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ARTILLERY IN TORRES STRAIT 1891-1945: THE SILENT FORGOTTEN SENTINELS OF THE NORTH

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A detailed exploration of artillery in Torres Strait from 1891-1945 is presented. Previous studies have focused on the Green Hill Fort on Thursday Island (King, 1983; Earle, 1993), however the period following the Fort's demise in 1925 has yet to be examined in the context of Second World War weaponry advancements. This paper addresses that issue by presenting a general outline of the development of Thursday Island as a strategic defence site prior to the Second World War. More detailed attention is then given as to the artillery during this time frame, with each artillery unit, their equipment, formation, position and role during their time in the area provided. This will create a context for further discussion of the artillery in the area from 1938-1945. Previously uncited archival and oral records are drawn upon, resulting in a deeper exploration of the guns of Torres Strait and their strategic importance to the defence of Australia during World War II. Complementing the material on the past is a concentration on the present. Previously unrecorded descriptions of the World War II gun sites are provided with a general overview of the local communities that have developed around them, to demonstrate the need for urgent preservation. □ *Torres Strait, World War II, artillery, sentinels.*

Vanessa Seekee OAM, PO Box 10 Horn Island 4875, Australia; 29 June 2005.

Research into the role of the Torres Strait during World War II has been gaining momentum in recent years, focusing largely on the Torres Strait people and their wartime service (Hall, 1989; Ball, D 1991; Topperwein, 1993; Saunders, 1995; and Osborne, 1997). These authors have documented the inequality of service experienced by Torres Strait Islander and non-Torres Strait Islander servicemen/women and the conditions and experiences of both the Torres Strait Light Infantry Battalion servicemen and civilians, particularly the women, who were left on the outer islands during wartime. Other works have been published concerning the Second World War in general in Torres Strait (Ball, 1994; Johnson, 1992; Bradley, 1995; Thursday Island State High School, 1995), though only the High School's work deals exclusively with Torres Strait. A single wartime documentary was produced by the ABC in 1999 regarding Torres Strait during the Second World War: Heroes of Horn Island. This documentary explored the emotions and reasoning behind World War II veterans returning to Horn Island after 60 years. Research focusing specifically on the artillery in Torres Strait from 1887-1945 is limited to two articles for the Royal Australian Artillery Historical Society Newsletter (Harvey & Gosper, 1994; 1995). Their work gives an excellent general description of the artillery in Torres Strait.

The aim of this paper is to provide a catalyst for the development of an holistic and comprehensive conservation management plan for Torres Strait military heritage sites, particularly World War II artillery sites. A notable example of successful conservation and interpretive work, and a subsequent management plan, is that of the Green Hill Fort site on Thursday Island (Grimwade & Ginn, 2002). It is the further aim of this paper to increase awareness and appreciation of the artillerymen and equipment that served in Torres Strait during 1938-1945. With a heightened awareness comes a deeper appreciation of what was sacrificed for our security, and a need to conserve and document these relics as evidence of these service people's efforts.

ABBREVIATIONS. AA, National Archives of Australia (Canberra); AASC, Australian Army Service Corps; AWM, Australian War Memorial (Canberra); QSA, Queensland State Archives (Brisbane)

DEFENDING TORRES STRAIT FROM THURSDAY ISLAND

Thursday Island was chosen as the site for a new settlement by Commander G.P Heath, Chairman of the Marine Board and Port Master of Brisbane, after the settlement at Sommerset on Cape York had failed (see Fig. 1). Sommerset had

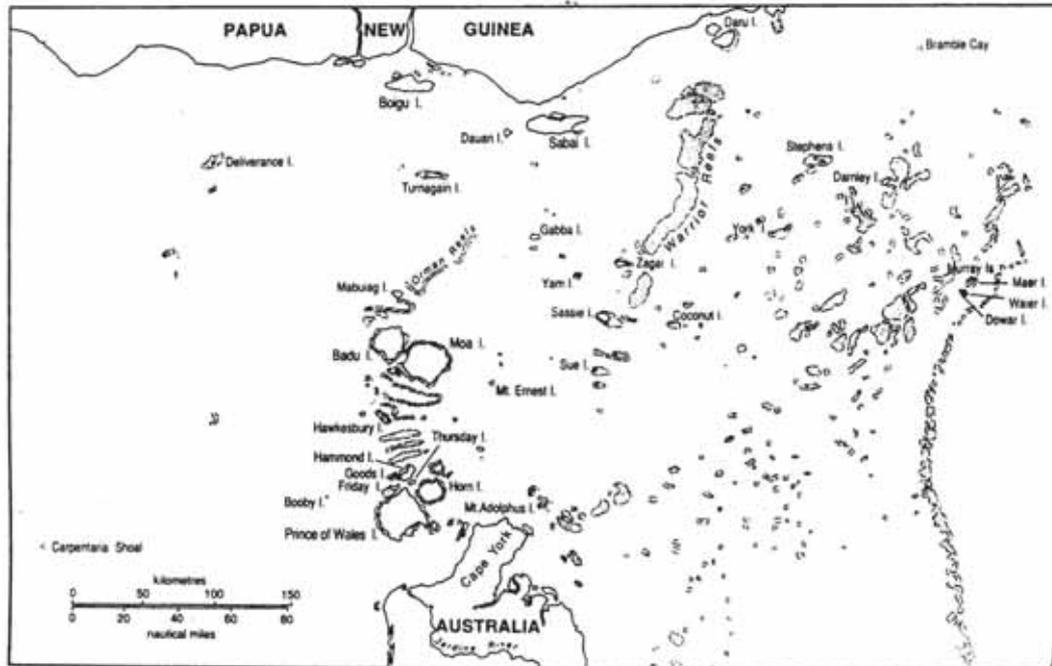


FIG. 1. The Islands of Torres Strait. (Babbage, R. 1990, *The strategic significance of the Torres Strait*).

been established as a coaling station, allowing ships to refuel, while also providing a haven for shipwrecked sailors. However John Jardine, police magistrate, had faced numerous problems with Sommerset since his arrival in 1864, e.g. white ants, hostile aborigines and mooring problems due to fast flowing tides. Lieutenant Henry Chester was appointed the first police magistrate of Thursday Island and formally took office on 19 July 1877, instigating European settlement of the island. By 1894, the European population, under the leadership of John Douglas, was 2,000 (Aboriginal and Torres Strait Islander peoples were not counted in the census until after 1966) and discussions soon revolved around the defence of the area (Harvey & Gosper, 1989: 5). There were no imperial troops in Torres Strait after the Royal Marines pulled out of Sommerset, leaving an imperial naval presence in the area, however the topic of an armed force was soon raised.

In 1877, Colonel Sir William Drummond Jervois and Lieutenant Colonel Peter Scratchley, two British officers of the Royal Australian Engineers, were commissioned with the task of evaluating the existing defensive installations and fortresses of Queensland. After a visit to

Thursday Island in 1881, Lieutenant Colonel Scratchley stressed the need for fortifications to be installed at Thursday Island to protect the coaling station. The island was a vital stop for sea traffic between Australia and Europe, and recognised as strategically and commercially important (McKenzie Smith, 1995: 2).

