagra Knob Site 28A: B6S6 TOWNSLEY (Battery Townsley Base End Station) B3S3 DAVIS (Battery Davis BES) Power Plant

Milagra Ridge Site 28B: BCN 244. (Unnamed two-gun 6 in) B'S' 244. (Battery 244 primary BES). B6S6 129 (BES for Battery 129 at Fort Barry). SCR 296 radar No.9. Fire control switchboard (FSB).

There were also two 40 mm AA AW guns, Nos. 29-30, at Milagra to protect Battery 244, part of the Separate Battalion, AGB-1, with CP at Fort Scott.

Milagra Cable Landing MR, Site 28C (I believe one of the missions of Battery 244 was the protection of the cable landing.)

We drove right up to Battery 244 and parked. The Pacifica Police Department's web page (<http://www.pacificapolice.org/>) states:

"In December 1964, there was a tentative Council approval to move the department to the World War II bunkers on Milagra Ridge. This proposal never came to fruition although it was leased from the United States Army for record and evidence storage for a period of time until an arson fire caused the records to be moved."

Since my first visit in 2002, the soil has been excavated away from the doors, but the original-looking heavy steel doors are securely welded shut. Peeking inside did reveal plenty of trash and graffiti of 1987-89 vintage inside, so there either is-or was-a way in. The battery commander's station remains atop Milagra Ridge, immediately east of the BC 244 magazine built into the side of the hill. The BC station is at 37° 38.47N/122° 28.97W. An unusual feature of this station is that the entrance was on the front (west) side, exposed to enemy fire, and consisted of a concrete entrance leading east into the bottom of the two-story structure. Once inside, observation staff would climb a ladder to the aboveground observation level. This entrance is secured by a rusty metal plate and a couple feet of soil. As with several other FC stations in the HDSF, this one had been camouflaged with stones held in place with concrete mortar, though much of the stone is gone. The top of the concrete BCS still has some sort of black residue on it, probably waterproofing tar, and the steel protective shield is down over the observation window, making us wonder what the inside may be like. A BES that should have been lower down the slope is reported to have slid or rolled (!) partway down the hill. One is indeed visible several hundred



Gun #1, with the Battery Commander's Station in the background. Magazine entrance is hidden from view in the center right



Looking SW at Gun #1 & the magazine entrance. Pacifica Pier in the background



BC-244 6" Gun Pit #2 & south side of magazine

yards down the ridge, facing the wrong way. We did not have the time to walk down and examine it, but it should be B6S6 for BCN 129.

At BCN 244, Gun No. 1 - the northern 6 in gun pit is at 37° 38.47N/122° 28.9W. The pit is filled in and now has grass growing inside it, but the circular concrete apron surrounding it is exposed.

Gun No. 2 - the Southern 6 in gun pit is at 37° 38.44N/122° 28.9W, with the pit filled, and a large "ornamental" piece of old concrete (easily several hundred pounds) set in it by unknown parties for unknown reasons. Maybe we can dynamite it...

Poking around the grounds further, we located the remains of the SCR-296 radar site on a hilltop behind the 244 BCS. There are three separate remains there. The westernmost, at 37° 38.44N/122° 28.83W, consists of a small underground structure, a probable cable vault in front of it (hatch off, filled with dirt) and some concrete pieces atop it that could have been mounts for an antenna. About 20 feet behind (east) it is a 15.5' x 20' concrete slab at 37° 38.451N/122° 28.823W; maybe it had a radar operations building on it. The third set of remains was about 20 feet further east on the back side of the hill, an 8' x 18' concrete pad which we believe to be the remains of the generator facility, at 37° 38.456N/122° 28.815W. This pad has several sets of shallow double notches in the concrete floor, perhaps from the generator mounts.



BCS 244 (2 levels), with west-facing entrance.

We did not locate any remains of either the two 40 mm AA positions nor the several .50 cal. emplacements, nor do we know exactly where the Milagra Cable Landing MR (HDSF Site 28C) was, though that one was probably close to the shoreline. Milagra Ridge overlooks the northern section of the City of Pacifica, set back about a mile east of the coastline. I have not seen the remains of anything that looked like a cable landing structure. It could have been demolished, or converted into something else decades ago, or perhaps it was about a half mile inland, where Pacifica High School now sits.

Our next stop was just a hundred yards back down the access road - Nike SF-51L.

