

"Dave and I felt that working together would allow us to produce a better publication, which it did. I couldn't have done it without him. As the museum's archivist, he has a strong working knowledge of the images of Fort Monroe, and we were able to tie that into a thesis of (the fort's) survival."

Images of America, Fort Monroe will sell for \$21.99 at the Museum gift shop and at local Barnes and Noble bookstores. Morando emphasized that neither he nor Johnson will receive any of the profits from the book. Those funds will be used to cover the cost of publishing the material and to support historic preservation programs at Fort Monroe.



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12-inch Gun and Mount at Cape Henlopen State Park, Delaware

Delaware State Parks has completed their display of a 12-inch navy gun and mount at Battery 519 at Fort Miles, now a part of Cape Henlopen State Park. The CDSG Fund donated money for this project, towards the repair of the breech, two years ago and here are some photos of the completed project. Please let us know about other such coast defense projects that the CDSG Fund can give money towards. Photos are courtesy of Lee Jennings.



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Trip Report of a Tour of the Dardanelles and Bosphorus

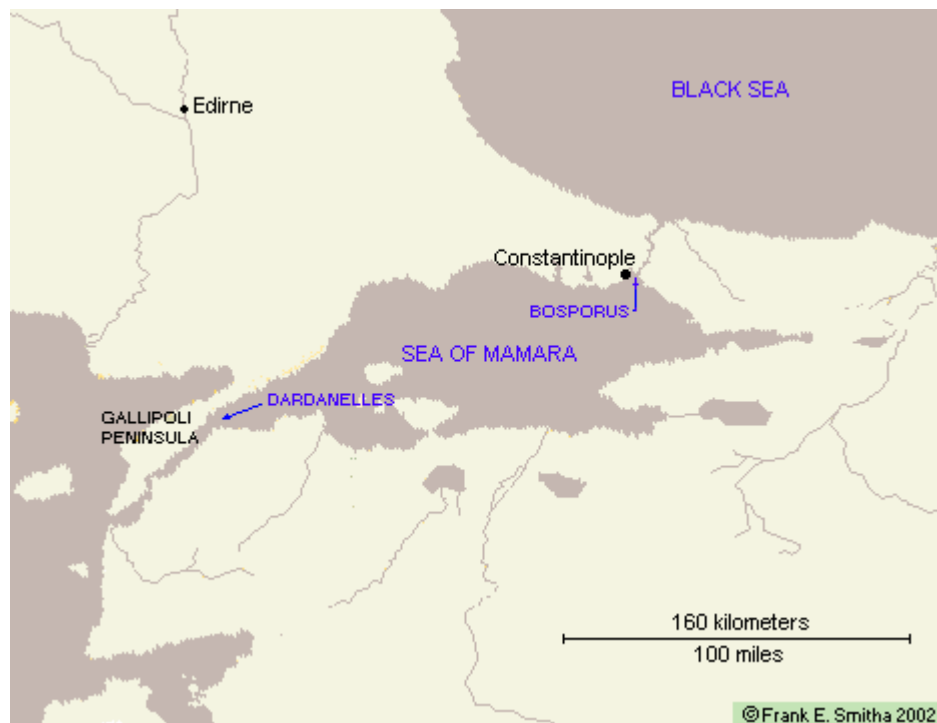
Christian Casartelli

September 28, 2008: We spent the first day driving from Istanbul to the Gallipoli peninsula. About 40 km west of Istanbul we passed the Tschatadska defenses, provisional earthworks built 1877-79 to prevent an enemy attacking the Bosphorus defenses from the back. Its strategic importance was reconsidered in the 1930s when MG and artillery bunkers replaced the obsolete forts. A similar defensive line stands at the beginning of the Gallipoli peninsula. The Ottomans built the first fortifications to block the peninsula in 1357 and the British and French built more during the Crimean War. The middle position was Fort Sultanie, with Fort Napoleon on its left flank and Vittoria Redoubt on its right. The two forts were bastioned earth works; Vittoria Redoubt was a crownwork. Only Fort Sultanie is in good condition, completely renovated, presumably in the 1870s or 1880s. These works had to stop an enemy advance in the thicker part of the peninsula. This area was reinforced in the 1930s with an anti-tank ditch and three bunker lines - the first just outside Korukoy, the last formed by AA batteries just south of Bolayir.