Rear Admiral Sir George Tryon, Commander of the Royal Navy's Australian Station reaffirmed Thursday Island's importance in 1885:

A safe depot and anchorage within the Torres Straits, in a position which, if held, would go far to secure a safe passage, cannot fail to be of the greatest value to Australia; the situation, if all its bearings are considered, is unique in the world; it offers a position to Australia which, if used, will be far more advantageous for defence purposes than that which Gibraltar affords to Europe (King, 1983: 96).

During the 1887 Intercolonial Conference in London, Torres Strait's strategic importance was ratified by the Secretary of the State of the Colonies.

As regards the Torres Straits, the value and bulk of trade following this route in time of peace will certainly increase, and the war importance of a coaling station, as a link between Australasia

and the East India and China Stations, can hardly be over-rated (King, 1983: 94).

Consequentially, the imperial government provided Thursday Island with four obsolete 7-inch rifled muzzle loading (RML) guns and four 16-pounder RML guns, with the agreement that the Queensland Government would meet all defence works and maintenance. Queensland declined the offer in favour of new 6-inch breech loading (BL) guns, agreeing to the maintenance plan as previously suggested.

A year and a half later, the Imperial government officially offered three 6-inch BL guns, four 9-pdr RML guns on field cartridges with 200 rounds of ammunition for each 6-inch gun and 1,200 rounds for each RML gun (Earle, 1993: 15). The introduction of the newer breech loading guns enabled an enemy to be targeted well outside the range of the harbour (Whitelaw, 2001: 3). At the Melbourne Federation Conference in February 1890, a Colonial Defence Committee was convened to initiate defence measures for King George Sound, Thursday Island and Darwin. The committee consisted of Captain A.W. Moore (Royal Navy), Major-General M.F. Downes (Commander South Australian Forces), Major-General John Richardson CB (Commander New South Wales Forces), Colonel H. Bernard (Commander Tasmanian Forces), Colonel G.A. French (Commander Queensland Forces) and Major-General Alex B. Tulloch (Commandant of Victoria) (Earle, 1993: 19). After an inspection of Thursday Island, Normanby Sound, Ellis Channel and Aplin Pass, the Committee made their report on 18 May 1891. Their recommendations included the mounting of the three 6-inch BL guns in a battery on Green Hill, Thursday Island on barbette mountings. These guns would be protected by a musketry parapet and iron palisading, while the eastern approaches to the island would be protected by a military road to enable the deployment of the 9-pdr RML guns (Nicholson, 1996: 310). The garrison would consist of two officers and 48 other ranks, to be increased in time of war to 250 infantry.

CONSTRUCTION OF GREEN HILL FORT. Engineer Staff Officer, Major Edward Druitt, (Royal Engineers) was given the task of constructing the Green Hill Fort once his current project, the fort at Kissing Point in Townsville, was completed. Work began on the Green Hill Fort on 10 August 1891 with allocations made for extensive underground water tanks, so the

garrison would not need to draw on the water supplies of the town. The allocated supply was five gallons a day for 300 men for over 200 days (Druitt, 1893: 3). The cost of building the fort, including the barracks, gun emplacements and water tanks totalled £23,053 and this expense was shared by all the states except Tasmania. This level of cooperation between states prior to federation was exceptional. Construction of the Victoria Barracks, as they were named, was tendered out to Henry Neals of Maryborough, with work commencing on 11 July 1892. Victoria Barracks consisted of three two-storey buildings for accommodation, a canteen building, sergeants' mess, gun shed and guard house. In January 1893, the Victoria Barracks complex was completed. 'A' Battery of the Queensland Permanent Artillery moved in on 6 June 1893, with a complement of two officers and 30 other ranks.

In his letter of 12 August 1893, Major Druitt detailed to the Commandant of the Queensland Defence Force, Major-General John Owens, in Brisbane, the completion of the Green Hill Fort. The barbette mountings were in place, the Green Hill Fort battery was completed and the musketry parapet was installed. However angle rod uprights, were substituted for the iron palisading, which in Druitt's view was far cheaper and just as effective. The military road measuring 1.5 miles had been constructed around the southeast end of the island, with four double emplacements situated on the road edge for the RML guns. A defensible lookout station was constructed on the summit of Rose Hill with a telephone line constructed between this lookout and Green Hill. Victoria Barracks was completed, 500 yards from the battery and it was connected to the township via a good road (Druitt, 1893). Druitt's work on Green Hill Fort was highly praised, earning the following remarks from Major-General Owens in a letter to the Chief Secretary of Defence:

I cannot close this final report on the progress of Defence Works at Thursday Island without drawing your attention to the excellent work done by Major Druitt and the zeal and ability shown by that officer in performing the duty entrusted to him so well and thoroughly as he has done, in the face of so many difficulties, climatic and otherwise (Major General Owens, 1893: 1-2).

Druitt and his team had succeeded in carving Green Hill Fort out of rock, under budget and on time. The fort was set into the summit of Green Hill using the existing rock, concrete and drystone, it offered a clear exterior slope in all directions. The three 6-inch guns were mounted in open pits, provided with training arcs (Fig. 2). The



FIG. 2. One of three 6-inch BL guns of Green Hill Fort, Thursday Island. (Photo, Liberty Seekee, 2004)

magazines and shell rooms were sunk behind the parapets and were approached down flights of steps on both sides. A passage led to a lift, centrally situated under the front parapet. There was a shell store and a general store. The right Direction Range Finder (DRF) station was 120-yards to the north east of the battery, approached by a partly sunken pathway. It occupied the summit of the hill which is higher than the battery and afforded a clear view all round. Beneath Green Hill five rooms were hewn out of the rock encased in 600mm thick mass concrete which provided storage space for ammunition, shells, cordite, artillery, a general storeroom and lamp room. Above the underground well (20,000gal. capacity), was built a corrugated iron guardhouse, measuring 25 x 15ft. In 1912, a cooling plant was established to provide ventilation to the cordite store and powder magazine via cooling ducts (Grimwade & Ginn, 2002: 86).

By 1896 advancements in naval warfare were continuing which necessitated the upgrading of the defences on Thursday Island to include the installation of a Quick Firing (QF) 4.7-inch gun with automatic sight, on Milman Hill. The garrison strength was increased by ten, complementing an earlier increase of 50 men. The new battery was also situated on the summit of the hill, with ample

trees for camouflage, something the Green Hill Battery lacked. The four RML guns and two .303 Maxim machine guns were held as a mobile armament along the eastern and northeastern shores (Earle, 1993: 38-40).