SAN FRANCISCO AIR DEFENSE MISSILE SITE No. 51, LAUNCHER AREA, MILAGRA RIDGE MR

The only remaining visible structures of Nike SF-51L are the two magazine elevator doors and the personnel escape hatch covers. The elevator doors are capped with concrete about 8 in thick (the same was done in spring 2005 with the SF-59L elevator doors at Ft. Funston). Like SF-59L, the elevator doors and launch pads are aligned NNE, towards downtown San Francisco and perhaps Soviet bombers inbound via the polar route. Matching up aerial imagery with the SF-51L general site map, you can still make out soil and terrain disturbances where some of the Nike structures had been, such as the sentry-dog area SW of the launchers, but it seems everything but the elevator doors and escape shafts have been either removed, or covered - even the sidewalks. I have no idea why someone went to this trouble, yet left the magazine elevator area clearly visible. This Nike site was operational until 1974, and in August of 1982 the launch site was mostly intact

but unused, perhaps still army property, with fencing up and gates secured. The SF-51 administration and housing area was further down the access road, NW of Sharp Park Drive and the access road, which probably had once been considered Sneath Rd. Documents in the GGNRA Archives say the admin area even had a church, constructed out of non-appropriated funds. This area is totally obliterated, and is now the Spyglass Hill condo subdivision. There is a curious object on satellite imagery in rugged open terrain about 1/3 mile NNE of the admin area. It is a small rectangular area that seems to have a fence around it and heavy foliage growing around the fence line. The problem with the site is that there are very few legitimate parking spaces outside the gate. Perhaps enough for just three or four cars, before you risk parking in a red zone and getting a ticket or towed. They should have left some of the Nike launcher-area pavement intact as a parking area.



Concrete slab atop one of the Nike SF-51 magazine elevator doors, and crew escape hatch.

<http://www.nps.gov/goga/parklabs/restoration/milagra/history.htm>

<http://www.militarymuseum.org/MilagraRidgeMilRes.html>

<http://www.acme.com/jef/nike/sf511.html>

ADDENDUM: On October 1, I returned to Milagra Ridge for what turned into a four-hour solo tramp through thick coastal fog around the former Milagra Ridge and Milagra Knob areas. I had some RCW annexes with me, a layout map of the SF-51 Nike Launch site, and recent satellite imagery of the area. The first thing I investigated was a curious rectangular signature that showed up on the satellite imagery several hundred yards of what had been the Nike admin/housing area. I finally came across what proved to be a former sewage lagoon compound at 37° 28.20N/122° 28.19W, long-abandoned and apparently from the Nike era, based on the fencing.

Due to the fog, visibility was 150 feet or less, and while temporarily lost in the fog, I stumbled across more all-too-rare remains of the Nike construction - 2 old ceramic-coated metal bathtubs at 37° 38.257N/122° 28.362W, two rusty rolls of old fencing at 37° 38.257N/122-28.412W, and finally, a single, overturned bathtub (same design as the other two) at 37° 38.254N/122 28.423W with "Kohler USA 17-5-2M 3 10 27" forged into the bottom. I am guessing that the tubs remain from the Nike housing.

There were also pieces of an old wooden fence lying in various

parts of this section on the east side of the current GGNRA access path, north of the old Nike housing area and SE of the Nike launch area. I made a quick visit to BCN 244. Sitting atop the 244 BCS for a quick rest, my inability see the Battery itself 50 yards away through the thick fog made me question the overall value of Harbor Defenses of San Francisco. I decided to try to find the BES that had slid partway down the slope and was now facing eastward, as well as the two BESs constructed at Milagra Knob. First taking a dirt trail and then the remains of the paved road that once worked its way across Milagra Ridge to Milagra Knob and then joined up with Highway 1, I found the former 129 B6S6 at 37° 38.513N/122° 29.185W, elevation approximately 268'. It is indeed now facing directly eastward instead of west towards the ocean, only about 15 feet west of the old road. The exterior and interior are covered with graffiti, yet there was also an American flag nearby which I promptly mounted on the BES.

The pipe pedestal for the azimuth instrument is still standing inside. However, the covered entrance vestibule that once led from the right side (facing the front of the BES) to the entrance in the rear is gone. Examining the sides of the structure gave me no clues as to how it came to be where it is now, nor were there any obvious markings along the side of Milagra Ridge to indicate exactly where it originally sat. Al Grobmeier seems to recall that it had once been sitting on its side, and that a bulldozer was probably used to set it upright. I continued walking down the former roadway, eventually reaching an old, heavy-duty gate that opened to a fenced-off Highway 1 turnout. I turned around and then spent the next hour or so looking for Battery Townsley's B6S6 and Battery Davis's B3S3 BESs that had been not too far off the road on Milagra Knob, but I was unable to find them. The knob has a large, open clearing on it which may indicate the BESs were removed, but it is not impossible that a combination of the hills, trees, and fog caused me to miss seeing them.

