



The CDSG Newsletter

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The Coast Defense Study Group, Inc. – Special 2020

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CDSG Tour to Singapore's Coastal Defenses – February 9 to 12, 2020. Day One

Terry McGovern

A dozen dedicated CDSG members, many who had survived the previous week's CDSG week-long tour to Corregidor, met in Singapore for a three-day tour to the remaining historic coastal defenses of this city-state. This follow-on tour was from February 9 to 12, 2020, and mainly focused on the defenses of Sentosa Island, as our requests to visit many of the other surviving sites were turned down by the current sites' owners (such as the MINDEF, Singapore Police Force, and National Parks Board). We tried several different routes to gain approval to visit these sites, but we were unsuccessful, as the Singapore authorities are very security minded and generally do not have a historical interest in British built WW2 defenses. Given these hurdles we still had more than enough sites to visit during our three days, given the everyday heat and humidity (and the coming of the COVID-19 virus).

A dozen tour members gathered on Sunday, February 9, at the Travelodge Harbourfront Hotel after flying from Manila, while others came from their home countries to Singapore. Our first night at the hotel, we arranged for a rooftop meeting room so Mr. Lim Chen Sian, Associate Fellow, Archaeology Unit of Nalanda-Sriwijaya Centre at ISEAS – Yusof Ishak Institute, could talk on the many military related archaeology projects that he had undertaken over the last 20 years in Singapore. Chen's excellent presentation gave us a good background on various sites we would be visiting and some that we could not, especially the AMTB battery on Palau Ubin.



Lim Chen Sian, working on an archaeology project at the Palau Ubin AMTB emplacement

Day One (Feb 10) had our tour group meeting for breakfast in the hotel before our departure by minibus with driver at 8 AM. We were joined by several locals to help us find our way to each site and to interface with local site owners. Led by Chris Lee and Harry Herizzad, along with Mohmand Faiz Bin Zulkifli, Chang Kwang Hong, Zulkifl Cassim, and several others, they joined us each day to keep us out of trouble. Our first stop was Changi Hill, which is now surrounded by the Changi Golf Club. The manager of the club, Christopher Low, allowed us to cross the fairways to the road to the top of the hill. This hill was used for the Changi Fire Command and the Johore Battery BOP/plotting room which consisted of several fire control stations and an underground plotting and communication center. The top of the hill is in use by Singapore authorities for communication towers/equipment and two water reservoirs, so we had to walk around the edge of the fence to see what remains we could visit. We were able to locate one of the fire control stations and the embedded rail that had supported the Barr & Stroud rangefinder. One of the groundskeepers showed me a sealed door that he said connected to the underground plotting and command center. He took pity on us and gave the group rides down the hill to our minibus. Our next stop was the replica turret of the 15-inch Johore Battery, located on top of the Number One emplacement, which was accessed via Cosford Road, very near the Changi International Airport. The site has a sheet-metal reconstruction of the "Spanish Mount" 15-inch gun and turret, even though this emplacement was for the Mark 1 carriage (similar to Wadstone Battery on English Channel). The underground magazines and power rooms are not accessible, but the outline of these underground rooms have been laid out in concrete behind the gun. This tourist site has gained a restaurant with outdoor seating and several large trees since the replica turret was dedicated in February 2002. The site's current focus seems more on the restaurant than the gun battery.

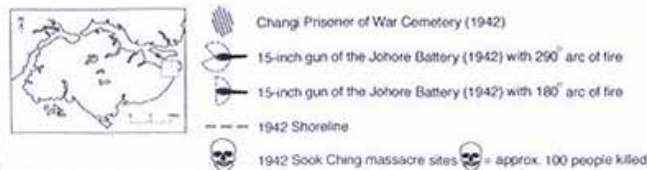
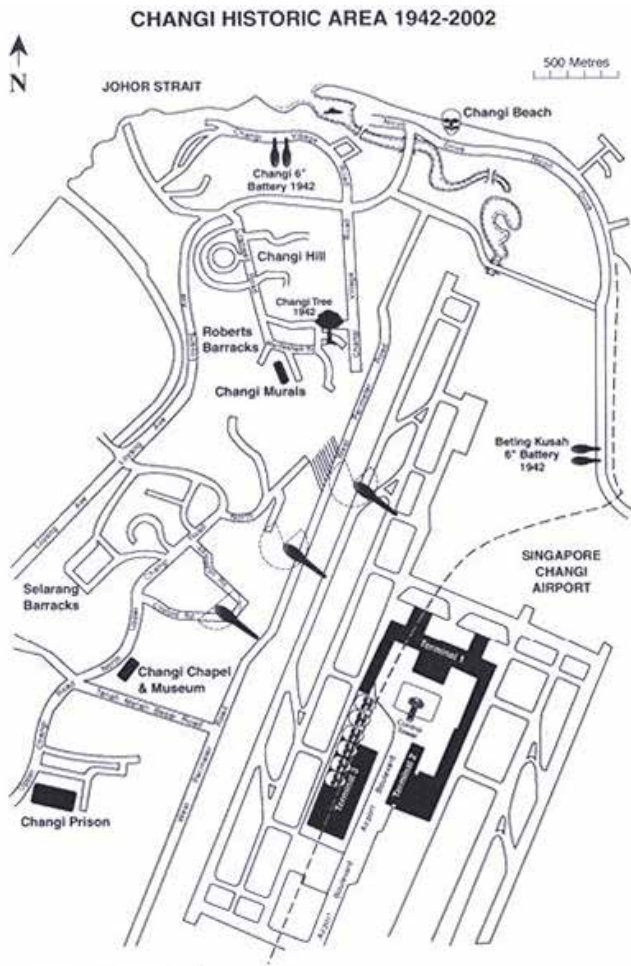