With warnings of a war approaching in Europe, Field Marshall Viscount Kitchener, who went on to become secretary of state for war in England from 1914-1916, made a visit to Australia in 1909 to discuss imperial defence. After a visit to Thursday Island, Kitchener recommended a 9.2-inch gun be placed on Goode Island to defend the Prince of Wales Channel and Endeavour Strait. He also suggested that one gun be removed from Green Hill and placed on Milman Hill (King, 1983: 104). The initial expenditure for his suggestions for Goode Island alone was £139,000, with an annual cost of £30,000, thus the question was reviewed. (King, 1983: 106). A visit by England's Chief of General Staff, Colonel Joseph Gordon, Captain Hughes-Onslow and Commander Thring in 1913, resulted in no further money being spent upgrading Thursday Island or moving the gun to Goode Island (Earle, 1993: 45).

In August 1914, the British Empire declared war on Germany and Thursday Island went on full alert due to the threat of German Navy raiders operating in the Indian and Pacific Oceans. Once

the 'Emden' and the 'Cormoran' were sunk in the Indian Ocean in early 1915, the threat subsided. Thursday Island then became a training ground for troops before they enlisted in the Australian Imperial Force for front line duty in Europe. Concerns that a German commerce raider was active in Australian waters led to an increase in personnel at the fort from February – April 1916 and again in April 1918 (King, 1983: 106).

In 1919, the Admiral of the British Fleet, Viscount Jellicoe, conducted a survey of Australian naval defences. He reported that the Japanese were now the main threat to Australia and that their progress would be from the north. However it was also hypothesised that Torres Strait was likely to be bypassed due to the geographical nature of New Guinea. Enemy forces would proceed around New Guinea and down the east or west Australian coast, missing Torres Strait altogether. (Earle, 1993: 48). Jellicoe recommended that naval forces be stationed in the area, only during a time of war. This change in Australia's defence policy, combined with the age of the weapons on Green Hill ensured the fort's demise (Harvey & Gosper, 1989: 14). In 1925 the Committee for Imperial Defence recommended that Thursday Island's defences be disbanded. Port Darwin was seen as more strategically important and planning commenced for the removal of the Victoria Barracks and facilities and their relocation to Elliot Point, Darwin as part of the new defence base on that site. The Royal Australian Engineers did not, however, remove the 6-inch BL guns from the fort as they were seen to be obsolete and not required anywhere on the coast due to their limited range. However the 4.7-inch gun from Milman Hill was removed for Examination Battery work at Darwin (Major General, Chief of the Army, 1932). Green Hill Fort was effectively closed in 1925, with the 6-inch guns rendered inoperable and left in situ.

DEFENCE OF TORRES STRAIT POST 1925

During the 1930's, advances in weaponry led to a complete review by the Military Board, of the coastal defences of Australia. As a result anti-aircraft defences were improved with an order to the United Kingdom in 1939 for 22, 40mm light anti-aircraft guns, searchlights and fire control instruments. Anti-tank artillery was also bolstered by an order for 22 2-pdr guns. In addition 6-inch Mk2 guns recovered from the Australian Cruisers 'Sydney', 'Melbourne' and 'Brisbane' were to be reallocated for coastal

defences (Chief of the General Staff, 1934). Changes were made to Field Artillery with 18-pdr guns, Mk2, Mk4 and 4.5-inch Howitzers having their wooden wheels replaced with pneumatic tyres to facilitate movement (Whitelaw, 2001: 6).

Even taking into account these orders for weapons, the state of the Australian artillery in 1940 was dim. There were both equipment and staffing shortages, with only 278 18-pdrs and 95 4.5-inch howitzers in Australia, with the militia and the first AIF requiring 248 and 80 respectively (Horner, 1995: 223). Additionally there was a constant drain on human resources from the AIF, making training and staffing units difficult. The anti-aircraft and anti-tank equipment was in a much worse state, with only 40 3.7-inch guns being made, and no 25-pdrs or 2-pdrs by the end of 1940. The 3.7-inch guns were of limited value without the predictors that were on order from Britain (Horner, 1995: 224). Therefore coast and anti-aircraft guns were installed and manned as they became available. The shortage of this type of equipment and manpower is reflected in the late arrival of anti-aircraft and 18-pdrs to Torres Strait – in late 1942, after Horn Island had received seven air raids.

Even though upgrades to coastal defences were initiated in NSW, there were no plans to reopen or establish any artillery defences in Torres Strait. It is highly likely that, given the number of artillery pieces available, there was not enough equipment or men for fixed defences in the area until 1938.

This current plan to not provide any defence for Torres Strait concerned the population of Thursday Island. In a letter written on 12 September 1938, to the Minister of Defence, Mr Fred Hodel, a civilian stated:

I am considerably concerned as to the fate of Thursday Island should war break out which would throw Japan into conflict with the British. At one time there was a military garrison of about 80 men, with two guns mounted in its defence. Through some stupid policy of economy the buildings were removed to Port Darwin after the garrison had been removed. With Japan against the British I can vision a gunboat landing a garrison of about 100 men with two guns on Thursday Island. There is absolutely nothing to stop them. I fail to see the Japanese dislodged from Thursday Island once in possession until the war concluded. The bombing of the place to destroy the guns would mean the slaughtering of our own people (QSA A816/1 14/301/153).

A reply came from Mr Macandie, the secretary of the Naval Board stating that there were no immediate plans to re-install any fortifications for the area in peace time, but that a 6-inch battery

and searchlights would be installed upon the outbreak of war (QSA A816/1 14/301/153).

The outbreak of World War II saw an Inter Service Sub Committee convene on 29 June 1940. This committee consisted of Colonel G.P.W. Meredith, (Director of Artillery) representing the Army, Group Captain F.M. Bladin, representing the (Royal Australian Air Force), and Commander W.H. Martin, Director of Naval Plans representing the Navy. Their task was to investigate Thursday Island and adjacent islands with a view to determining the location of two 6-inch guns and searchlights plus the calculation of a budget and a time frame for completion of these works (QSA A1196 15/501/169). The naval defence objective around Thursday Island was to retain the control of the channels to the north of Goode and Hammond Islands and prevent the passage of ships if necessary. The navy also wanted protection of the Examination Anchorage between Goode and Friday Islands and the eastern approaches to Thursday Island including the Flinders Passage and Ellis Channel (QSA A1196 15/501/169). The Royal Australian Airforce's objective was the protection of the aerodrome and equipment on Horn Island, thus a request was made for the guns to be positioned so that covering fire could reach Horn Island.

With these objectives in mind the committee narrowed the site selection for the gun and searchlights to the following: Thursday Island – Green and Milman Hills, Wednesday Island, Hammond Island – Turtle Head and Goode Island – Tucker Point. Tucker Point on Goode Island was chosen as the site for two 6-inch guns and searchlights, as this position would allow the guns to cover the Prince of Wales, Dyman and parts of the Simpson Channel, coverage of the Western and Eastern approaches to Thursday Island as well as the aerodrome site on Horn Island (QSA A1196 15/501/169). The defence of the area could be strengthened by the installation of a 4.7-inch gun on Milman Hill. The emplacements from the previous 4.7-inch gun were still there and this site allowed coverage of the Eastern approaches to Thursday Island, the Horn Island aerodrome and the Japanese section of Thursday Island (Harvey & Gosper, 1994: 1). The cost of installing the Goode Island and Milman Hill battery was £10,000 and would be ready within five weeks; however the ammunition and construction costs for the personnel camp area were set at £100,000. Personnel costs, for manning the guns and searchlights, were £299,000 for the first year, with a further

£300,000 required each year for maintenance (QSA A1196 15/501/169).

