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CDSG 2008 Conference

St. Babs XXVI
February 21-25, Galveston, Texas
Mark Berhow

The CDSG is making a second round of harbor defense annual conference sites around the continental United States. This year the group headed to Galveston, TX, to revisit this site last visited as a group in 1989. Dale Manuel made the local arrangements, with the help (from afar) of Alex Holder. The group was headquartered at the Holiday Inn Resort on Seawall Blvd, on the former grounds of Fort Crockett, one of the three Endicott-era harbor defense forts around Galveston.

Galveston is a major Texas natural deep-water harbor, and a key American harbor along the Gulf of Mexico. The Spanish built several small temporary coastal fortifications in the area, more for local defense against the natives and pirates than any formal coast defense; it was not until Texas became a state that any substantial seacoast defenses were considered. Throughout history, hurricanes have changed the landscape around Fort Point significantly, an important consideration when it came to building more permanent defenses. Fortifications were projected during the Third System (1817-1860) and plans for a major fortification on Pelican Spit were drawn up, but construction had only just begun when Texas seceded from the Union in 1861. Its major deep-water harbor undefended, the Confederate forces in Texas soon built earthwork forts armed with a variety of weapons at Fort Point, Bolivar Point, and on Pelican Spit, as well as defenses around the city of Galveston proper. All these were abandoned after the end of the war, and in 1879, plans were made for new defenses, but no funding was approved.

With the development of the oil fields in and around East Texas, as well as extensive improvements to the jetties at the harbor entrance, Galveston had become an increasingly important port. The defense of the port was considered important by the Endicott Board in their report of 1886. By the 1890s, construction of concrete batteries and mine defense began on three fortification sites, at the tip of the Bolivar Peninsula, Fort Point, and on a tract of land at the southeast corner of the city. Construction was still in progress when the hurricane of September 8, 1900, struck the island. Twenty-nine of the 129 soldiers at the fort lost their lives. All military buildings were destroyed, and most concrete emplacements were a total loss. The defenses were turned back over to the Corps of Engineers. The guns were removed and the batteries were rebuilt. A new seawall was also built along the shore, from Fort Point to Fort Crockett. Fort Crockett received new "hurricane-proof" buildings as the main garrison area for the defenses.

In the 1920s, the defenses were upgraded with two twin-gun 12-inch long-range batteries, and again in 1942 with two twin 6-inch gun batteries. Additional WWII-era defenses for the Texas coast included an AMTB battery at Fort Point and temporary harbor defenses - two gun 155 mm batteries on 360 degree Panama mounts - at Sabine Pass, TX, Calcasieu Pass, LA, Freeport, TX, and Port Aransas, TX.

The 37 members and guests gathered the evening of February 21 in the meeting room at the Holiday Inn Resort to check in, meet and greet old friends, and make new ones. The presentations started with Dale Manuel covering the defense sites to be visited over the next few days, as well as some suggestions for food and drink, followed by Joel Eastman's presentation on Second System forts of Portland, Glen Williford's presentation on the previous January's visit to the Philippine defenses, and Mark Berhow's first attempt at a general CDSG presentation on an overview of American harbor defenses.

Friday February 22

The group drove to the end of the Galveston seawall to visit the remains of Fort San Jacinto. The site is generally used for the deposit of sludge dredged from the shipping channel, under the Corps of Engineers. At the end of the pavement, we passed over the sites of the buried/destroyed batteries Heileman and Hogan. One gun block of the Fort Point AMTB battery (2 x 90 mm fixed, 2 x 90 mm mobile) remains at the very end of the seawall; the other block is covered by the roadway. A short walk along the beach brought us to Battery Crogan (2 x 3-inch MP, later replaced with 2 x 3-inch P). The battery is abandoned, with its front earthen protection washed away, but is otherwise intact. The addition of a mine casemate forms an "L" shaped structure. The coincidence range finding (CRF) fire control station is about 200 yards behind the battery.