Photo Credit: Karl Hack and Kevin Blackburn



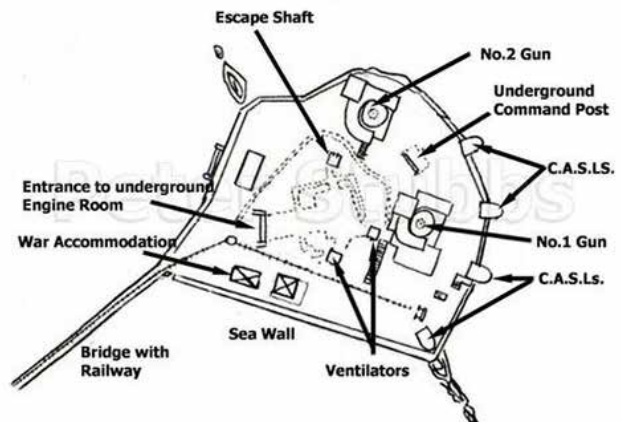
Concrete pathways show the layout of the underground rooms at Johore Battery, Emplacement #1



Replica 15-inch gun and turret (Spanish Mount) at Johore Battery, Emplacement #1

Changi Hill and Emplacement #1 were the only sites from the Changi Fire Command that we were able to visit, as MINDEF declined our request to visit three remaining batteries on Pulau Tekong (a 3-gun 9.2-inch battery and two AMTB), while the Singapore Police Force turned down our request to visit the AMTB on Palau Ubin. The other defenses of the Changi Fire Command have been destroyed by Singapore's constant growth. We turn our minibus south toward Sentosa Island.

Though the good offices of Peter Stubbs (the webmaster of <http://www.fortsiloso.com>), we were introduced to Mr. Alvin Chia of the Sentosa Development Corporation, which runs Sentosa Island. Alvin was the key to our entire Singapore Tour as he made it possible for us to visit all the remaining batteries and their supporting structures on Sentosa Island. We owe Alvin special thanks as he personally made sure that over the two days we visited Sentosa Island we accessed the many fortification sites on Sentosa Island. Our minibus took us over the bridge to this island and to the award-winning Sentosa Golf Club. We had an excellent lunch on the veranda of the golf club overlooking Singapore Strait. Sylvester Yeo, manager of the Sentosa Golf Club, provided our tour group with a fleet of golf carts to our first stop, the AMTB on Berhala Reping, which used to be a small island before being attached to the golf course through landfill. Sylvester and Alvin guided us to the overgrown site, though some of our golf carts got lost along the way. The AMTB is very overgrown and not very visible from the course but that did not



stop our tour members from climbing through the rubble and vegetation to reach each emplacement and their fire director towers for the two-gun, twin 6-pounder battery. We were able to climb into the underground engine rooms and visit both gun emplacements and their director towers as well as the searchlight stations. It took several tries to gather our tour group to return to their golf carts so we could continue on to our second stop at the golf course – Fort Connaught.



Berhala Reping AMTB Director Tower for Emplacement #2 is fully camouflaged today.



Berhala Reping AMTB Gun Emplacement #1 is lost in the jungle today.



Fixed coastal searchlight station at Berhala Reping, one of four CASL at this battery.

Fort Connaught was first known as Fort Blakang Mati East Battery when constructed in 1878. This battery went through several upgrades over the next 50 years; in the 1930s the battery (now known as Fort Connaught) was rebuilt and armed with three Mark X 9.2 in guns on 30° Mark VII mountings. A new battery observation post was built at the top of Mount Serapong, and a battery plotting room was built deep underground into the northern side of Mount Serapong. Located outside the plotting room was an engine room that provided power for the plotting room and the battery observation post on Mount Serapong. This battery replaced all the other 9.2 in batteries on Sentosa Island as it had superior range due to more modern carriages. The battery engaged the Japanese invasion force by firing over Mount Serapong and the guns were spiked upon surrender. The battery was not restored after the war and was abandoned. The construction of the golf courses resulted in most of the fort being demolished. The only remaining feature is Emplacement #3, while the other two 9.2 in emplacements have been incorporated into the golf course (one is the tee for Hole 4, while the other has been removed to form the fairway). We were able to make our way through the jungle to Emplacement #3, where we explored the shell store and magazine, as well as the power room. Next to the gun emplacement (which showed the damage from spiking the 9.2 in gun in 1942) is the secondary battery command post, in a concrete tower. Next to this tower is the remains of the older 9.2 in emplacement. Our tour group scattered among these structures but gathered at the Pyramid Rest Pavilion (built next to a foundation of the battery command post). After a break and a group photo, we loaded up for the ride back to the club house. We thanked our hosts, boarded our minibus, and were dropped off at our hotel.