End of Addendum.

We proceed down Sharp Park Drive towards the coast, then south on Cabrillo Hwy (Hwy 1) into the famous Devils Slide area. The old concrete powerhouse and narrow, decaying concrete steps along the cliff lead up to the Devils Slide double-BES (B5S5/Davis & B8S8/Townsley), and the single B8S8/129 next to it, plus the SCR-296 No. 10 site, now with a rusty 1950s-era steel tower atop it (apparently constructed by the navy, for unknown reasons). The former Devils Slide Power House sits just off Cabrillo Highway at the base of the outcropping.



A year ago, I finally built up the nerve to climb the decaying concrete steps up to the site. Of course, I was rewarded with three BESs and the SCR-296 remains, but the steep steps up and down the hill are extremely treacherous. One slip, and the pieces of you not left behind along the steep, rocky slope will have a burial at sea. I am very glad I made it up there, and I spent so much time up there recovering from the climb up and delaying the inevitable climb down that I am pretty sure I will never have a need to do that again! There was no way I wanted to be responsible for leading a group up there, so I was happy to merely point it out as we drove by. Sooner or later, those concrete steps and the cable trench alongside them will slide down the slope into the water, several hundred feet below, and mountain-climbing equipment will be necessary to access the remains. Incidentally, one BES had a large gaping hole in the side of it, leading me to believe it may



Devils Slide BESs, as seen from the top of the late 1950s-era Navy tower atop the SCR-296 Bldg

have been shelled or used for demolition training long ago.

<http://www.californiacoastline.org/cgi-bin/image.cgi?image=5940&mode=big&lastmode=sequential&flags=0&year=2002>

Our next destination was just about a third of a mile further down Highway 1.

HDSF LITTLE DEVIL'S SLIDE B2S2/144 BASE END STATION AND FT FUNSTON GROUP FLANK COMMAND POST/OBSERVATION POST

This is a double-site on a southern Devil's Slide outcropping, with all of the soil excavated and eroded around it except for the rock it sits on. It is directly across Highway 1 from where work on the Hwy 1 Devil's Slide bypass tunnel has finally started. This part of the San Mateo County coastline is very rugged, and old signs along the stretch advise that it is a "dangerous area," with parking, hiking, climbing, etc. prohibited. Due to the CalTrans tunnel construction, there was no sane place to even illegally park nearby, and the heavy traffic in that area combined with the construction zone and winding, incredibly scenic, two-lane road made me very concerned about how to safely transport a group

of people to the site. I decided to call the San Mateo County Sheriff's North Coast Substation, and talk to its commander, Lt. Steve Shively. Our problem was solved quickly, after explaining our interest in the site and my concerns with getting there safely. He very quickly offered one of his marked SMSO vehicles and a driver to get us there for a brief visit! This tended to mitigate another issue - ownership of the site was a little confusing and I did not want to get in trouble for trespassing.



So at around 10:30AM we pulled into the SMSO substation, a couple miles further south on Highway 1, met our contact, and off we went in one of their vehicles to what the locals generally refer to as the "South Bunker." After a pretty amazing bit of 4WD maneuvering (in what I think may have just been a 2WD van!) we all got out and walked up to the construction, which rests about 10 ft above the current grade. The site certainly has some graffiti on the outside, along with the occasional broken beer bottle, but is pretty intact, complete with some orange tile (insulation or water-proofing) still on the northern side. James climbed up the rock, worked his way around a narrow ledge, and was actually able to climb in through the lower observation port! He reported a lot of graffiti inside it, but also the remains of at least one power or telephone panel box still on a wall. The site is at 37°34.08N/122°30.99W. According to the USACE DERP-FUDS report, the site consisted of 13.7 owned acres and 3.11 leased acres, and in July of 1960 the government sold the 13.7 acres to a private citizen. In the past few years, I have read several different bits of lore on the Internet about how the Little Devil's Slide bunker came to be perched up on the rock like an art exhibit. The general consensus seems to be that some rich guy bought the site and possibly other nearby land in the 1960s and started excavating and grading the top of Little Devil's Slide hill for a mansion. He was also at least talking about developing a small residential community on other property in the area, but then suddenly stopped the project. Lieutenant Shively thought that the property was still privately owned, but a September 6, 2005, *San Mateo County Times* cover story on the tunnel project indicates that when the bypass is finally opened (in 2010!), the old roadway will be given to the NPS GGNRA for hikers, mountain bikers, and walkers. An accompanying artist's depiction shows the old stretch of Hwy 1 about 100 yards north of the Little Devil's Slide bunker as a turnaround and parking area. This will mean

that regardless of who actually owns the Little Devil's Slide and Devil's Slide land that the bunkers rest upon, in about 5 years there will be many people on foot or bicycles visiting the sites, particularly the highly visible and safer Little Devil's Slide BES and CP/OP.