Fears were rising of an invasion by Japan, as evidenced by this letter from the Department of External Affairs to the Secretary of the Prime Minister on 30 July 1940:

I desire to inform you that information has already been forwarded to the Departments of the Army, Navy and Defence Co-ordination, which has indicated that Japan is actively interested in the coastal area of Northern Australia and the islands lying adjacent thereto, including Thursday Island. Should...certain eventualities in the international situation arise, it is considered quite possible that Japan may have plans for intervention in these regions (QSA A816/1 14/301/153).

The Department of the Interior was tasked with the construction of the emplacements and other defence works on Goode Island, commencing in October 1940. An advance party of personnel from the Royal Australian Engineers (RAE), Royal Australian Artillery (RAA), and Australian Army Service Corps (AASC) departed Brisbane on 19 November 1940 onboard the transport HMAS Zealandia arriving at Thursday Island on 2 December 1940 (Ball, R., 1994: 9). This party, under the command of Major R.J.R. Hurst, was tasked with re-establishing the Milman Hill position and establishing a new battery at Tucker Point on Goode Island. Additional troops arrived during February 1941 onboard the HMAS Zealandia. The two realigned 6-inch Mk 2 BL guns, (serial nos 2287 and 2289), two mountings P.6 (no. 25 and 29), with associated stores were shipped to Thursday Island from Sydney on the SS Montoro on 11 January 1941 and then onto Goode Island (Brigadier In Charge Admn, Eastern Command, 1941: 1). By July the guns had been assembled and proof-fired and by December the three-storied command post and searchlight engine rooms were completed with equipment and stores positioned (Fig. 3).

The command post was built approximately 49ft behind gun no. 1 out of concrete and was three stories high. A system of trigonometry had recently been introduced with the development of a predicated fire system. This new technique required ballistic data on the guns, meteorological data, maps, range tables, slide rules and plotting boards with communications to be located away from the noise and smoke of the guns. Hence the development of the command post. (The Royal Australian Artillery Historical Company, 1999: 4G-2).

The two guns were both ex-naval guns, with no. 2289 coming from the scrapped HMAS Sydney and no. 2287 from the scrapped HMAS



FIG. 3. Command post on Goode Island in relation to the first 6-inch mk2 BL gun, with Quion Point camp in the background. (Photo, Liberty Seekee, 1998).

Melbourne. The guns were both breech loading with a maximum range of 1.056 miles, a projectile weight of 99 pounds and a traverse of 360 degrees. When initially installed these guns were capable of being elevated only 15 degrees. In February 1943, the mountings were modified to enable a greater elevation of 20 degrees, thus permitting a greater maximum range (Harvey & Gosper, 1994: 13).

Queensland Department of Main Roads was responsible for the construction of the camp at Quion Point, a sheltered bay to the south east of the battery. Sydney Williams steel huts were used for accommodations, while water was supplied from galvanised tanks that collected water from the rain gutters on the roof of the huts. These tanks would later be replaced by a 75,000-gallon concrete water reservoir constructed by the 17 Australian Field Company in early 1943 (West, 1996: 26).

While Goode Island battery was being installed, work had commenced on Milman Battery, Thursday Island. The QF 4.7-inch Mk3 gun had been transferred from Brisbane's Victoria Barracks in November 1940 and was mounted on Milman Hill during the following month (Ball, 1996: 9). The five-foot fortress (Coast Artillery) searchlights for use at both

Milman and Goode Batteries arrived on 6 January 1941 and were installed soon after. These searchlights were used to illuminate areas of water through which attacking vessels must pass in order to reach their target, during which they would come under fire from the fortress guns. This type of light was used around harbours, bays and coves throughout Australia. (Royal Australian Artillery Historical Society, 1999: 4H-3). The light source was called the Lamp, and was a semi-automatic carbon arc lamp, which produced 200-million candlepower, reflected out of the barrel, through the front of glass in a dispersed beam of 16, 30 or 45 degrees (Royal Australian Artillery Historical Society, 1999: 4H-3). The searchlights required 75 volts DC at 150 amps, and were powered by engines housed in concrete engine rooms alongside the searchlights.

Personnel for Milman Battery were housed at Links Camp located at the bottom of Milman Hill, in similar huts to those on Goode Island. The 4.7-inch gun had a crew of six, with one man operating the firing, one to work the breech, two to load the gun and two men to work the elevation and traverse of the weapon. Training ensured smooth and clockwork precision (Cook, 2003).

The headquarters for all coastal artillery in Torres Strait was the Thursday Island Fixed

Defences, housed in a private residence not far from the wharf. However when the Torres Strait Force was formed under the First Australian Army in mid 1942, the unit was renamed Torres Strait Coast Artillery. The new headquarters building was the Court House, while its staff was quartered at Milman Hill.

HORN ISLAND AIRBASE IN WORLD WAR II. While fortifications were being installed on Thursday and Goode Island, Queensland Department of Main Roads were constructing two runways on Horn Island making it the most northern allied airbase in Australia. Horn Island had been chosen as the site for a civil aerodrome in January 1937, when the Department of Civil Aviation wanted to initiate a new Sydney – Port Moresby air route, using Horn Island as a vital refuelling base. However these plans were changed on 21 August 1939 when the Secretary of the Air Board stated:

Cabinet approval has been given for the initiation of urgent steps to complete a number of strategic landing grounds for the RAAF, one of which is to be located on Horn Island (AWM 7/1/774).

Horn Island's airbase played a vital strategic role, allowing Allied aircraft to be launched against Japanese held targets in the north; hence it was imperative that this island base be protected. Horn Island gave the Allies a huge tactical advantage in the air war in New Guinea, as the Japanese lacked a similar staging base and had to keep their aircraft close to the frontline making them vulnerable to air attack. The island base was equipped with refuelling and repair capabilities (Seeke, 2002: 3). It had an excellent dispersal bay system scattered in the bush of 52 bays, each protected by an earth wall and camouflage netting (Kingwell, 1997). Horn Island suffered eight air raids between 14 March 1942 and 17 June 1943 with 43 other occasions where unidentified enemy aircraft reconnoitred the area. (AWM 64 16/1). These harassing flights continued until July 1944 (AWM 52 1/5/58). The Japanese lost two Zero fighters and one Betty bomber due to aerial dogfights (AWM 52 56/42/2). Although Horn Island was principally an airbase, air force units relied upon the Army to protect its personnel, the airstrip, associated infrastructure and aircraft on the ground. Part of these army units included two anti-aircraft batteries, a coastal artillery unit, and a tank attack battery.