Emplacement #3 magazine at Fort Connaught



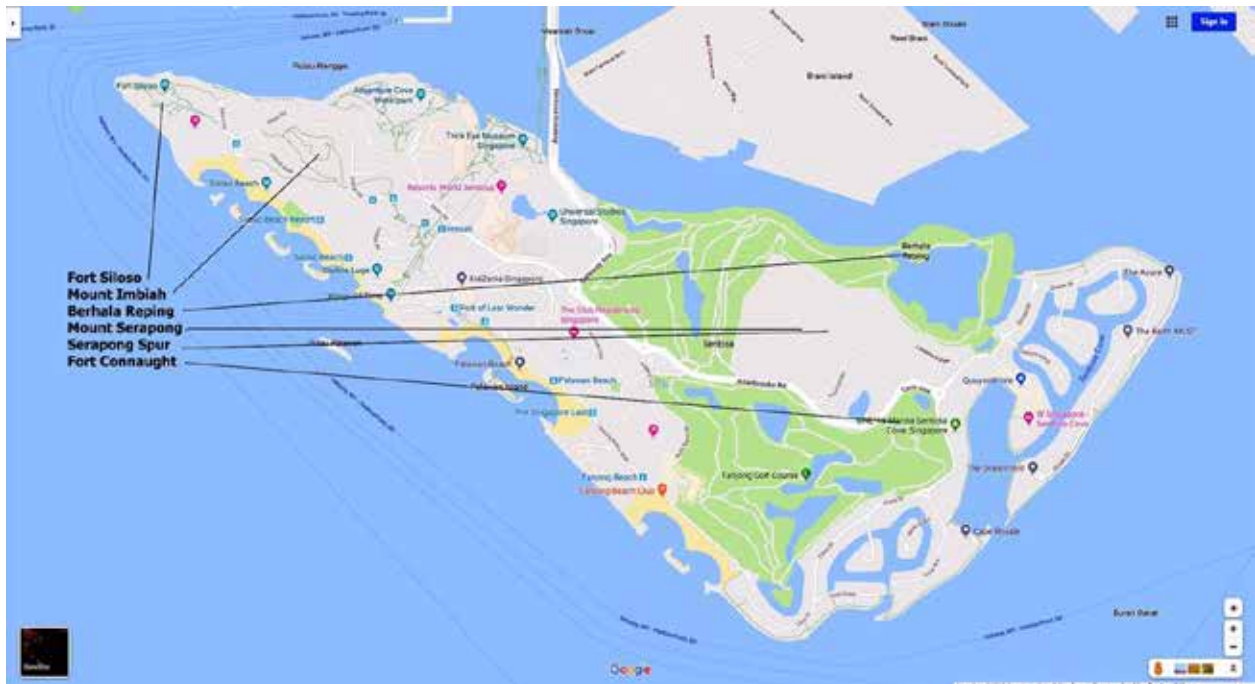
Damage to Fort Connaught's Gun Emplacement #3 caused by spiking or the removal the guns when they were scrapped.



Shell lift at Emplacement #3, Fort Connaught. Trees are attacking the emplacement.



Secondary battery observation post at Fort Connaught.



After the group had their independent dinners, we gathered again in the rooftop meeting room at the hotel to hear Brian Farrell, a professor of military history at the National University of Singapore. Professor Farrell gave a great lecture on the military strategy of both the British and Japanese during the Malaysian Campaign which led to the fall of Singapore in 1942. During two hours of lecturing and questions, Brian withstood every question we could throw at him about this campaign and its aftermath. It was a great treat to learn from Brian's vast knowledge of the subject and we are grateful he took the time to speak to us.



Professor Brian Farrell speaking on Singapore and World War II.

Day Two

Day Two (Feb 11) began with breakfast and taking our minibus back to Sentosa Island. We meet Alvin, who directed us to Mount Imbiah on the western side of the island. As we climbed to the top of the hill, we were confronted by lion guarding the way, but being nimble we were soon past this obstacle to reach the remains of the 1890 redoubt. Built inside these infantry defenses is Imbiah Battery, which mounted a single 9.2 in Mk. X BL gun on a Mk. V mounting, which was put into service around 1912. When Fort Connaught received its higher angle 9.2 in guns in 1936, this battery was decommissioned and structures on Mount Imbiah were used for quarters and reserve magazine for the island. Our group quickly spread out to visit the emplacement, magazines, and fire control stations. This battery is open to the public and promoted as one of the hiking trails for those visiting Sentosa Island. We rejoined our minibus and headed off to the eastern end of the island – Mount Serapong.

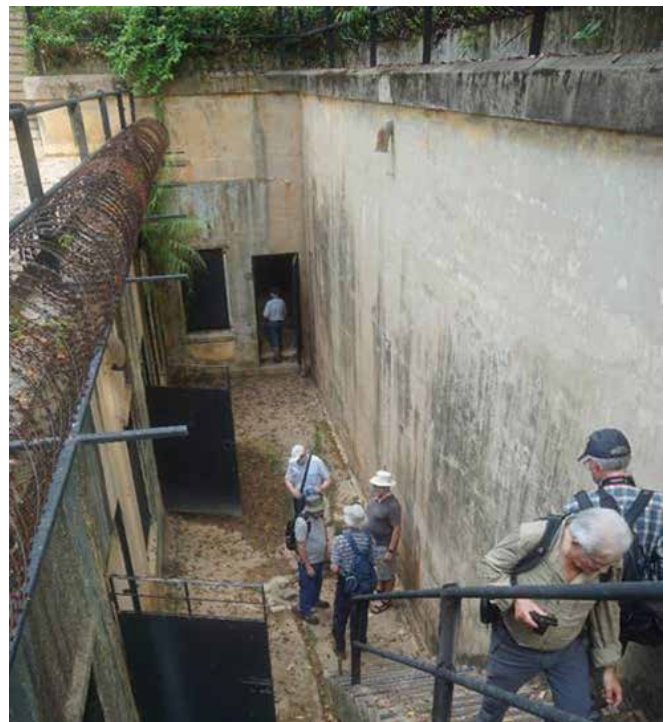
Tour members explore the shell store and powder magazines at Imbiah Battery.



A dangerous lion guards the road to Mount Imbiah. We lost no tour members.



Imbiah Battery, emplacement of a single 9.2 in Mk. X BL Gun on a Mk. V Mounting.





Position finding cells at Imbiah Battery, built inside the old infantry redoubt.