Battery Crogan

Heading back down the seawall road about a mile, we found the results of the hard work of Dale Manuel and his brother Wayne Manuel. The last two batteries were inside a containment dike built to hold back the dredge spoils. However, a dry walk last summer from the road to the containment dike and then across to the mortar battery was now wet and partially covered by a lake. The industrious Manuel brothers collected scrap lumber and built a walkway across the mud bottom between the seawall and the containment dike. Then, using an aluminum skiff, they rigged a ferry across the lake to the mortar battery. The efforts the Manuel brothers put in to this were greatly appreciated! Battery Mercer (8 x 12-inch mortars) is now filled to the top with dredge spoils. The locations of the two pits are outlined by the crows nests on the two flanks of the battery, and the center magazine is the location of the WWII-era observation tower for the harbor

entrance command post/harbor defense command post (HECP/HDCP). No entrances to the magazines can be seen.

Dale and Wayne Manuel Ferry & Bridge System, Inc.

Ferrying back to the dike, the group followed a path, freshly mowed by Wayne Manual and his son, along the containment dike about ¾ of mile south to Battery 235 (2 x 6-inch shielded BC). This battery has completely lost its original earthen berm, and subsequently been partially buried by the dredge spoils. The gun platforms are covered by mud and water, and the magazines are about half full of mud. The group then retraced their steps along the path to the top of the dike and back across the wooden walkway to the cars.

Battery 236

The afternoon was spent touring Fort Crockett. Following the inactivation of the harbor defenses in 1947, the bulk of the buildings were transferred to the Coast Guard and other governmental agencies. Several more housing units were built on part of the parade ground for USCG families. Eventually some of the newer WWII-era buildings were transferred to the State of Texas for college campuses. The original barracks buildings and the post exchange were transferred to the Bureau of Commercial Fisheries and are currently part of the National Oceanic and Atmospheric Administration (NOAA) National Marine Fisheries Laboratories. The Coast Guard left the reservation in 1970s. The rest of the reservation was sold to private hands, and is now a combination of strip malls, shops, and hotels.

Barracks (left) and post exchange (right) Fort Crockett

We started with a visit to the NOAA facilities at Fort Crockett, hosted by Dr. Roger Zimmerman. This facility has been the hub of fisheries research in the Gulf of Mexico, with a large research effort on sea turtles, wetlands restoration, and fish habitat and shrimp fishery management research. In 2000, NOAA completed

NOAA conference room in ex-latrine, Fort Crockett

an extensive remodeling of the two sets of 1910 barracks, mess halls, and latrines into offices, labs, and conference rooms. The exteriors retain the look of the coast artillery barracks. The group was given an overview of the NOAA research program and the building rehabilitation effort by Dr. Zimmerman in the conference room in one of the old latrines. He then led the group over to the post exchange, which has been partially remodeled, retaining the original gymnasium floor and balcony. Finally, he took the group into the sea turtle lab, where we got an up close and personal look at the 1, 2, and 3-year-old sea turtles used for net design research.

Headquarters building, Fort Crockett

The rest of the afternoon was spent in on-your-own tours of the remainder of the Fort Crockett reservation. Local colleges are using the two main WWII-era buildings. The post hospital, looking pretty forlorn, is nominally part of Galveston Community College; the harbor defense headquarters building, which looks to be in better shape, is an extension campus for Texas A&M University. A mix of WWII-era and post-war quarters are generally in private hands. At the upper end of the old reservation are four officers quarters, fenced off and unoccupied. The property has been sold to a private developer and the buildings likely face demolition. Along the seawall, Batteries Wade Hampton and Izard were leveled for the enlargement of Seawall Blvd, though the footprint of the two batteries can be clearly seen. Battery Jacint Laval (2 x 3-inch P) is the only Endicott-era battery remaining at Fort Crockett. The gun platforms and the top of the battery carry display plaques. The casemates of Battery Leonard Hoskins (2 x 12-inch BCLR) can be seen under the San Luis Resort and Spa. The resort was built behind the battery; the top of the battery now serves as the entry plaza and pool for the hotel. The entry way to the back of the south casemate still remains, and the hotel kindly unlocked the door for the adventuresome. The south casemate is used for storage; the rest of the battery is partially filled with mud and water, which gets deeper towards the north casemate.