With the Japanese attack on Pearl Harbour on 8 December 1941, the threat to Australia became very real, and as a result the manufacture of

artillery pieces was stepped up. 3.7-inch and 40mm anti-aircraft guns, 4-inch naval guns, 25-pdr gun/howitzers, 2-inch, 6-inch and 17-pdr anti-tank guns together with all stores and operating equipment such as range finders were manufactured in Australia (Whitelaw, 2001: 7). By the beginning of 1942, the coastal artillery required few changes as most batteries had been equipped and manned prior to the Pacific war, e.g. Goode and Milman Batteries, however further extension would see King Section on Horn Island, Endeavour Battery on Entrance Island and Q Battery on Hammond Island installed between the end of 1942 and 1943.

Horn Island's overall defence was organised under the Horn Island Defensive Plan. This plan divided the island up into five sectors with different units and squadrons allotted for each section's defence. The Western Sector included the foreshore from Madge Reef to the Horn Island jetty and inland to Double Hill. The Central Sector included the foreshore from Horn Island jetty eastwards and excluding King Point, inland to a line running centrally north and south through the high ground southwest of the aerodrome area. This sector then stretched west to the lower ridges of Double Hill. King Point Sector included the foreshore of the promontory, southeast excluding Horn Hill and inland from that point to the northeastern boundary of the aerodrome. South-east Sector included Horn Hill and west (with the main ridges south of the aerodrome) to meet the eastern boundary of the Central Sector and the last section in the aerodrome and dispersal areas (AWM 52/01/42).

Anti-tank artillery units were first formed in Australia in 1939-1940, to combat tanks after their introduction in World War I. These units were equipped with 2-pdr, 6-pdr and 17-pdr anti-tank guns. Initially these guns were part of the artillery, however as they became obsolete, they were transferred to the infantry (Royal Australian Artillery Historical Society, 1999: 4E-2). To combat the threat of tanks, the 18 Tank Attack Battery (T/A Bty) were deployed to the island with QF 2-pdr guns to provide protective fire for the runways and immediate surrounds with additional light machine guns positioned along the runways. These guns were British design, firing a 2-pound High Explosive (HE) shell a maximum of 4.5 miles. The 18 T/A Bty was formed in Holdsworthy, NSW in August 1941. Under the command of Lieutenant Tidswell it comprised thirty men and arrived at Thursday Island on 21 September, via HMAT

Zealandia. This unit provided support for the Milman Battery until April 1942 when Lieutenant Tidswell made a reconnaissance of the Horn Island airstrip. As a result the 2-pdr guns were relocated to the airstrip (AWM 52 4/4/29). John Vitlin a veteran of this unit on Horn Island comments:

Some bright spark thought we should park the 2-pdr guns on the edge of the airstrip and attack the Japanese planes as they came in (Vitlin, 2000).

The battery encountered two Japanese air raids while positioned on the strip, with the air raid on 30 April 1942 proving fatal. Gunner Joseph Davidovitz was killed by concussion from a 500-pound bomb. John Vitlin remembers:

He took my place on the Lewis gun that day, because I had to go to Thursday Island for all the boils and Dengue Fever I had. He was killed while on my Lewis gun, there wasn't a mark on him, except for some shrapnel marks in his feet (Vitlin, 2000).

Early May brought another inspection, this time by Colonel Spry who recommended the 18 T/A battery's withdrawal. On 18 July the unit departed Horn Island, their positions taken up by 14 Garrison Battalion.

The 34 Australian Heavy Anti-Aircraft Battery (34 Aust Hvy AA Bty) was the first anti-aircraft battery to arrive at Horn Island. The unit was formed under the command of Major Tom Rusden in Braybrook, Victoria on 1 September 1942. On 25 September eight officers and 260 Other Ranks (ORs) embarked on the transport vessel Ormiston reaching Horn Island on 14 October 1942 (AWM 52 4/16/37). Upon arrival the unit was split into two sections; A Section located on Double Hill and B Section at King Point, each with four QF 3.7-inch anti-aircraft guns on a static mount (Fig. 4). These guns could also be used for field and coastal artillery and they had a range of 32,000ft using a HE shrapnel round, weighing 28 pounds (Harvey, 1995: 5). There were two types of guns constructed at Maryibynong in Victoria: static and mobile. Horn Island was equipped with static mount guns (Royal Australian Artillery Historical Society, 1999: 4D-5).

At both A and B Sections on Horn Island the guns were placed within an octagonal gun pit. These pits were carved out of Badu Granite, on which the island is based (Levy & Storey, n.d.: 1451). Digging commenced as soon as the unit

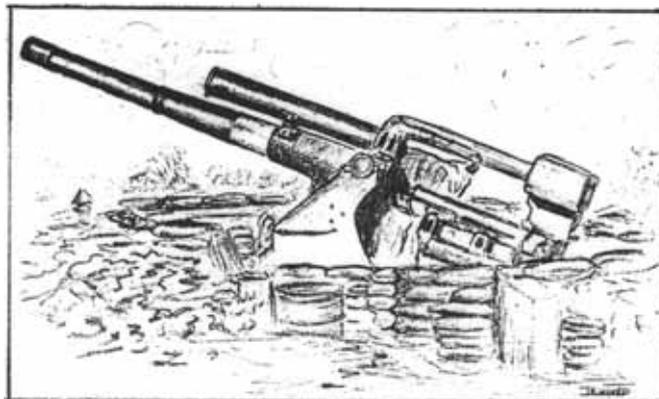


FIG. 4. Sketch of the QF 3.7-inch anti-aircraft gun of 34 Aust Hvy AA Bty, Horn Island. Sketch by Don Myers 1942, Horn Island.

arrived, with the construction of tent sites, latrines, command post, mess and kitchens being undertaken concurrently. Major Tom Rusden recalls his frustration in the unit diary:

16 Oct. Commenced digging gun pits for Site A. Work is progressing slowly, the nature of the ground is hard and rocky, the work being done by manual labour using inferior tools. The picks issued to the unit, apparently for digging of trenches, have to be used for much heavier work, which made them useless in a few days (AWM 52 4/16/37).

The command post (Fig. 5) was centrally located to the four gun pits, from which all firing could be coordinated. To ensure firing accuracy the unit utilised the Barr & Stroud Height and Range Finder located in close proximity to the command post. This machine effectively predicted the future position of an aircraft using the height information from the 36 Radar Station (36 RS), (Cameron, 1999). Roy Brown who operated the range finder explains:

A height and range finder is a standard anti-aircraft computing machine, which predicts the future position of a target. It is necessary to feed in only the height and follow the target through two right-angled telescopes rigidly connected together. All the information went out through cables from the command post to the four guns. They then followed the pointers on their dials, what we fed into the Height and Range Finder and followed on from there. In theory we should get them with every shot (Brown, 1999).