Inevitably due to erosion and perhaps as soon as the next major earthquake, the Little Devil's Slide structure will tumble into the ocean several hundred feet below. Perhaps the powerhouse has already met that fate (or perhaps it was removed during the 1960s grading), as it was nowhere to be found. After poking around the site for about 20 minutes, we proceeded back north on Hwy 1 to our next destination.

<http://ca.ckwinfo.net/sf/devils/index.html>

<http://www.californiacoastline.org/cgi-bin/image.cgi?image=5945&mode=big&lastmode=sequential&flags=0&year=2002>

USN RADIO COMPASS STATION AND MONTARA AA TRAINING CENTER



What is now the Montara Water & Sanitary District's (MW&SD) administrative offices and plant compound along Hwy 1 used to be a navy radio facility dating back to the 1920s, perhaps as early as 1917. The navy radio compass station network provided navigational aid to ships entering a major port during foggy conditions when visual aids such as lighthouses might be ineffective. Some radio compass stations were established as early as 1917. The 12th Naval District's San Francisco Entrance Group Radio Compass net stations consisted of Point Montara, the Farallon Islands, and Point Reyes, plus two located a couple hundred miles north at Eureka and Point St. George near Crescent City. The Farallon site is apparently completely demolished, while the Point St. George station appears to have been turned into a USCG station and mothballed several decades ago. As of 2004, the Point Reyes site was an intact private residence owned by GGNRA. One of the actual 2-story radio-shack buildings is still intact but had been modified in the 1960s into a cozy little bungalow, yet it still had a small circular hole in the roof for the mast of the "Armstrong method" rotating loop antenna. The navy disestablished their radio compass station net in July of 1941, turning most stations over to the USCG. The 12th Naval District established the Point Montara Antiaircraft Training Center (AATC) in 1943 on land surrounding the USCG RDF compound, paying \$290,000 for the approximately 14 acres, and

running a water pipeline to the site from the Half Moon Bay Flight Strip, a couple miles south.

NARA San Bruno revealed no navy files, but plenty of documents in RG 270 - Records of the War Assets Administration, Office of Real Property, Washington, DC, Real Property Case Files, 1946-1949, pertained to the WAA's efforts to sell off the AATC property. The AATC was a navy training school established to provide antiaircraft instruction. According to a June 3, 1945, map, there were a plethora of gun types - .50 cal., 20 mm, 40 mm (plus twin and quads), 3 in/23 cal., and 5 in/38 cal. In addition, there were assorted classroom buildings, magazines, loading-machine buildings, a range-control tower atop a fire control building, and the admin building, all in the secure compound on the west side of SH 56. The housing/support area with 8 barracks, BOQ, boiler room, latrines, and a drill field was on the east side of the highway. A small footbridge crossed the old Ocean Shore Railroad right-of-way, long out of service and now having two Mark 3 Trainer buildings and a general-purpose classroom building atop the former tracks. A second footbridge crossed SH 56 to the housing side. All sides of the two AATC compounds were fenced, including the west side by the gun mounts along the ocean cliff. There were three "Poloroid [sic] Training" buildings on the site, as well as a "TDD Hangar," which I assume housed target drones, Denny aircraft that would have been launched via catapult. In 1945, NAS Moffett Field had a utility squadron (VJ) operating nine Marauder aircraft for aerial gunnery and antiaircraft training. I think it safe to assume that these Marauders towed aerial target banners or sleeves.

From visiting the MW&SD office in the past, I knew that they had some knowledge and interest in the history of the grounds, but for permission to visit the site on July 28, I needed to contact the district's president, Scott Boyd. I know Boyd recognizes the historic value of their site, but for safety and liability reasons he was hesitant to permit us to explore and document the grounds. He failed to get back to me to do so, but when we stopped by on the 28th, the secretary called Boyd and we were allowed to look around in their office building (the former USN/USCG radio compass station admin/housing structure) as well as take a quick peek out their back door towards the old AATC gun emplacements, etc. Their two-story, wood-framed office building has been heavily renovated over the years, converted into offices, meeting rooms, and storage. They do have a copy of the 1945 AATC layout map framed on the main hallway wall.