Officer's quarters, Fort Crockett

Battery Hoskins

The annual CDSG Banquet was held that evening, followed by the annual business meeting chaired by Board Chairman Jonathan Prostak. The evening presentations started of with a great talk on the Battleship Texas by park director Andy Smith, followed by presentations by Greg Hagge on Endicott weapons, Dale Manuel, Phil Payette, and Glen Williford on the temporary batteries of 1898.

Saturday February 23

The CDSG caravan headed north to the Galveston ferry landing for the free ride to Bolivar Point. Northeast of the landing is the USCG station at Galveston, the location of the original Fort San Jacinto mine complex (now destroyed). Once across the channel, the group headed over to Fort Travis Park, a unit of the Galveston County Beach Park Board. All original emplacements

Battery Davis

Battery Kimble

Battery 236

remain, the site superintendent opened the interiors to all the batteries. A concrete seawall surrounds the area and the parkland is now a nice grass field. The Endicott batteries are Battery Davis (2 x 8-inch DC) and Battery Ernst (3 x 3-inch BP). Both batteries are on the seawall facing the channel, and both are backed by aluminum fencing. Neither battery is maintained by park staff; the fencing is more to demark liability limits than to keep people out. In the middle of the reservation are the later batteries Battery Kimble (2 x 12-inch BCLR) and Battery 236 (2 x 6-inch shielded BC). Battery Kimble is an unmodified WWI-era 12-inch battery in excellent condition. Battery 236 is also in fine condition, one of the best WWII 6-inch batteries for photographing.

Returning via the ferry, the group split up for lunch, then reconvened in the hotel meeting room that afternoon for presentations. After a break for dinner (including the CDSG volunteer recognition dinner at Landry's Seafood Restaurant), the diehards came back for more presentations that evening.

Sunday February 24

Out on the road towards Houston, the group convened at San Jacinto Battlefield State Park near Pasadena, TX, for a tour of the USS *Texas* (BB 35), the world's only remaining dreadnought-era battleship. Given to the State of Texas in 1948, the battleship is berthed in a slip adjacent to the battlefield. A nonprofit organization has maintained the *Texas* for over 40 years, dry-docking the ship for desperately needed hull repairs in 1989. Much of the original AA ordnance has been replaced over the years, but the ship retains much of its engineering, mechanics, and equipment. However, time, the elements, and especially contact with water continue to take a toll on the ship. Efforts are being made to raise funds to build a cofferdam to get the *Texas* out of the water that is literally eating her away. Enthusiastic volunteers graciously showed the group around to the plotting room, engine room, gun decks, bridge and turrets. It was a real pleasure to see a contemporary "foe" of the coast artillery! With the visit to the *Texas,* the conference officially ended.

USS Texas (photo by Roger Davis)

The first add-on tour was led by Dale Manuel with eight people out to the border of Texas and Louisiana to visit the temporary defenses of the Sabine Pass and Calcasieu Pass. These THD protected shipping lanes to the petrochemical plants, sulfur mines, and refineries located near Port Arthur and Lake Charles, respectively. The first site visited was Sabine Pass. The No. 1 Panama mount was torn out years ago. The No. 2 Panama mount still exists at the end of the road on the west side of the Sabine River and very easy to locate. Near the road about a half mile northwest of the Panama mount is the site of one of two Spanish American War (SAW) temporary batteries at Sabine Pass. An eroding mound of earth supporting small trees marks the site of the single-gun battery armed with an 8-inch breechloading rifle on a Rodman 15-inch carriage. The site of the other SAW battery, armed with breech-loading siege pieces (replaced by two muzzleloading 12 pounder cannon), is now in the Sabine River. The second battery also had a mining casemate in its left flank. The Panama mounts at Calcasieu Pass could not be found. Both show clearly in post Katrina aerial photos. An offshore oil rig servicing company, adjacent to the battery site, has recently expanded its parking/equipment lot and, evidently, covered the mounts.