Plan for Imbiah Battery showing the infantry redoubt and the position finding cells and posts.

Mount Serapong is the highest hill on Sentosa Island and it overlooks Keppel Harbour, so it played an important role in the harbor's military defenses. The hill has two peaks – Mount Serapong itself and Serapong Spur – each receiving coast defenses. Let's cover Mount Serapong first. An infantry redoubt was constructed in 1880 to deny this key location to any attacking force which could then control Singapore primary commercial harbor. The redoubt was converted into a coastal battery in 1887 by installing two 8 in BL guns. The battery was up-gunned in 1908, when the 8 in guns were removed and this replaced with new emplacements for two Mark X 9.2 in BL guns on Mark V 15° barbette mountings. In 1937, this battery was abandoned due to the more modern three-gun 9.2 in battery at Fort Connaught. The Fort Connaught Battery Observation Post was then built between the two empty emplacements, while a battery plotting room was constructed underground at the base of the hill (with a ladder rising to the battery's casemates). After WW2, the BOP became the Keppel Fire Command to the end of British Coast Artillery in 1956. Given this "layering" of defenses, we relied on Alvin and our Singapore colleagues for guidance on what to see and how to find it. We were able to discover various structures from each of Mount Serapong's five periods of defenses. Given

the limited time we were forced to move on to the Serapong Spur site before we could visit all the structures at Mount Serapong (an opportunity to return again!). We preceded down the road about 200 yards to our next site – Serapong Spur.



Map of Blakang Mati Island (now Sentosa Island) and Mount Serapong and Serapong Spur.



The 1886 casemates at Mount Serapong. These casemates were modified several times to serve evolving roles over the fort's phases.



9.2 in Emplacement No. 2 at Mount Serapong Battery with four members viewing the remains of the 8 in BL emplacement in the background.



9.2 in Emplacement No. 1 at Mount Serapong Battery.



Access shaft from the Fort Connaught Plotting Room to the casemates and then access to the battery observation post.



Fort Connaught Battery Observation Post (later the Keppel Harbour Fire Command) at Mount Serapong.



Inside the casemates are shell stores and powder magazines with connections to the emplacements via shell lifts and access ways.

The Serapong Spur site was first used for an emplacement for a single 9.2 in Mark X BL gun on a Mark V 15° barbette mounting which came into service around the same time as the two 9.2 in guns at Mount Serapong. This battery was deactivated in 1937 when Fort Connaught's newer 9.2 in guns were completed. Soon after it was decided that more 6 in guns were needed to defend Keppel Harbour, so the 9.2 in BL Spur Battery emplacement was modified for a Mark VII 6 in BL gun as was its magazine. This new gun was to become the No. 1 Gun of the battery. The No. 2 6 in BL Gun Emplacement and its magazine would be built 50 yards northwest (uphill, so the upper gun was superposed over the lower gun) of the original Spur position. The 9.2 in battery command post for the Spur Battery 50 yards northwest of the new No. 2 gun would be enlarged to make it the 6 in battery observation post. An edict issued in 1937 stated that all eighteen 6 in BL guns and six 9.2 in BL guns in Singapore were to have all-round traverse. This is how the new Serapong Battery with its Mark VII 6 in BL guns and their Mark II 15° CPMs were built. Later, probably in 1941, overhead semi-circular concrete splinter protection was constructed at the Serapong Spur emplacements. On the January 18, 1942, the Serapong Battery was bombed and the No. 2 Gun and its concrete splinter cover were damaged. The gun itself was replaced from reserve stocks. On February 14, 1942, came the order to destroy the guns of Mount Serapong. The No. 2 gun was destroyed first, being spiked with a gelignite charge at 1200 hrs. Later, at 1700 hrs, its magazine was detonating completely, leaving a large crater and severely damaging the emplacement above and to the left of it, as well as five men injured in the blast. The No. 1 gun remained available for action until the morning of the 15th, when it in turn, was spiked. All equipment in the battery command post was also destroyed.

Given the lack of time, we only had time to explore Emplacement No. 1, so we will need to return to see the badly damaged Emplacement No. 2 and the battery observation post. We were able to visit Emplacement No. 2 where, the overhead protection from WW2 has collapsed, making access more difficult. The new emplacement for the 6 in gun was placed in the front part of the old 9.2 in gun location, so we needed to pass through this emplacement to reach the 6 in emplacement. The old 9.2 in work provided the underground shell store and magazine, as well as

shell lifts to the new 6 in battery. We were summoned to make our way down the hill to our awaiting minibus, which would take us to the other end of Sentosa Island to visit Fort Siloso. The defenses of Mount Serapong and Serapong Spur proved to have much to explore and really deserved a full day of our attention, but that would be have to be for our next tour.



Serapong Spur 9.2 in emplacement with the collapsed 6 in gun overhead protection.



Serapong Spur 6 in Emplacement No. 1, built into the old 9.2 in emplacement.



The first step is a long one! This is the Serapong Spur 9.2 in shell store and magazines, which were converted for the use of the 6 in Emplacement No. 1 in 1937.

Our minibus drove us to lunch at a group of restaurants along the Siloso Beach Walk, with such fine dining options as McDonalds. After lunch, the minibus took us to Fort Siloso, which used to be known as Sarang Rimau (Tiger's Nest) at the western point of Blakang Mati (now Sentosa Island). This location would give Fort Siloso and another new fort, Pasir Panjang, on the opposite side of the harbor entrance, commanding positions covering the western entrance to New Harbour (now known as Keppel Harbour). Unfortunately, we were faced with our first heavy rain during the tour. We took shelter in the lobby of the Shangri-La Rasa Sentosa until the rain diminished and we could walk to the Fort Siloso Sky Walk. This impressive structure is a fort visitor's dream, as the Sky Walk raises you via elevators to the level of the top of Mount Siloso and then you can walk through the sky directly to the fort. No climbing hills here!!!