A 500,000-gallon wastewater-overflow storage tank sits about where Magazine No. 4 would have been, but otherwise, AATC permanent structures such as the concrete gun pedestals/mounts and ammo magazines seem to be intact on the grounds. By December 1947, the site was in a caretaker status. During this time, the State of California constructed a new highway atop the former Ocean Shore Railway grade and named it Highway 1. The former highway just a few dozen yards east became a street. The State of California purchased 17 buildings in 1948 to be removed and used elsewhere as veteran's housing, and shortly thereafter a deed conveyed all 15.5 acres, 11 buildings, and utilities on the former AATC eastern compound to the Montara Elementary School District. The school district subsequently gave or sold Bldgs T-29 (garage) and T-48 (loading shed) to the Rockaway

Beach School District and in June of 1949 transferred Bldgs T-33 (barracks) and T-47 (loading shed) to the Lucinda Weeks Foundation, also for use off site.

Prior to 1972, the Montara Elementary School that had occupied several former AATC buildings on the eastern compound closed and the buildings were removed. The only remains I have found were concrete foundations and steps. Some of the land now has houses on it, but much is abandoned.

I expect that sometime in the foreseeable future the MW&SD will need to expand, either to a new location or enlarging their current administrative and plant facilities on the grounds of the former radio compass and AATC site. Some of the AATC gun mounts are at risk of eroding down the cliff and into the ocean, and there are images on www.Californiacoastline.org of concrete already over the side of the cliff.

We thanked the secretary for letting us briefly intrude, left behind some photocopies of WAA paperwork regarding AATC for Scott Boyd, and went off to our next destination.

<http://msd.montara.com>

<http://www.californiacoastline.org/cgi-bin/image.cgi?image=5976&mode=big&lastmode=sequential&flags=0&year=2002>

<http://www.californiacoastline.org/cgi-bin/image.cgi?image=7217046&mode=big&lastmode=timecompare&flags=0&year=1972> (Large image from 1972, grainy, but depicts both halves of the former AATC)

HALF MOON BAY FLIGHT STRIP

We were getting close to our scheduled arrival time for Pillar Point AFS, but we could knock off one more site of interest on our coastal defense checklist en route. Half Moon Bay Flight Strip was listed as a 4th Army Air Forces forward operating location for fighter/interceptor aircraft (including P-38s and P-40s) primarily based at Hamilton Field during WW-II. The 4700' x 150' Flight Strip was also apparently used by WASPs to operate UC-78s, radio-controlled target drones. At San Bruno, RG 270, Box 38, had some WAA records pertaining to Half Moon Bay Flight Strip, but again, the records focused on determining what was there, placing a value on it, and then selling it, not the history of the field nor its operations. The California Dept. of Public Works, Division of Contracts and Highways (currently California Dept. of Transportation, aka CalTrans) originally obtained 217.68 acres from 11 landowners by sale and condemnation. It is possible that the state built the original runway on the site as a civil field - the closest continental airfield to Hawaii. During World War II, the army acquired the site and improved it with an operations building, a BOQ, several shops, roads, utilities, and barracks. All 19 buildings were theater-of-operations type. The entire flight strip area was leased to the navy from June 1, 1945, until June 1, 1950, but it is unknown how the navy utilized the property, besides the well that supplied drinking water to the AATC a few miles up the coast. The War Department advised the WAA on August 1, 1946, that the site was surplus to the needs of the military. With several concerns in mind, the WAA signed an interim license agreement with the County of San Mateo on February 1, 1947, to use the former military flight strip, with the understanding that the county was responsible for protection and



maintenance of the facility. Most of the original wooden army buildings remained in use on site until they burned in 1954. CAA/FAA records indicate United Airlines operated a small terminal building at Half Moon Bay Airport in the 1950s and 60s when the field was an alternate for San Francisco, but now the airport is a relatively active but uncontrolled field still owned and maintained by San Mateo County. All that remains from the army flight strip are some aircraft hardstands, which I pointed out as we drove by, but a HMB FS installation map obtained from NARA will allow me to walk some of the grounds and look for the remains of other structures, such as the installation's flag pole at a later date. The San Mateo County Sheriff's Office uses part of the old taxiway area that fed the southern hardstands for their Emergency Vehicle Operations Course.

http://www.co.sanmateo.ca.us/smc/departments/dpw/home/0,,5562541_5562593_147318973,00.html

<http://www.airnav.com/airport/KHAF>

PILLAR POINT MILITARY RESERVATION, HDSF SITE No. 35

Shortly before noon, we finally arrived at the gate for our primary reason for gathering on the 28th - the long-planned, long-awaited visit to the former Pillar Point Military Reservation, now Pillar Point Air Force Station - a contractor-operated annex of Vandenberg AFB that tracks missiles launched from Vandenberg via radar.