Fort Sultanie

The Dardanelles are 67 km long, with a channel 1,212 to 7,590 m wide and not less than 40 m deep. The tide makes navigation relatively difficult from the Aegean to the Sea of Marmara. The Gallipoli peninsula, 80 km long and between 8-20 km wide, contains heights 150-380 m in elevation. The strait was defended by fortifications on both shores. The first works, built in the 17th



century, were the castles of Seddulbahir and Kumkale, reinforced with other batteries between the end of the 18th and beginning of the 19th centuries. All guarded the western entrance to the channel. At the end of the Russo-Turkish War in 1878, a mixture of fortifications of different dates and armament existed, but because of their technical qualities and the channel's width (3,650 m), they had little offensive value.

After 1885, some older guns were replaced by Krupp guns, and under Ristow Pasha's direction, the final defensive system was completed. The works were modernized and reorganized into three big groups. The first group, named Seddulbahir, had to protect the entrance from the Aegean Sea. The second group, Çanakkale or Kilitbahir, formed the main defensive position. (The strait's here is only 1,212 m wide between Çanakkale and Kilitbahir, and 2,124 m between Nagara and Bogali, but it forms two curves, so this space could be easily covered by artillery). The Third group was named Nagara. The Seddulbahir Group's defenses were shelled, especially by the Italian Navy on the night of July 18, 1912, during the Italo-Turkish War, and in WWI on November 3, 1914, February 19, 1915, and February 25, 1915. The second group was bombarded in March 1915.

September 29: The "official" tour began with batteries on European side. After a few minutes' drive we stopped at Camburnu Fort, built between 1807 and 1820 by Sultan Mahmut II to strengthen the defenses of the Narrows, and at the Gallipoli National Park Center, which houses a small museum with some guns and battlefield artifacts. Following the coastal road, we passed Degirman Burnu Fort, built in 1884 during the reign of Sultan Abdulhamit II and still occupied by the army. We arrived in Kilitbahir Castle (Key of the Sea). Built 1462-63 by Sultan Mehmet II, with round towers and loop holed walls, it was further rebuilt and expanded by Sultan Abdulhamid II in 1893, when eight artillery batteries were installed behind embrasures. Until

WWI it had a primary defensive role, as the command center for all the European batteries. All the communication tunnels to the European forts and one underwater to Asia, departed from here. A torpedo battery was built in the fort.



Camburnu Fort

Just behind the castle and connected to it is Namazgah Fort, an irregular fort with parapets 6-11 m wide. One front faces south and one northeast. The gorge was closed by a wall 4 m high and 0.70 m thick with three orders of fire; today it has almost completely disappeared. The main entrance, in the middle of the gorge, was protected by a sort of tower. The fort had two powder magazines under the raised terreplain and a third in the parade. A large central cavalier served as a big traverse and now houses a small museum, while smaller traverses divide the gun emplacements for two 26 cm L/22, two 24 cm L/35, five 24 cm L/22, and seven 21 cm L/22 guns, all from Krupp.

Rumeli Hamidiye Fort, an earthen battery with masonry revetments widened in 1895, contains two emplacements for 35.5 cm L/35 Krupp guns, divided by a traverse containing a powder magazine. Nearly 350 m after passing Namazgah and Rumeli Hamidiye Forts, Rumeli Mecidiye Fort was one of the main



Kilitbahir Castle



Seddulbahir Castle



Rumeli Mecidiye Fort

fortifications of this defensive position. Built in 1889, it is an earthwork with two masonry-revetted fronts. Seven ready-service shell magazines in traverses divided the emplacements for two 28 cm L/22 and four 24 cm L/35 Krupp guns. Near the fort is the "Man with Shell" statue depicting national hero Corporal Seyit. During the Allied Naval attack on March 18, 1915, when 61 of his comrades were killed by naval shells, he carried the last 276 kg (607 lb) shell to his gun. The shot damaged the rudders of the battleship *Ocean*, which then ran into mines and sank.