Construction of Fort Siloso begun in 1879 to mount three 7 in RML guns and two 64-pounder RML guns. Later, a controlled submarine mine defense would be added with a mining post near the island's point, including an observation station, testing (control) room, and engine room. By 1889, the fort would see an upgrade of its armament with the addition of another 7 in RML near the single 7 in RML at the top of Mount Siloso, and a single 9.2 in Mark IV gun with underground magazines being installed next to the casemates, while the 64-pounders were retired. The advance of coast artillery armament caused another upgrade to Fort Siloso when the lower 7 in RML were retired and replaced with two 12-pounder QF guns. The two upper 7 in RML were replaced with two 6 in QF guns by 1900. By 1909, the 9.2 in gun was removed and the 6 in QF guns were to be moved to the location of the 9.2 in gun. At the same time, the battery command post at the top of Mount Siloso was expanded. In 1932, Fort Siloso's armament began another upgrade. The battery command post was enlarged into that is seen today on Mount Siloso. The 6 in QF guns were retired from service, as new Mark VII 6 in BL guns on Mark II CP mountings were emplaced where the 6 in QF guns had been.

The coming of WW2 saw the addition of a twin 6-pounder emplacement at Siloso Point as an AMTB, along with three searchlight emplacements on stilts on the beach at Siloso Point. When the emplacement was completed, no twin 6-pounders were available, so a single 12-pounder was used instead. Fort Siloso joined the battle for Singapore on February 11. Its guns engaged Japanese forces along the west coast, and fired on the oil tanks on Pulau Bukom to destroy them before the Japanese took them. The fort was bombed, shelled, and mortared, but its guns kept firing. Upon surrender, Fort Siloso guns were spiked and support equipment was disabled. The only gun the Japanese restored was the 12-pounder at Siloso Point. The British replaced the two 6 in guns and emplaced a twin 6-pounder at Siloso Point after the war. Fort Siloso's use as a coast artillery establishment ended in 1956. In 1975, the fort opened as tourist attraction, part of converting Sentosa Island into center for tourism.

Upon exiting from the Sky Way, we visited a restored 7 in RML position before moving to 6 in QF emplacements, where a replica 6 in barrel is being lifted, while the magazines have been restored with displays. The battery observation post has been restored to its WW2 appearance, including a sound show. Descending the

stairs, we reached the casemates, where each casemate has been turned into a collection of displays that tells the WW2 story of Fort Siloso and Singapore. Beyond a display of real BL barrels is the former 9.2 in emplacement that was converted to mount two 6 in guns. One emplacement has a replica gun with a static gun crew performing firing drill all day long. The remains of the 9.2 in emplacement can be seen between the two 6 in gun emplacement. At this point, the rain started again so we hustled down to the underground engine room and submarine mining station. Most of these rooms are vacant and for some reason the generating equipment on display last time I visited Fort Siloso has disappeared. Continuing down the staircase, we emerged at the AMTB emplacement at Siloso Point. This emplacement has a replica 12-pounder with a collection of dummy shells. Access to the director tower was limited to the lower floor as the ladders were blocked. Fending off the rain, we headed to the former site of the two lower 7 in RML and the former mono-rail station which today contains displays of the 1942 and 1945 surrender ceremonies. We made our way back to our minibus so we could visit our last site for the day. We appreciate that the Sentosa Development Corporation has preserved and interpreted Fort Siloso rather than turning it into a more profitable hotel and resort.



Replica 7 in RML at Fort Siloso.



6 in QF emplacement with a replica 6 in barrel being lifted at Fort Siloso.



Fort Siloso Sky Walk makes climbing hills as easy as pushing a button!



The shell room and magazines for the 6 in QF battery at Fort Siloso.



Fort Siloso's Battery Observation Post (upper level), while the lower level is for directing the fort's seacoast searchlights.



Replica 12-pounder gun at the AMTB at Siloso Point. They have a lot of cased ammo in an exposed position but no shells!



The BOP is ready to provide direction for the fort's 6 in guns during WW2. These guys have been on duty since 1942!



Fort Siloso's protected casemates with BOP above and a collection of BL coast artillery below.



Director tower at Siloso Point. Used for both the AMTB and seacoast searchlights.



Map of Fort Siloso show the Sky Walk and various components of the fort.

As we boarded the minibus, we had an opportunity to thank Alvin Chia for all his interest and support for our tour to defenses of Sentosa Island. Again, without his help we could have explored only a fraction of the sites on the island. We now headed to Mount Faber Park, back on the main island and behind our hotel. Starting in 1937, two new fire commands would defend the sea approaches to Singapore - Changi and Faber. Changi Fire Command covered the eastern approaches to Singapore and the proposed naval base, and Faber Fire Command covered the southern and western approaches to Singapore. Faber Fire Command (7th Coast Artillery Regiment) controlled the Pasir Laba, Buona Vista, Labrador, Siloso, Connaught, Serapong, and Silingsing Batteries. Changi Fire Command (9th Coast Artillery Regiment) controlled Johore, Beting Kusah, Changi, Sphinx, Tekong, and Pengerang Batteries. We had already visited the Changi Fire Command at Changi Hill, so we wanted to see what remained of the Faber Fire Command on top of Mount Faber, which at one time had the Faber Fire Command Post, the Faber Fortress Observation Post, the Faber Fortress Plotting Room, and the nearby BOP for Buna Vista Battery (2-15 in guns). We already knew that the Faber Fortress Plotting Room still existed and we had requested permission from the National Parks Board to visit this underground complex, but they turned down our request due to safety concerns. Chris Lee directed our minibus to the entrance to the Fortress Plotting Room and all our tour members hurried to see if we could enter (we knew we could not). They were disappointed as a replacement gate had been installed just six months before. We looked around for the other fire control and command positions but without knowing exactly where to look and with all the park improvements located on the most likely spots, we were unable to locate any of these structures. After a long day the group was ready to return to the hotel and independently seek food and sleep.