Pillar Point MR came into existence in October 1940, when the army purchased approximately 13 acres and leased 36 additional acres of vacant land to create a coast defense site for BESs (B7S7/Davis, B4S4/244, & B9S9/129), SCR-296 Radar No. 11, and Seacoast Searchlights 34 and 35. We had heard there were some remains, and as the site had been a secure military facility for many decades, our hopes were that whatever remained would be in remarkable condition. When we pulled up to the gatehouse and exited our vehicles, the elderly sentry greeted us and signed us in, then notified our host of our arrival. We were then instructed to drive up to the main operations building. I had not located any information at NARA, but the NPS GGNRA Archives at the Presidio has some nice info, including a Pillar Point installation map. After all the months of coordination, my only contact with the Pillar Point site manager, Mr. Helmut Erhard of InDyne Corp, was a simple email, "I look forward to seeing you on the 28th!" so I was uncertain how happy he might actually be to have us tromping around his restricted military installation. Corps of Engineers contractors trying to do a DERP-FUDS evaluation on Pillar Point Military Reservation were denied entry to the AFS in 1991, but it turned out Mr. Erhard was a very cordial host. The nearly 50 acres acquired for the HDSF military reservation was disposed of over a ten-year period starting in 1949, but in 1959 the original 13 acres were transferred to the navy. The navy also re-leased the other 36 acres and operated the former coastal defense site as a tracking annex for guided missile test launches from the navy's Point Arguello missile testing center on what is now Vandenberg AFB. A few years later, the navy handed the site over to the USAF, which tracked missile launches, received telemetry, and if necessary, sent command-destruct signals to rockets and missiles launched from Vandenberg, 230 miles south. The air force station has for decades has been operated by contractors, first ITT Federal Services and currently InDyne. We parked amongst the large radar dishes at the operations building and Mr. Erhard was waiting for us. He was very friendly, but to be honest, his thick German accent made more than one of us have flashbacks to Dr. Strangelove, though Werner Von Braun is probably more apropos. I told Mr. Erhard that we would like to walk around the property and take photographs, notes, and mark coordinates via GPS, and all he asked was that we not photograph the radar antennas. He then introduced us to his No. 2 man. I failed to write his name down, but as he has been at the site for approximately 30 years and his father had installed searchlights at



HDSF sites during WWII, he was the one most familiar with the remains of Pillar Point MR. His office seemed to be the small civil engineering building. He showed us recent maps of the AFS and pointed out where the known and suspected remains of HDSF-related construction were, and we showed him my 1945 Pillar Point layout map, which we ended up donating to the AFS. One publication in his collection – “Historical Eligibility Evaluation of Pillar Point Air Force Station, December 1994,” prepared for ITT by SAIC Corporation, was obviously a great source of historic information pertaining to the grounds, confirming that all but one BES had been “bulldozed.” I am currently trying to obtain a copy of this publication, or as a last resort, will see if I can borrow Pillar Point’s copy. After leaving the CE office, our next stop was a nearby grassy mound at 37-29.89N/122-29.9W. According to our guide, this was the location of Searchlight 35; the searchlight shelter and tracks were covered long ago.



A few dozen yards further east at 37-29.89N/122-29.92W (the highest terrain of Pillar Point) is where we believed the SCR-296 radar had been located. There were no obvious SCR remains, just some old concrete and steel pedestals used to support a 60 ft radar dish whenever it is off the cylindrical tower-style antenna pedestal adjacent to it. This large dish antenna was a familiar landmark for mariners, pilots, and motorists on Hwy 1 for decades, but was removed several years ago and should finally be replaced with a new one in the near future. A large cable pit, complete with cables and a small snake were nearby and our guide was quite certain it had not been used in decades, but we were not able to establish if it dates back to the HDSF or not. The one remaining BES (B7S7) has been heavily modified and is used now as a hazardous materials storage shed for weed killer, etc.



An original blackout curtain rod is still in place at the interior doorway between the front observation room and rear room.

Our guide also led us to an old concrete “bunker” off to the side of the site in a small forested area.





Obscured by foliage, the SCR-296 powerhouse is in the center of the image.

After ensuring that the trespasser who had set up his campsite there was out for the day, we took a close look at the graffiti-covered concrete building located at 37°29.9N/122°29.89W and determined it to be the former generator building for the SCR-296 site about 25 yards to the north.