An underground pipeline carried the cables from the command post to each gun pit, so that information from the Height and Range Finder was communicated to each gun crew to enable the guns to be accurately trained on their targets. Each gun crew was equipped with ten men, each with a specific job to perform. Once the height and range information came to the gun pit, each

General Laverack, Commanding 1 Australian Army reported in July 1943 that it would be advantageous to move Headquarters 4 Australian Division to Torres Strait as soon as possible, due to the increased importance of the area in terms of administration and defence (AWM 54 628/1/5).

To provide anti-aircraft protection against low level strafing and dive bomb attacks the 157 Aust LAA Bty were deployed to Horn Island. The unit was formed at Canterbury, NSW in June 1942 and became part of the 111 Australian LAA Regiment, under the command of Lieutenant Colonel Dalton. The 157 Bty, under the command of Captain Horace Newland departed Canterbury for their journey north on 13 October. They arrived at Horn Island on 26 October 1942 and travelled with the 34 Aust Hvy AA Bty onboard the transport vessel Ormiston. The unit was equipped with twelve QF 40mm Bofor guns firing a 4.6 pound shell a maximum of 23,600ft (Harvey, 1995: 5). This weapon was the most widely used during World War II, originally developed in 1932, and used by all branches of the defence force. It was recoil operated and had a vertical sliding breech, and was used as an anti-personnel, anti-tank and anti-aircraft gun. (Royal Australian Artillery Historical Society, 1999: 4D-6).

The 157 Aust LAA Bty was divided into A-D troops, with A troop sent to Goode Island, under the command of Seargent Christie, with three Bofors guns to provide protection for the Goode Battery. They would later return to Horn Island in December 1943. B troop was under the command of Seargents Maloney and Elliot, as there were two detachments in this troop. C troop was under the command of Seargent Hutching and D troop was under the command of Seargent James (Newland, 1942). Each troop had three guns assigned and were responsible for the protection of the following locations in conjunction with the 34 Aust Hvy AA: the 34 Aust Hvy AA gun sites; the aerodrome, runways and dispersal bays; RAAF installations; King Section; forward artillery; the infantry defences; and, the Horn Island jetty (AWM 52 56/42/2).

Bofors guns (Fig. 6) were situated along the ridge to the east of the east/west runway, on the ridge to the south of the north/south runway, plus at King Point and Double Hill. Bert Harvey explains the operation of the Bofor gun:

Two men look through telescopic sights to pick up the aircraft. They in turn operate the swivel of the gun and elevate the barrel up and down. The man at the top is the Loader who is passing a clip of 4x40mm shells into the weapon. The gun fires by depressing the foot pedal (Harvey, 1997).

In 1942, with the anti-aircraft units arrival, there was an immediate requirement for a command and control unit to be assembled to co-ordinate the different branches of the forces in a unified effort. As a consequence, Headquarters Torres Strait Anti-Aircraft Defences was established in October 1942 under the command of Major Tom Rusden. This Headquarters was housed in the Gun Operations Room established alongside the 112 Mobile Fighter Sector on Horn Island. Multiple maps were used to plot the incoming Japanese forces as both Airforce and Army required different maps to depict different information relevant to their defensive response (pers. corr. P. Smith, 1998). The Gun Operations Room held the members of the RAAF Fighter Sector, 34 Aust Hvy AA Bty men and 157 LAA Bty members. Between the airforce and the army, information was collated, reviewed and then a response was calculated, ensuring that allied aircraft were not in the air when the guns of Horn Island were engaging the enemy (Cameron, 2003; Pickering, 2003).



FIG. 6. QF. 40mm Bofor Gun of 157 Aust LAA Bty, Horn Island. (Photo, Bert Harvey)

King Point Section was a coastal artillery unit with two QF 18-pdr Mark 4 field guns situated at King Point in the northeastern corner of Horn Island. These guns were archaic, having been introduced in 1906, and were originally towed by horse. Field artillery was a great advantage as it was mobile, being towed by animal — however as developments progressed, the animals were replaced by vehicle (Royal Australian Artillery Historical Company, 1999: 4B-2). They had a range of 5.44 miles with a HE charge weighing 18 pounds (Harvey & Gosper, 1994: 13). These guns had a left and right traverse of 71 miles and an elevation of 284 miles, firing a maximum of 20 rounds per minute. One officer, Lieutenant McCormack and 39 other ranks were drawn from the Milman Battery of Thursday Island and the Goode Battery on Goode Island arriving at the section on 18 September 1942.

King Point Section's role was to provide close defensive coverage of the northeastern approaches to Horn Island airstrip and the Endeavour Strait. The unit's responsibilities were broken down to protection of a) beach defence at King Point, b) beach Defence at Thursday Island c) to provide harassing fire onto enemy artillery and troop concentrations established on Horn Island, and d) support infantry troops as needed (AWM 52 56/42/2).

OTHER ARTILLERY IN TORRES STRAIT IN WORLD WAR II. In January 1943 Q Australian Heavy Battery was formed at Glenfield Camp near Liverpool, NSW under the command of Major Len Gregory. These 'letter' batteries had been formed as a result of a review of all Australian harbours, naval bases and ports instigated by General Douglas MacArthur in April 1942 (Harvey & Gosper, 1994: 12). This review recommended that twelve Australian ports be equipped with additional defences, Thursday Island being one of them. The United States Government provided 68 x 155mm type 1917A1/1918A1 guns to be used for coastal defence, in addition to all supporting equipment, e.g. coastal artillery searchlights and ammunition. These guns could fire a HE shell of 43.6kg a maximum range of 14.47 miles, with an elevation of 1,126 miles (Royal Australian Artillery Historical Society, 1999: 4B-26). The wheels were solid rubber with steel bodies, however the Americans had altered the carriages somewhat to allow towing by vehicles. Twenty batteries were raised, each designated by a letter of the alphabet.

Q Battery, with two 155mm weapons, was placed at Turtle Head at the northeastern end of Hammond Island in Torres Strait. Situated there the battery could cover the eastern approaches to the Prince of Wales Channel and provide flank protection for the Goode Battery. On 16 April 1943 the personnel arrived and began moving the unit's equipment up the 500ft hill to their location. Concrete emplacements had to be coconstructed, along with a concrete battery observation post, battery plotting room and magazines. All work was completed by September, with two Sperry anti-aircraft searchlights installed alongside the guns.

In September 1942 a reconnaissance of Entrance Island was carried out as part of the overall Torres Strait artillery pattern. A battery on Entrance Island, at the southern area of Prince of Wales Island could protect the Endeavour Strait and the landing and port facility at Red Island Point. It was recommended that three 60-pdr guns would be installed in concrete emplacements together with a battery observation post and provision made for two Sperry anti-aircraft searchlights. These guns had been introduced pre 1925 in England, and it could fire a 60 pound HE round a maximum range of 8.58 miles, with a top traverse of 71 miles left and right and an elevation of 382 miles (Royal Australian Artillery Historical Society, 1999: 4B-18).

Work on the emplacements and posts commenced in January 1943. Personnel from other batteries in the area and men from the Torres Strait Light Infantry Battalion arrived in March under the overall command of Lieutenant Eric Knowles.