Further south on the road we passed the old Krithia village, completely destroyed in 1915 and renamed Alcitepe after rebuilding, the so called "French Gun" position (one 14 cm M1898 gun), and finally the Turkish Martyr's Memorial Complex, completed in 1960. The next stops were the French National Cemetery and then Seddulbahir Castle, built in 1657 by architect Mustafa Aga. The castle was modernized, transforming it and using the walls, loopholes, and towers, three of which served as ammunition stores. The main front, facing the sea, had open gun emplacements and traverses where ammunition ready to be fired was stored. The powder magazine was under the raised terreplain. A barracks for one battalion was inside the walls. With Kumkale Castle opposite, the fort commanded the entrance to the Dar-

danelles, with one short 21 cm and five short 28 cm guns. Two Krupp guns still stand on its parapets. Before WWII, some gun emplacements were added in front of the old emplacements.

Attached to the northeast wall of the castle, by the road which leads to the Camber, is Seddulbahir Cephankik Cemetery. Here are inscribed the names of the first Turkish martyrs of the Dardanelles Campaign, five officers and 81 men killed during the first British-French naval attack on November 3, 1914, when a shell detonated the magazine. The fort was shelled again between February 19 and 25, 1915. The small harbor below, the Camber, was the scene of several Royal Marine raids between February and March 1915, putting 30 guns out of action.

Next stop was V Beach, the landing here on April 25, 1915, was one of the bloodiest and most heroic episodes in the Gallipoli Campaign. The first stop was at Ertugrul Battery, built by Asaf Pasa in the 1890s. The barbette battery with earth-covered traverses was armed with two long 24 cm M83 Krupp guns; one is still in its emplacement. Near the battery are some recreated trenches and a WWII pillbox. From the cliff top we walked down to V Beach Cemetery and to a gun battery built in 1930s for two 4.7-inch Armstrong-Whitworth M1903 guns, one still existing, connected by an underground reinforced-concrete tunnel. We ended the visit to the Cap Helles area at Cap Helles Memorial,



Ertugrul Battery



4.724-inch near Ertugrul fort

the main British memorial on the peninsula, with a 33 m obelisk. Outside it we found a gun, probably a 15 cm Krupp, used in a mobile battery.

In the afternoon, after a short refreshment break, we drove north to Anzac Coastline. The Gaba Tepe information center, unfortunately closed for restoration, houses a museum, a small gun exhibit outside, and rebuilt trenches nearby. Along the road to Anzac Cove, following the coast of the Aegean Sea, are some WWII beach pillboxes. The last stop of the day was at Kucukanafarta Battery, a field battery for two Krupp naval guns. Unfortunately, only one gun is more or less intact; the British blew up the other barrel in August 1915.



Kucukanafarta

September 30: We dedicated this day to visiting Asian defenses, so after a half-hour ferry from Eceabat we reached Çanakkale. Here we visited Republic Square, with a presumed 28 cm Krupp gun and a 6-inch M1902 Whitworth gun. The main attraction in town is Çimenlik Castle, built during Sultan Mehmet II's reign. Armed with one 35.5 cm L35, one 35.5 cm L/22, one 24 cm L/22, and one 21 cm L/22 Krupp gun, it is a rectangular building with 5.8 m-thick walls strengthened by corner and intermediate towers. Inside the outer walls, a four-story 22 m-high rectangular keep houses a military museum. A hole in the castle's wall is evidence of the March 18 bombardment by HMS *Queen Elizabeth*. In the park adjoining the castle are artillery pieces from the 19th and 20th centuries, at the site of a light-caliber battery. The most interesting guns displayed are



Çanakkale Republic Square

a damaged 15 cm Krupp gun from Teke Burnu Battery, west of Ertugrul Battery, a torpedo tube from the floating torpedo battery in Kilitbahir, a 24 cm Schneider M1905 gun, and mine rails from which floating mines could be dropped into water. The park also contains a replica of the Turkish minelayer *Nusret*, hero of March 18, 1915. On the night of 7-8 March, the *Nusret* laid a line of 21 mines in Erenkoy Bay, parallel to the shore. This row of mines sank three Allied ships and damaged several others. After this loss, the Allied fleet made no more attempts to force the Dardanelles; after that, the task fell to the army.