Entrance to Faber Fire Command Plotting Room. New gate, new lock, and new sign to keep us away.



Our tour members frustrated by the failure to enter Faber Fire Command Plotting Room ponder what to do.

Day Three (Feb 12) began with breakfast and our minibus taking us to central Singapore. We had arranged for a guided tour of the former British Headquarters Malaya Command Operations Bunker, in an underground complex at the former Fort Canning. After this tour, Mr. Jeyathurai Ayadurai, the director of the Singapore History Consultants, had agreed to give us a lecture about the battle for Singapore that occurred in 1942. Fort Canning Hill was the British Army headquarters in Singapore, with a number of buildings built for this purpose in the 1920s. However, the lack of a headquarters combining all three services present in Singapore – the British Army, Royal Navy, and Royal Air Force – was a major concern. To remedy this, a combined operations headquarters was proposed for Fort Canning in 1936.

Nearly 30 feet beneath the hill, the Fort Canning Bunker, also known as the Headquarters Malaya Command Operations Bunker, was constructed starting in 1936 and completed by 1941. The bunker was constructed with one-meter thick reinforced concrete walls to withstand direct hits from bombs and shells. The complex with about 30 rooms included a telephone exchange connected to all military and most civilian switchboards in Malaya, various signals and operations rooms, sleeping quarters, and latrines. The bunker also included a cipher room for coding and decoding messages. By the latter stages of the battle for Singapore, the Japanese were bombing the Central Area of Singapore, including Fort Canning Hill, at will. Fort Canning Hill was also within range of the Japanese artillery, forcing personnel into the bunker. There were around 500 officers and men in the bunker in the latter stages of the battle. The decision to surrender Singapore was made by Lieutenant-General Percival in a meeting on the morning of February 15, 1942. Held in the “Commander, Anti-Aircraft Defence Room” of the bunker, a number of senior officers were in attendance, including Generals Bennett, Heath, and Simmons. With diminishing water supplies, and no viable options for launching a counterattack, the decision was made to seek terms with the Japanese.

The Fort Canning Bunker was later occupied by Japanese forces during the Japanese Occupation of Singapore and used for communications right up to the time of the Japanese surrender. After the war, Fort Canning Hill was again used by the British as the Singapore Base District Headquarters. The British handed

over Fort Canning to the Singapore Armed Forces in 1968–69, and the buildings of Fort Canning Hill served for a time as the Singapore Command and Staff College. The Fort Canning Bunker, having remained empty and unused since the war, was sealed off in the late 1960s due to safety concerns and its exact location forgotten. It was brought back into the public eye when it was “rediscovered” by a journalist in 1988, who was following a number of leads claiming the existence of an underground bunker complex over Fort Canning Hill. The Fort Canning Bunker was developed into a museum depicting the final days of the Battle of Singapore. The museum, called the Battle Box, was formally opened on February 15, 1997, on the 55th anniversary of the surrender of Singapore.

Upon our arrival at the Battle Box, we gathered in the gift shop of the museum to await our tour guide and to make our many purchases of all things relating to fortifications. We were escorted to the bunker and were told that no photography was allowed. Our guide led us around the complex which had been restored to its look and feel of 1942. The displays and recreations of events gave us a good understanding of the function of Battle Box and the stress its inhabitants must have been under during that time. We were joined by Jeya (director of the SHC, which runs the Battle Box) during our tour of the bunker. We gathered in the bunker’s theater room to hear Jeya’s lecture. His detailed presentation and the following question and answer period lasted for over an hour. Jeya demonstrated his years of research on the 1942 battle and its effect on Singapore. We greatly enjoyed his talk and we all left the bunker with a better understanding of the battle of Singapore. Our tour ended when we exited the bunker and the group quickly scattered to explore the remains of Fort Canning. We met up at the minibus to travel to the site of the 1942 surrender – the Ford Automobile Factory.



This room at the Battle Box tracked both British and Japanese aircraft over Malaya.



Work stations for telephone operators occupied this room at the Battle Box.



Mr. Jeyathurai Ayadurai, director of the Singapore History Consultants, gave us an excellent lecture about the battle for Singapore.



One of several access points to the Battle Box at Fort Canning Park.



This sally port is one of the several remains of Fort Canning.

Our minibus took from Fort Canning to the former Ford Factory (also Old Ford Motor Factory and Old Ford Factory depending on sources) which is along Upper Bukit Timah Road at Bukit Timah in Singapore. It is where British forces under Lieutenant-General Percival surrendered to Japanese forces under Lieutenant-General Yamashita Tomoyuki on February 15, 1942, after the Battle of Singapore. The Old Ford Motor Factory was gazetted a National Monument in 2006, and converted into an exhibition gallery and archive named Memories at Old Ford Factory. We surprised the staff of the museum as they did not expect 20 visitors all at the same time given the start of virus restrictions and testing. After touring the museum for an hour, our minibus took us to an area of restaurants so the group could have lunch.