2008 CDSG Conference Attendees (photo by Alex Holder)

Panama mount at Sabine Pass (photo by Alex Holder)

Monday February 25

On Monday the eight person group became three. Still led by Dale, the first stop was the THD Freeport site, which protected shipping access to nearby sulfur mines. Both Panama mounts remain within the Quintana Beach County Park. The number one mount has been planked over and an 8-in howitzer parked on top. THD Port Aransas guarded Aransas Pass, the channel to Corpus Christi's harbor. Both Panama mounts remain, the No. 2 mount about 50 feet from a paved road. The mounts are on separate sand dunes, each about 25 feet high, and, with their flattened tops, easily located.

Panama mount with 8-inch howitzer at Freeport

Conference Summary

The conference was a lot of fun - easy paced, plenty of time for presentations, visiting local attractions, and good food and laughs. Dale Manuel and his brother Wayne deserve everyone's appreciation for their expedient bridging, trail building, and ferry operation, which allowed visits to Fort San Jacinto's batteries, as well as setting up the arrangements for the hotel, meeting room, and site visits. The CDSG attendees would also like to thank Dr. Roger Zimmerman at the NOAA laboratory at Fort Crockett, the superintendent at Fort Travis Park, and Andy Smith at the Battleship *Texas* for making the arrangements for such extensive visits to their sites.

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Montenegro Decommissions Coast Defense Missiles

Charles H. Bogart

Based on open source information

In 2007, Montenegro, due to financial difficulties, decommissioned its land-based coast defense system of seven Styx surface-to-surface anti-ship missile batteries, purchased and installed by the Yugoslavian Army in the 1970s. The Styx, better known by its NATO designation of SS-N-2, was first deployed by Russia in 1959. The missile has a range of 80 km and carries a 454 kg, high explosive, hollow charge warhead. The SS-N-2 is guided to its target along a radar beam. Early in 2008, Montenegro sold seven Styx batteries and their associated equipment to Egypt. It is understood that Egypt will deploy these seven Styx batteries along its Red Sea coastline.

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Romania Upgrades Its Coast Defense

Charles H. Bogart

Based on open source Lockheed Martin press releases and news articles in trade magazines and web sites)

On May 14, 1955, Romania joined the Warsaw Pact, which pledged to defend its fellow members against an attack from NATO. Romania thus orientated its military toward the west, although some defenses were set up to protect against an attack by fellow Warsaw Pact members. With the collapse of the Soviet Union in 1990, the Warsaw Pact lost its primary military member, and was dissolved on July 1, 1991. However, as Russia, the successor to the Soviet Union, began to re-assert its political will on former members of the Warsaw Pact during the late 1990s, many of these countries sought to come under the protective umbrella of NATO. In 2004, Romania formally joined NATO.

Even before Romania joined NATO, it began to reorient its defensive structure from West to East. During this re-organization of its defense, Romania began to buy military equipment from NATO countries to insure compatibility with the command, control, communication, and intelligence system (C3I) of its fellow NATO treaty members. Offensive and defensive weapons are of little use unless they can be coordinated to respond in a timely and appropriate manner. The system that makes this possible is C3I.

In 2002, Romania purchased two modified Lockheed Martin AN/TPS-79 air surveillance radar systems. The AN/TPS-79 is a highly mobile, medium range, solid state, three dimensional, tactical surveillance radar that operates in the S band (2.7 GHz to 2.9 GHz). It can track aircraft up to 68 miles (110 km) away, and at altitudes up to 30,000 feet. It can operate from fixed sites or relocate daily, becoming operational within one hour of arriving at a new site. Command and support personnel are based in modified HMMWV. The two AN/TPS-79 radars purchased by Rumania were reclassified as TPS-79(R).

The two TPS-79(R) radars were purchased to fill gaps in the existing Romanian air defense surveillance radar system. The first two radars more than meet Romania's military require-