Eight hundred meters south, we passed Hamidie I Battery, still occupied by the military. The French built its low earthworks in 1837, and construction ended in the 1880s. During the Gallipoli Campaign, it was still considered the most formidable Asiatic battery, armed with four 35.5 cm L/35 (range 13,000 meters) and six 24 cm L/35 (range 14,000 meters) Krupp guns on the parapet. Driving south, we reached Dardanos Battery. It was built in 1892 by Marshal Asaf Pasa with two 15 cm Krupp guns, but on August 19, 1914, three 150 mm guns from the battleship *Asar-i Tevfik* strengthened the position. The Hasan-Mevsuf Memorial at the beginning of the road leading to the battery commemorates the battery commander, Lieutenant Hasan, 2nd



Dardanos Battery

Lieutenant Mevsuf, and four unnamed soldiers who died during the March 18 naval bombardment.

The other three batteries visited, Mesudiye, Turgut Reis, and Çakaltepe, were built in the 1930s. Mesudiye was built in 1938 and armed with two 6-inch M1901 guns taken from the battleship *Mesudiye* sunk in Sari Sighlar Bay on December 13, 1914, by the British submarine *B11* in one of Britain's first hostile actions against Turkey. With guns in open emplacements, connected by an underground tunnel, Turgut Reis was built using two naval turrets taken from the *Turgut Reis*, built in 1891 as the 10,000-ton German battleship *Weissenberg* and purchased by Turkey in 1910. The battery's armament consisted of two twin 28 cm Krupp M1892/1893 gun turrets with independent bombproof

entrance and underground magazines. Çakaltepe has two 6-inch guns in an Atlantic Wall-style casemated battery.

Kumkale Castle (Castle of Sand) was our next objective. Built in the same period as Seddülbahir Castle, opposite, it had to stop the entrance to the channel. In 1915 it was still garrisoned and armed with 15 cm to 28 cm Krupp pieces. Some of the round flanking towers were used for stores. The main front facing the sea was *en barbette*, with a powder magazine under the raised terreplein. On the parade was a store for unloaded shells and barracks for the troops to defend this fort, Besica, a work for three field guns now gone, and Orhaniye Battery. The armament was three short 28 cm, two short 26 cm, two short 24 cm, one short 21 cm, and two short 15 cm guns. Due to its strategic importance at the entrance of the Dardanelles, it was heavily shelled during the Gallipoli Campaign and like Seddülbahir is in bad condition. The castle is still used by the army.

Orhaniye Battery, some 2 km south of the castle, was armed with two 24 cm/35 Krupp guns, one exhibited in the Çimenlik Castle park. Before WWII the battery was strengthened by adding two 6-inch guns in open emplacements, four AA, and four other unknown gun emplacements, while the coast between Kumkale and Orhaniye was defended by artillery and MG bunkers. When the tour ended approximately 4 PM we took the occasion to visit the famous ruins of Troy, just before they closed. After this emotive visit we took the ferry back to Eceabat.



Mesudiye Battery



Turgut Reis Battery



Çakaltepe



Orhaniye Battery

October 1: Before leaving the Gallipoli peninsula we spent the morning and part of early afternoon visiting the War Memorials along the Pine Ridge, between Gabatepe and Chunuk Bair, the most important being Lone Pine, Johnston's Jolly (with original trenches), Turkish 57th Inf. Regt., Baby 700, and Chunuk Bair. In addition to these memorials, we also saw the Mesudiye gun emplacement, with the 15 cm gun from the battleship *Mesudiye*. After this, we drove to Istanbul.

October 2: This day was dedicated to visiting sites in Istanbul. In the morning, we visited the naval museum in Besika, which contains an exhibition devoted to Mustafa Kemal Atatürk, the founder of the Turkish Republic, models of some Turkish battleships and some of the Allied battleships that participated to the Gallipoli Campaign, some objects owned by Adm. Barbaros Hayrettin, uniforms, naval instruments, and other equipment. The next stop was at the Military Museum, with a large collection of guns and arms. A complete 35.5 cm Krupp gun from the Dardanelles stands in the museum courtyard.