We then headed to the site of Buona Vista Battery which had mounted two 15 in MK II guns on Spanish model carriages. The Buona Vista Battery straddled Ulu Pandan Road near its junction with Reformatory Road, which was renamed Clementi Road after the war. Due to the limited seaward angle of the guns, these guns saw no action during the Battle of Singapore and were partially destroyed by the retreating British in February 1942. The Japanese forces repaired Gun No. 2 for manual use, but it was never used by them. The entire area has been heavily commercially developed since WW2. The site of Emplacement No. 1 is within the perimeter of the old Mowbray Police Training Camp which today is the headquarter of the ProCom Police unit. There have been reports of several concrete entryways on the hillside within the camp, which could be the battery plotting room. We requested permission to visit, but were turned down. Across Ulu Pandan Road is the Pine Grove housing complex. There have been reports

of a grassy area showing outlines of an underground structure. This development is restricted to residents, so we did not visit. We had to satisfy ourselves with driving down Clementi and Ulu Pandan Roads and looking out our bus's windows for any remains.



The Old Ford Motor Factory is now a museum to the war years in Singapore and the site of 1942 surrender.



The closest we were able to get to the site of Buona Vista Battery (15 in gun - Emplacement No. 1).

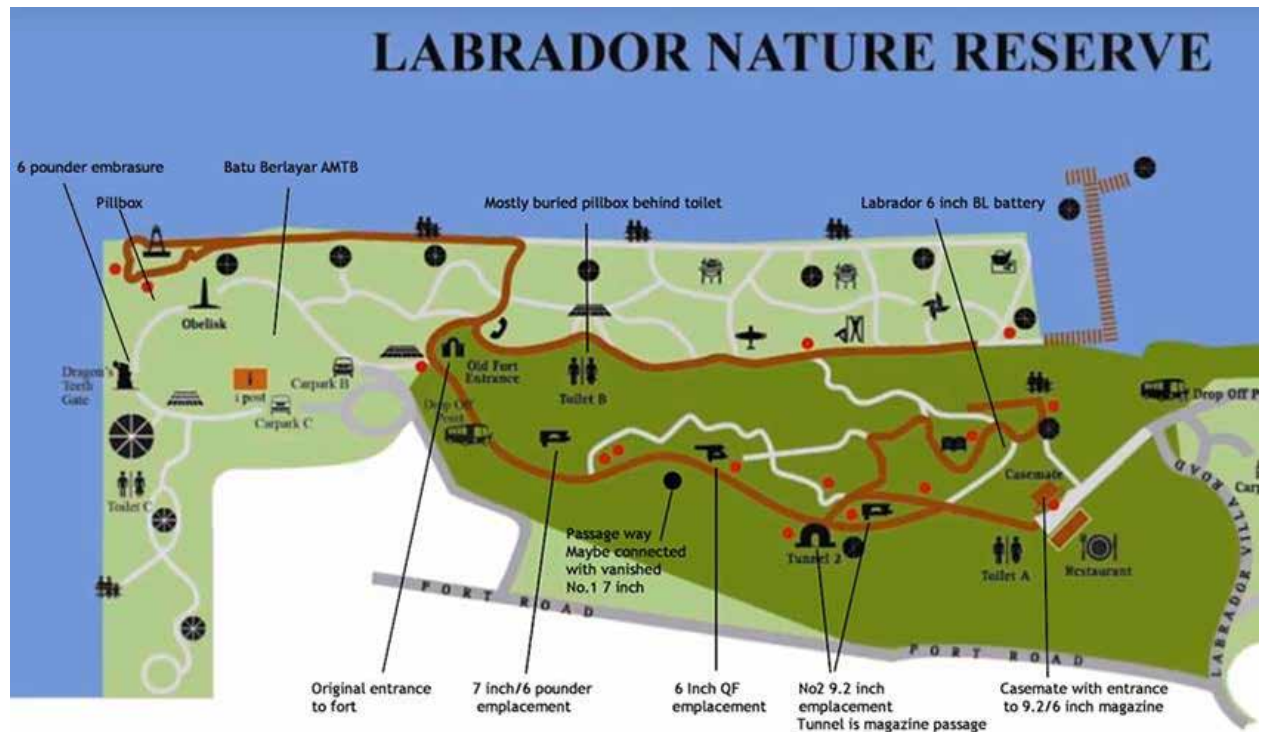
Continuing on from the Buona Vista Battery site, we returned to the Keppel Harbour area to visit the Labrador Nature Reserve which used to be Fort Pasir Panjang, which protected the western entrance to the harbor in conjunction with Fort Siloso. Fort Pasir Panjang was constructed during a period of great uncertainty when Russia was considered a threat to the British Empire. The fort received two batteries, - Two 9.2 in Mark IV BL guns and two 7 in RML guns. The 7 in RML were installed between 1886 to 1889, while the 9.2 in guns were mounted between 1890 to 1891. The fort also supported a controlled submarine minefield located off the harbor's entrance. As the 7 in RML became obsolete, they were replaced by two Mark II 6 in QF Guns. By September 1900, the two 6 in QF emplacements had been completed and the guns located in one of the 7 in RML emplacements. Around the same time, two 6-pounder QF were installed, reusing the other 7 in RML emplacement. Fort Pasir Panjang was not a long-lived fort, being disarmed of its heavy armament by 1912, and its machine guns by April 1914. The fort never saw active service during this period.