A small cable vault at 37°29.9N/122°29.9 was about 10 yards north of the generator building. Personally, I had hoped we would also be afforded a brief show and tell of the current mission and buildings, but that did not happen, perhaps because all my requests and follow-ups focused on our interest in the WW-II era history of the site.

We walked around a good portion of the grounds, seeing the newer buildings and variety of radar dishes while we were officially looking for any more WW-II-era detritus. After finding nothing, we drove back down to the gate.

The guard took a group photograph of us by the Pillar Point AFS sign; we turned in our visitor badges and signed out, then headed south along Hwy 1/Cabrillo Hwy.

<http://www.californiacoastline.org/cgi-bin/image.cgi?image=6038&mode=big&lastmode=sequential&flags=0&year=2002>

<http://www.idinc.com/index.cfm>



Shortly after departing Pillar Point and heading S on Highway 1, we passed through the unincorporated village of El Granada, which according to USACE DERP-FUDS, had a 17.933 acre Granada Cantonment Area sometime prior to 1943 to house troops stationed in this section of the San Mateo County coastline. It is unknown if any improvements were ever made - a visual survey by CofE contractors revealed nothing from the WW-II era, and today the approximate area consists of a heavily developed residential subdivision.

<http://www.californiacoastline.org/cgi-bin/image.cgi?image=6067&mode=sequential&flags=0&year=2002>

A few moments later, we passed through the community of Miramar, which also according to USACE DERP-FUDS records, was home to a 6.3-acre 6th Army encampment from 1943 until the end of World War II. Apparently, the army did build some improvements, but none are known to survive, and the area now consists of residences.

HALF MOON BAY AIR WARNING STATION/EARLY WARNING STATION

This site was operated in 1947 by the 505th Air Control & Warning Group as a ground-controlled-intercept (GCI) training site for fighter aircraft in concert with Hamilton Field. In 1948, the site was put on 24/7 readiness due to the Cold War, and operated as part of the LASHUP system of air defense warning sites until 1950.

For the first time in several visits over the years, the former AAF/NORAD Ops blockhouse door was unsecured, and we stepped inside. Other than some old power outlets and possibly a worktable and storage shelves, the old building was stripped, used as storage for the nearby softball fields. The old cinderblock generator building is still sealed; the three ventilation windows for the old generators were bricked up years ago.





The radar tower foundations are intact at 37-26.83N/122-26.14W and line up with a hole in the roof of the ops building through which the radar wave guide would have fed the antenna.



A third cinderblock building, this one only about 10'x10', is 100 yards east of the main complex, at 37°26.82N/122°26.04W. An old wooden workbench and old and recent trash inside it gave no clues as to why the structure had been built. It was close to 3PM, and we had a long drive to our next destination, so we soon were back traveling Hwy 1 along the beautiful San Mateo County coastline.



BOLSA POINT MILITARY RESERVATION

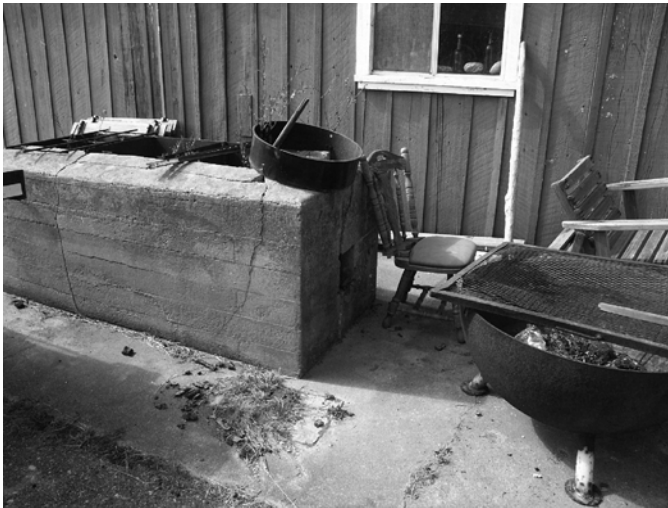
Not much is known about this WW-II-era site. NARA San Bruno seems to have nothing on it, and the Coast Defense Yahoo discussion group a year ago produced no information. What first caught my attention was an image of a very large, thick concrete wall with a small stable built against it, in an open field on the California Coastline web page several years ago. Photo 34. What seemed to be a large, mysterious concrete wall turned out to be just that when I personally made a visit. The wall is about 9 ft tall and about 2 ft wide at the base, tapering to about 8 in wide at the top. The surrounding land is all agricultural, so it was very curious that someone went to the trouble and expense of constructing such a wall many years ago. Pockmarks resembling large and small-caliber bullet strikes added to the mystery. The beautiful Pigeon Point Lighthouse is about a mile south, and a small complex of old, wooden buildings painted red is about a mile north.