355 mm Krupp gun at the Military Museum in Istanbul

In the afternoon, we drove north to visit the fortifications of the European side of the Bosphorus, the strait that connects the Sea of Marmara with the Black Sea and divides Europe from Asia, between Rumeli Hisar and Anadolu Hissar. The Bosphorus is 30.5 km long and not less than 25 m deep. It is 3.7 km wide at the Black Sea, 2 km wide at the other extremity in front of Istanbul, and 670 m wide at the most restricted point. Navigation is easy from the Black Sea to the Sea of Marmara, but tides make it difficult in the opposite direction. It forms two main curves represented by Buyukdere and Beikos Bays with two important narrows: the first, northern one, between Anadolu Kavak and Rumeli Kavak (984 m) and the second, more southern, between Anadolu Hisar and Rumeli Hisar (650 m). Generally its shores are high above sea level.

Defenses to prevent an enemy fleet approaching the capital were formed by forts and redoubts along the two shores, almost always near sea level, at the base of hills. Most of these were built in late 18th century. During the Russo-Turkish War (1877-78) some were already obsolete and abandoned. The maintained batteries were divided into two groups: the first defended the entrance from the Black Sea, while the second covered the Rumeli Kavak-Anadolu Kavak narrows. After 1888, all fortifications were reinforced, in response to the new defensive demands, and were reorganized to stop a fleet in the sea space between Karibieh and

Poiras, on the north, and Magiar Kalesi and Telli, on the south. In the new defensive plan the old Rumeli Kavak and Anadolu Kavak forts became the main positions.

In light of events in Russia in 1905, and the eventual need to prevent the passage of the Russian Black Sea Fleet, the Turkish government decided to reinforce the Bosphorus fortifications, building new works and modernizing existing ones without considering Russian protests. Today the military presence, even if reduced from the 1990s, is still important in this area and most defensive buildings are still inside restricted areas.

An obligatory stop was at Rumeli Hisar (Rock of Europe) Castle, built in a few months in 1452 by Mehmet II, considered the first Europe fortress taking into account the use of cannon. From the top of its three circular/octagonal towers the Ottomans could fire a great distance. It was decided to block supplies to Constantinople, since Anadolu Hisar Castle was at a point where the Bosphorus is wide enough for ships to sail along the European coast without great risk of being hit.



Rumeli Hisar

Proceeding north, we saw the only accessible 20th century battery of European Bosphorus, the New Telli Tabya Battery built in 1905/06 on a hill overlooking the obsolete Telli Tabya Battery and armed with two shielded 15 cm/L50 Armstrong guns on naval mounts. The trip finished with the visit to old Garipçe and Rumelifeneri Castles. The first had casemated guns posi-



New Telli Tabya Battery

tions, before WWII it was strengthened with two casemated gun emplacements, probably 6-inch. Rumelifeneri Castle is located at the Bosphorus entrance and before WWII a battery for two guns in open emplacements was built.



Garipçe Castle & WWII casemate



Inside WWII casemate, Garipçe castle

October 3: We crossed the Bosphorus bridge and reached the Asian side of the Bosphorus, where we first stopped at Anadolu Hisar Castle, built by Sultan Bayezit in 1389/1402 to safely move his troops from Anatolia to Europe. In particular it was built to support its 1396/97 siege of Constantinople, opposite Rumeli Hisar. Driving further north we stopped at Yoros Castle, a Byzantine fortress acquired by the Genoese, from which we had a good view of the new Anadolu Kavak Battery, built in 1905/06 and armed with four 24 cm/L35 Krupp guns. Unfortunately, it is still in a military area like the old Anadolu Kavak Battery. New Fil Burnu Battery was armed in 1905 with the three 15 cm/L26 Krupp guns taken from Fil Burnu, built 10 years before over an old existing battery. Opposite Garipçe is Poyraz Castle, used until few years ago but now abandoned.

Kechili Liman, completed in 1907 and armed with four 24 cm Krupp guns, is inside a military area and only visible from a distance. On the way back to Istanbul, we stopped at a WWII battery armed with two 6-inch guns, similar to 200-series American batteries. Back in Istanbul in late afternoon, we had time to visit Yedikule Castle, a fortress built in 1457/8, after the



Yoros Castle



Anadolu kavak new battery



WWII 6-inch battery



Yedikule Castle, Istanbul



Constantinople walls

Ottoman conquest of Constantinople, as an internal fortress through an addition to the land-side Byzantine city wall at the most important entrance, the Porta Aurea (the Golden Gate). From here we walked along part of Constantinople's walls, built by Emperor Theodosius II between 400/450 AD. The tour ended here; after spending the next day visiting monuments in Istanbul, we departed for home.