The history of Fort Pasir Panjang is sometimes confused with the much later Labrador Battery. In the British Government's Defence Review of 1935, it was agreed that a new 6 in battery would be constructed on the site of the disused Fort Pasir Panjang. This new battery, later known as the Labrador Battery,

would complement the nearby 6 in QF battery at Fort Siloso, which was to be upgraded to a BL battery. The batteries, working together, would provide an effective close defense of the western entrance to Keppel Harbour. In order to clear up confusion, Labrador Battery was constructed circa 1939 above the old 9.2 in casemates. It occupied the site of the No. 1 9.2 in gun of the Passeir Panjang Battery. This 9.2 in emplacement was destroyed to enable the construction of two 6 in Mark VII BL on Mark II CPM emplacements with all-around fire for Labrador Battery. Labrador Battery also made use of the casemates and a modified No. 1 Magazine. Around 1941, both gun emplacements were modified to have overhead concrete splinter cover installed, restricting their field of fire.

During the Battle for Singapore, Labrador Battery fired several times in February on the approaching Japanese forces, until February 13, when the guns were spiked and magazine, searchlights, and engine room had demolition charges set off. The Japanese repaired one 6 in gun to operational status. After the war the battery was not restored and the repaired 6 in gun was transferred for use at Fort Siloso's 6 in battery. The area was undeveloped reserve until 2000, when the Labrador Nature Reserve was created. Much clearing up and safety work was required before the casemates and magazines were opened to the public in 2005. Unfortunately, the casemates are currently closed to the public due to safety concerns.

Our minibus left us near the fort's casemate so we began our walking tour with the exterior of the casemates. We had requested permission from the National Parks Board to visit the interior of the casemate and magazine, but this was denied due to safety concerns. We visited the No. 1 Emplacement of the 9.2 in guns, but all we could locate were the emplacements for the Labrador Battery, which have been converted to a sitting area for park visitors. We followed the path to the No. 2 9.2 in Emplacement which survives, along with its underground magazines (the entrance gate was locked). An open position finding cell remains next to the emplacement. Further down we spent time looking at the 6 in QF emplacement, which displays an original 6 in barrel on a replica central pivot mount. We investigated which part of the emplacement was part of the 7 in RML work and which part was added for the 6 in QF battery. Continuing downhill we reached 6-pounder emplacement which include part of the older 7 in RML structure. When we reached the remains of the fort's brick sally port, we completed our tour of Fort Pasir Panjang.



Plan for the Labrador Nature Reserve which encompasses Fort Passeir Panjang, Labrador Battery, and Batu Berlayar AMTB.



The casemates for the 9.2 in battery at Fort Passeir Panjang. Once open to the public, they have now been closed due to safety concerns.



The entrance to the magazines for the 9.2 in Emplacement No. 2 at Fort Passeir Panjang.



Emplacement No. 2 for the 9.2 in battery at Fort Passeir Panjang.



The 6 in QF battery at Fort Passeir Panjang. In 2002, an original 6 in barrel was mated with a replica central pivot mounting.



The 6-pounder QF emplacement using the older 7 in RML structure at Fort Passeir Panjang.

Our next objective was the defenses of Batu Berlayar, the point on the northern side of the western entrance to Keppel Harbour. Only a 100 yards from the former entrance to Fort Passeir Panjang, this sea cliff point was first used for a 6-pounder QF emplacement to cover the Western Controlled Minefield that blocked the entrance to Keppel Harbour. The first emplacement for this weapon was completed in 1892. By 1898, an additional 6-pounder QF gun had been added, but by 1905 there was no record of any guns at the point. It was not until 1937 that the point again received coast artillery, when a two-gun AMTB emplacement was constructed to mount twin 6-pounders, but due to the lack of these modern weapons, two 12-pounder QF guns completed this battery in 1941. Also, three seacoast searchlight emplacements were built at the point at the same time. The battery saw no action during the Battle for Singapore in 1942. On February 13, 1942, the guns were spiked and the magazines set on fire. There is no record of the Japanese using this defensive position. After the war ended, the British rearmed the battery with one twin 6-pounder, which remained in service until 1956 when the British coast artillery was disbanded.

The AMTB is currently abandoned, along with the harbor control tower that was built after WW2. We located stairs and a path to emplacements which the group quickly scattered to explore. We regrouped at a local bus shelter to await our minibus, discussing what our next step would be as we had visited all the sites on our schedule. Not willing to end our tour, we decided to look for surviving WW2 pillboxes. Our local team directed our bus driver to one of the more well-known pillboxes. One of the very few remaining in Singapore is the preserved one at the junction of Pasir Panjang and Science Park Roads. This pillbox was in the area defended by C Company, 1st Battalion, the Malay Regiment, when the Japanese swept through on February 13, 1942, and despite of lack of evidence on the pillbox, it may have been used to put down fire on the advancing Japanese. The design is similar to many built in Singapore. Pillbox designs were not rigid, and modifications could be made to suit local conditions. With our bus charter running out of time, we returned to our hotel and the tour was completed. After several rounds of good byes, the tour group each headed their own ways.

The passageway between the two emplacements at the Batu Berlayar AMTB.



A view from the harbor control tower of the Batu Berlayar AMTB Emplacement No. 1.



The director tower for Batu Berlayar AMTB Emplacement No. 2.





The Batu Berlayar AMTB emplacement No 1.



One of the very few remaining pillboxes in Singapore is this one at the junction of Pasir Panjang and Science Park Roads.



The harbor entrance command post at Batu Berlayar.



Attending the Singapore tour were Matthew Adams, Gerhard Borchert, Alan Fyson, Bernd Ibsch, Mariusz Jachimowicz, Tom Kavanagh (Tom had to drop out of the tour), Terry McGovern, Quentin Schillare, John Scholes, Rolf Thoendel, Tim Wellburn, and Ian Wolfe. Below is a group photo with our local support team in front of the casemates at Mount Serapong.



Half buried pillbox at Batu Berlayar.

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