Wilf Bridge was one of the members of the Endeavour Battery and has these recollections:

Our battery had a total of 103 plus 14 Torres Strait boys who were fine fellows, this total included officers, Non-Commissioned Officers, cooks, range finders, searchlight operators and a chap to dish out aspirins and bandaids if we broke a leg or the like! We had two field guns, one Bofor gun, two searchlights and we all had 303's. We had a mess hut come recreation hut, a cookhouse, a quartermaster store and provision store combined. On the side of a watercourse (mostly dry) we had an ablution block and further round from the camp we had the Regimental Aid Post (pers. corr. W. Bridge, 2004).

A dam provided a water supply for the men on Entrance Island. It was built in early 1943, and a barge delivered water when the dam was depleted. Gradually communications with Thursday Island improved with an Aldis Lamp and Morse code used towards the end of 1943. Then a radio arrived in February 1944, probably

due to the review of Torres Strait Fixed Defences that had occurred the previous month. As well the Endeavour Battery would be upgraded to two 6-inch Mk7 guns, replacing the obsolete 60-pdr guns. These new guns would be emplaced on two cruciform mountings at two of the 60-pdr sites. The 6-inch guns had a greater range of 10.2 miles, firing a HE round of 99 pounds (Harvey & Gosper, 1994: 13). In addition, a Bofor gun was installed to provide protection against low-level air attack.

As a result of the Allies advancement north through New Guinea and the Japanese' steady defeat in that area, the Torres Strait Fixed Defences organisation was reviewed in January and September 1944 (McKenzie-Smith, 1995: 100). The January review saw the upgrade of the Endeavour battery as mentioned, however the September review saw the withdrawal of all artillery units, except Milman and Goode battery, from the area. These units were subsequently disbanded.

ARTILLERY SITES IN TORRES STRAIT IN 2005

The artillery sites are in urgent need of conservation work. All have suffered the affects of time, erosion due to tropical local weather conditions, and invasive vegetation and sediment, causing degradation of the bunkers and gun emplacements. The following general description of the sites is provided to highlight the degree of urgency regarding their conservation.

GREEN HILL FORT, THURSDAY ISLAND. Green Hill Fort is presently a tourist attraction on Thursday Island, with the Torres Strait Historical Society and Museum Association operating within the five rooms beneath the Fort, and a viewing platform located on the edge of the hill. Gordon Grimwade and Associates completed a conservation and site interpretation study from 1998-2000. The Torres Strait Historical Society and Museum Association were successful in obtaining grant monies from the Commonwealth Government's Centenary of Federation program and the Queensland Government, via the Torres Shire Council for the completion of the viewing platform. The project was broken down into the following categories: feasibility studies, archaeology, conservation action, site interpretation, development of museum displays, development of a Tourism Concept, Interpretation Design guidelines, and Conservation Plan (Grimwade & Ginn, 2002: 87). Ten thousand people each year

visit Green Hill Fort and discover what military role Thursday Island played in Queensland's history (pers. comm. N. Wright, Secretary of Torres Strait Historical Society, 2005).

GOODE BATTERY, GOODE ISLAND. The 6-inch Mk2 BL guns at Goode Battery, Goode Island were removed as a tri service exercise in 1987 and restored by the Royal Australian Navy, under the supervision of Chief Petty Officer Warren Heywood. The Navy presented one gun (serial no. 2289) to the Australian War Memorial in November 1988 as a Bicentennial gift (Australian War Memorial, 1988: 1); the location of the other gun (serial no. 2287) could not be determined. While the guns themselves were removed, their mounting and battery observation posts are intact. The three-storeyed surface level, concrete command post shows signs of decay, with steel reinforcing exposed in places. Overall however, the concrete is in good condition. Other existing sites include a communications bunker dug into the side of the hill; with three medium sized rooms all reinforced with double concrete blast walls. The concrete water reservoir is in place as is the artillery store located 10 metres away. The latter is again constructed of concrete and is 11 metres long, divided into two rooms. A mural on the outside wall, depicting a tropical scene, leads to speculation that the artist was a soldier from the era. Radiating in a 180-degree arc with the command post as its centre, are six searchlight rooms with an adjacent engine room. These installations were used to illuminate targets for the Goode Battery.

All the sites at Goode Battery show signs of post-war usage by campers and visitors to the area. Due to the nature of the terrain, and the fact that the wartime road to the battery has disappeared through time, visitor numbers are minimal. Easy access to the battery can be gained via helicopter; the alternative is a long walk up the side of the hill. The population of Goode Island varies with the seasons, as a handful of people have small huts on the island.

MILMAN BATTERY, THURSDAY ISLAND. Thursday Island is the commercial centre of Torres Strait and home to approximately 4,000 people, with a growing number of tourist visitors each year (Torres Shire Council, 2005). Development on the island has been diverse and widespread, hence the Milman Battery today is only partially intact. The command post, which has one level above ground and two below ground, is today the property of Telstra. Telstra

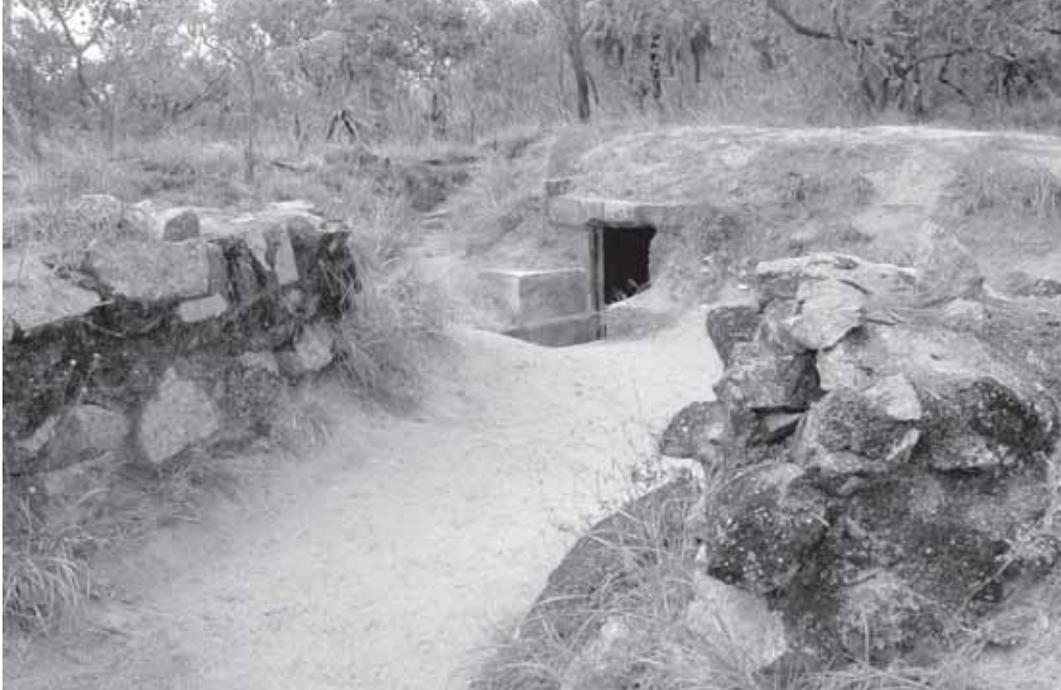


FIG. 7. The Command Post at King Point, Horn Island 2005. (Photo, Liberty Seekee)

uses the rooms as a storage area, while the 4.7-inch gun emplacement has been overtaken by the car park. The command post is in good condition, the only adaptation being glass windows in place. Searchlight and engine rooms dot the side of Milman Hill, however one in particular is close to collapse. Named 'Lions Lookout' by locals, it has been a popular visiting point; however with the steel reinforcement exposed in areas that support the roof, it has become a danger. Milman Hill also hides many trenches and machine gun emplacements that are evident only after a fire has swept the hill. The remains of the hut slabs of the Milman Camp are clearly visible; however the Links Camp area was developed soon after the war ended.