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Proposed Brazil Harbor Defenses Tour November 13-22, 2009

Organized by Christian Casartelli

A tour is being planned to visit some of the coastal defense batteries built to protect Rio de Janeiro Bay (the old Brazilian capital), Santos Bay, Curitiba Bay, and Santa Catalina State.

The first fortification built in Rio de Janeiro was built on Villegaignon Island by French Huguenots in 1555. In the 17th and 18th centuries more batteries and forts were built by the Spanish and the Portuguese to defend the Rio de Janeiro Bay entrance. After its independence from Portugal in 19th century, the Brazilians remodeled and reinforced the colonial forts with Armstrong, Parrott and Whitworth RML guns housed in casemates or "en barbette". The Fleet Rebellion of 1893 showed that Rio defenses were obsolete against modern warships. In 1894 a new set of fortifications were constructed of concrete equipped with modern Krupp guns in cupolas: Fort Imbuhy in 1894, followed by Duque de Caxias Howitzer Battery in 1895 and Fort Laje in 1896. A new fortification project was proposed in 1898 but no construction was started until after the turn of the 20th century. While additional fortifications were built at Rio De Janeiro, additional ports also received some defenses.

Several 6-inch Krupp guns batteries were built around the Rio area. In 1908 Fort Copacabana was completed with its 2x12-inch Krupp gun turrets. In 1918 the defensive plan was completed with the Pico Howitzer Battery and Fort Rio Branco. Beginning in 1902 the commercial port of Santos received modern fortifications with the construction of the Itaipu Fortress with three 6-inch Schneider-Canet batteries. Other batteries were built using 4.7-inch or 6-inch ship guns along the coasts of Parana, Rio de

Janeiro, and Santa Catarina state to prevent enemy landings and occupation. In 1942 the Itaipu Fortress at Santos received the underground Andradas Howitzer Battery, the only one built in Brazil during WWII.

All batteries located inside Brazilian military areas are still armed with their original guns, except Sao Luis. The surviving guns are 4.7-inch, 6-inch, 7-inch, 9.2-inch, 11-inch and 12-inch. Many of the guns are shielded and stand in open emplacements. In Rio there are both small and big guns in cupolas. The BL guns are Krupp, Canet, Schneider & Creusot, while the RML are Parrotts, Armstrongs and Whitworths.

PROPOSED PROGRAM:

Remember that the schedule below is a draft and some changes could happen, especially for the transfer times town to town and town to forts.

Friday 13 November

Arrival at Sao Paulo Int. Airport. Coach Transfer to Santos Hotel in Santos.

Saturday 14 November

Visit Santos Bay defenses (Fortaleza de Itaipu):

- Forte Jurubatuba 2 x 150mm Schneider M/02 C/50
- Forte Itaipu 4 x 150mm Schneider M/02 C/50

Sunday 15 November

Visit Santos defences

- Forte Andradas 4 x 280mm Krupp Howitzer C/16
- Drive to Paranagua

Monday 16 November

Drive to Pontal do Sul & Ferry to Ilha do Mel.

Visit Ilha do Mel defences:

- Forte Nossa Senhora dos Prazeres RML transformed in BL
- Forte Morro da Baleia 4x120mm Armstrong M/83 C/40
- Drive to Sao Francisco do Sul

Tuesday 17 November

Drive & visit Forte Marechal Luz 4 x 152mm Armstrong C/50

Drive to Florianopolis

Wednesday 18 November

Drive & visit Forte Marechal Moura 3 x 120mm Armstrong M/93 C/50

Flight to Rio de Janeiro

Thursday 19 November

Drive to Macae

Visit Forte Marechal Hermes 4 x 152.4mm Armstrong C/50

Drive to Rio de Janeiro.

Friday 20 November

Drive to Angra dos Reis

Visit Forte Punta do Leme 2x234mm Armstrong C/40

Drive to Rio de Janeiro