<http://www.californiacoastline.org/cgi-bin/image.cgi?image=200401005&mode=big&lastmode=sequential&flags=0&year=2004>

I had been informed that the area was once the Bolsa Point MR, and an old timer insisted that the area along the coast is strewn with large concrete remains of permanent gun emplacements. The small complex of old wooden buildings is alleged to be the remains of part of the reservation. The story goes that they were later used as a Portuguese fishing colony. Now the area is owned by the Peninsula Open Space Trust and known as the Bolsa Point Ranch Property. The alleged old barracks now houses migrant farm workers. The wonderful California Coastline imagery does





not show any large concrete remains near the site. I had obtained a special permit from POST to visit and explore the grounds, although we were not to enter any of the buildings without permission from the couple of old farmers that lived on the site. Exploring the grounds on foot for about an hour revealed what we already suspected from the California Coastline.org imagery - there were no coastal defense, let alone any structures visible in the fields surrounding the buildings, or along the beach. We did not explore the mysterious concrete wall about a half-mile south, as that is now private property. Longtime Pescadero character and Bolsa Point farmer Joe Muzzi, who lives on the site and has been farming it for 50-plus years finally shed some light on the situation. His understanding was that it was an old military site, and that various concrete remains had indeed once been in the fields, but that he and others used tractors and sledgehammers 35 or 40 years ago to remove them in order to make it easier to farm the land. He did not recollect what had happened to the concrete remains. Mr. Muzzi believed that the large concrete wall to the south was indeed a firing range backstop, but the mystery continues - why would they go to the trouble of constructing a massive concrete backstop instead of a large earthen berm like so many other shooting ranges still seem to do? Any stray rounds fired in the general direction of the target would have landed in the ocean. Al Grobmeier provided the following:

WW II history of the Northern California Sector, Western Defense Command, shows the following at or near Pidgeon Point: Infantry platoon, 125th Infantry Regiment, at Pidgeon Point. Reg. HQ at Gilroy and Fort Ord. Elements at ... Point

Joe, Belmont, Pescadero, Miramar... Mission: Tactical & Beach Defense. Element of 76th Field Artillery Bn. Unit HQ at San Francisco, Belmont, Tres Pinos. Elements at 15 locations including Pidgeon Point. Beginning 1 May 1942. Mission: Tactical & Beach Defense.

Though the correct spelling is Pigeon Point (named after the clipper *Carrier Pigeon*, which sank off the point in 1853), the references to it as well as Pescadero could actually be for the nearby Bolsa Point location.

<http://www.californiacoastline.org/cgi-bin/image.cgi?image=200400999&mode=big&lastmode=sequential&flags=0&year=2004>

<http://www.rudyalichelighthouse.net/CalLts/PigeonPt/PigeonPt.htm> [_http://www.parks.ca.gov/default.asp?page_id=533](http://www.parks.ca.gov/default.asp?page_id=533)

<http://www.californiacoastline.org/cgi-bin/image.cgi?image=200401017&mode=big&lastmode=sequential&flags=0&year=2004>

Making a quick stop at a 7-11 in Half Moon Bay, we made it back to my San Mateo home around 6PM. Thank-you letters were sent to the San Mateo County Sheriff's Office and the 30th Space Wing.

Tim Tyler is CDSG's new HDSF Representative, and encourages any comments, corrections, or amplifying information regarding the sites covered in this article to be sent to him at CldWarArch@aol.com.

He says "I am extremely new to coast defense stuff, so I would love for the membership to contact me if they have photos and notes from their visits in the past, or if I've gotten a fact wrong, to contact me."

* * * * *

Fort Jackson under Attack Again Can It Be Saved?

Lee Hughart

Assistant Curator

Fort Jackson Historic Park

National Historic Landmark

Plaquemines Parish, LA

Flag Officer David Farragut's mortars bombarded Fort Jackson on the Mississippi for seven days, beginning on April 18, 1862. On the last day, this fire would be combined with a daring run by Farragut between Fort Jackson and her sister fort, Fort St. Philip. In the end, Farragut captured New Orleans, leaving behind Fort Jackson, heavily damaged but still standing. Reports at the time noted a great deal of damage, including large holes and cracks, in addition to the destruction of the barracks.

In late August this year, Hurricane Katrina came ashore on Sunday, August 28, and brought a storm surge on Monday estimated as high as 28 feet. In the end, the fort was in water to the top of her ramparts, damaged, but still standing, once again a testament to the engineering and construction techniques of Third-System forts.