HORN ISLAND. Whereas Thursday Island has enjoyed post war reconstruction, Horn Island has not been as developed and hence a lot more World War II relics still dot the landscape. Wasaga village is home to approximately 650 people with a growing number of tourists each year (Torres Shire Council, 2005). The tourists primarily come to discover the heritage of the area and the World War II history of the island.

The 34 Aust Hvy AA Bty sites at both Double Hill and King Point are the only example of heavy artillery emplacements in Torres Strait.

The King Point area has the central underground command post with four octagonal 3.7-inch anti-aircraft gun sites radiating from the centre. The gun pits are each 1.8 metres deep, with ammunition bays surrounding the centre. The concrete at the gun emplacements is quite sound, considering age, rough material and tropical environment. The command post however is showing signs of wear, as the steel reinforcing in the roof, just to the right of the doorway is exposed and as such has started to expand and crack the concrete. This command post is 1.5 metres below the surface, with six steps leading down to the room. The underground pipeline, through which ran the cable to each of the four guns, is also still in evidence, albeit in a very rusty condition. The two magazines, which stored ammunition, are in excellent condition, with one being used as a storage room by a local identity. The campsite area still has the remains of concrete slabs showing the location of two buildings, one of which was the mess room. The large concrete block stove and grease trap are still there,

depicting the location of the kitchen area. This site is very accessible and is part of the King Point recreation reserve. It is visited by approximately 4,500 people a year who take part in the 'Forgotten Isle' tours of Horn Island which operate daily between May and December (Gateway Torres Strait Resort, 2005).

The Double Hill site is a replica of the King Point location, although Double Hill is privately owned, and as such some of the installations have been altered. The owners attempted to transform the command post into a swimming pool, by removing its roof and painting it blue. The transformation was not successful. Gun pits 1 and 2 have been used for fuel storage tanks and as a repair station for vehicles. Regardless of their usage the structure of the pits are still very sound. This site had three magazines, all of which are concreted and are in a good condition. The largest magazine is one metre below the surface, with four steps leading in to the room, which is eight metres long. Of great interest is the writing on the wall that says 'Geelong Hall of Horrors'. Many veterans of this unit have come back since 1997, when the Torres Strait Heritage Museum was opened, to revisit their sites. This writing was identified by Gordon Cameron as being written by the men of the unit, most of whom were from Victoria, displaying their sense of humour (Cameron, 1999). One magazine has been incorporated into a house and is used as a cellar. The army campsite was behind the hill and remains of buildings, such as the quartermaster store, mess and kitchen area are still evident. John Brownhill, another member of this battery, assisted in the identification of these slabs when he visited the area in 2000 (Brownhill, 2000).

The Bofors gun pits of 157 Aust LAA Bty are still in place at the various locations they occupied. The best example of these pits is the two B troop gun emplacements on the ridge overlooking the east/west runway. These gun pits are concreted with slight cracking on the edges, and are one metre deep with five ammunition bays around the walls. The campsite for B Troop was at the bottom of the hill, with the kitchen area and mess evidenced by concrete slabs and grease traps (Kershaw, 1998). The tents location can be seen as a cleared spot with picket posts marking where tent flaps were tied down.

'Q' BATTERY, HAMMOND ISLAND. Q Battery at Hammond Island is similar to Goode Battery on Goode Island, as it has not had a lot of visitors since World War II. There has been no

development of the area except for the installation of Australian Maritime Safety equipment on the roof of what was the 36 RS site. The 155mm gun emplacement, concrete battery observation post, battery plotting room, magazines, searchlight and engine room installations are still in place on the summit of the hill or dotting the hillside. The structure is sound, with reinforcing rods exposed in some areas. Hammond Island village is home to approximately 400 people, and is linked to Q Battery via a dirt road, which becomes almost impassable in the wet season.

ENDEAVOUR BATTERY, ENTRANCE ISLAND. Endeavour Battery on Entrance Island is the least visited of the Torres Strait artillery sites. The three 60-pdr gun sites and battery observation post are still in existence, however surrounding vegetation is quite dense. The dam only has water in it during the wet season, a situation that has not changed since it supplied water to the battery. There are 56 people living on the island and tourists do not visit often.

CONCLUSION

Torres Strait holds a wide variety of historic relics from both European and Torres Strait culture. Of the artillery sites discussed, only the Green Hill Fort on Thursday Island has had restorative or interpretative work completed. The only other study of a military site in the area was an archaeological study of a portion of the Horn Island runway for the Torres Shire Council, prior to recent upgrades to the airport (Burke & Seeke, 2001: 1).

Torres Strait has been an area of recognised strategic importance since 1877 when discussions began regarding the installation of Green Hill Fort. It was during World War II however, that the area would see its greatest military occupation by approximately 7,000 American and Australian army, airforce and navy personnel. The inner islands of Torres Strait (Thursday, Horn, Hammond, Entrance, Goode and Prince of Wales Islands) were well staffed and armed against both sea and air attack. These sites have lain dormant since 1944-1945 when the personnel and equipment were withdrawn. Once they were vital for the areas protection – now they are vital as study subjects of an era long since gone.

The physical appearance of these sites provides clear evidence of the general population's ignorance regarding the World War II artillery sites in Torres Strait. Properly conserved, with

appropriate interpretational signage and a secure management plan, these important heritage resources could be vital for the area, encouraging tourism and study alike. Increased opportunities for local employment both in tourism and services would be beneficial to an area where unemployment is a major concern. For families and veterans, a return to these sites is an emotional experience that could be enhanced with sensitive conservation works. At present, the sites are crumbling examples of decay, which belies an uncaring attitude towards our diggers and their memory. These sites are examples of a long tradition of Australian artillery founded on the principles of professionalism, devotion and esprit, espoused by those who served in the artillery, the Gunners (Horner, 1995: 523). These sites should be conserved for reasons previously outlined, but most importantly to show old diggers and the wider community what was sacrificed here in Torres Strait will not be forgotten and will never be sacrificed to the whims of time.

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