

Our Military History

THE ILLAWARRA MILITARY DEFENCES

By MICHAEL HOUGH



Introduction

The Illawarra region has a long history of Government-built military fortifications - essentially designed to protect the resources of the region.

The military defences and fortifications can be divided into two phases, such as:

- ***Phase: Pre-Federation investment by colonial New South Wales***

This is the era of the 1880's onwards, when the State of New South Wales invested in early Colonial Era Defences - essentially designed to protect the Wollongong Harbour from the threat of invasion by e.g. shipping seeking refueling and/or supplies - especially, but not only, coal. (It is easy to forget that in this pre-Federation era, coastal shipping was the most effective way of travelling between Sydney and the South Coast ports (such as Wollongong), and there was much more focus and concern on seagoing trade and shipping).

- ***Phase: The Australian Government Investment in Coastal Defences Against Possible Invasion And Bombardment***

This investment was a consequence of the development of the Port Kembla harbour facilities - which were part of the Government investment in, and development of, the basic infrastructure required to support to the development of the Australian Iron and Steel works, which was relocated from Lithgow in the 1920's.

In this pre-WW2/early WW2 era - there was belated but very significant Federal Government investment in coastal defences - mainly to protect these Port Kembla steel works and associated industries, and also to protect the coastal settlements from bombardment by, for example, Japanese or German submarines.



This initial article (one of three planned as a sequence) provides a broad overview - at essentially summary level, of all these developments. Mainly because of the common underlying requirement of protecting coastal installations, such as the steel works, against seaborn invasion or bombardment, the majority of the investment was in Army coastal gunnery installations, e.g. Forts and Gun Batteries. In the very latest phase e.g. early 1940's there was also some RAAF focused investment, e.g. the development of the Albion Park Rail airfield, and in 1942, the allocation of an early Radar unit antenna was installed on Hill 60.

Here following, is a summary of the basic features of each phase, and in Part 2 of this article the colonial era forts will be described in detail, whilst in Part 3 the WW2 era forts and installations will be detailed.

The Colonial Era: Protecting Wollongong Harbour

The perceived threat was from sailing ships or hybrid powered ships (e.g. early sail *and* coal powered shipping) with, especially, the Russians being perceived as the major possible enemy! The threat to be countered was the seaborn landing and seizing of facilities and resources (e.g. coal), for a relatively short period of time (as distinct from an invasion by an occupying power).



Cliff Road Battery (Rotary Working-Bee)

The harbor defences consisted of:

- Two coastal batteries protecting the harbor as follows:
 - An outer battery- located on Smiths Hill (now also called the Cliff Rd Battery) near the current Novotel

Northbeach hotel. This battery is undisturbed and still intact in its original military designed layout.

- An inner defence battery of three 68-pounder cannons - located on what is now the Flagstaff Hill ring road (Endeavour Drive) lower, and when the harbour was redeveloped to create this road, this battery was demolished and the guns were re-located higher up on the Flagstaff Hill, near the new operating lighthouse, where they are located as tourist attraction objects.
- A replacement for the obsolete 68-pounder guns of the inner fort was commissioned. This was a larger gun (a 6-inch breech loading pneumatic disappearing swivel gun), which was located in a (higher level) disappearing gun battery located further up Flagstaff Hill. This was a disappearing gun which relied on a "spring" type logic - in that when it was fired the recoil drove the gun back and out of site and down out of sight into the circular gun emplacement, where it could be safely reloaded out of sight of the enemy by the gun crews, and then pneumatic pressure brought it back up to the firing position - hence the term 'disappearing gun'. This particular gun has been scrapped rather than relocated, but the circular gun emplacement and the underground stores/armory and administration areas remain - although the latter are currently sealed and not open to public inspection.

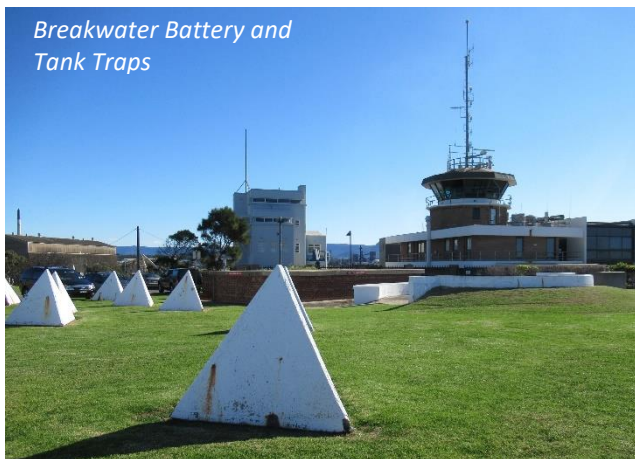
There are no other significant pre-colonial military fortifications still existing or known, and the 'jewel in the crown' is definitely the Smiths Hill (Cliff Rd) Battery, in which the two original Muzzle Loading 80-pounder guns are still intact, and the accompanying Nordenfelt two-pounder spotting gun has also been preserved.

The WW2 Era Fortifications

The Australian Government, somewhat belatedly, installed some significant coastal defences - essentially to protect the heavy industry located around Port Kembla Harbour, rather than to protect the Wollongong area.

The main fortifications consisted of a network of three linked coastal artillery defensive batteries: two 6-inch gun batteries closer to the shoreline, and a 9.2-inch heavy battery located back on a crest overlooking the steel works and the harbour.

These batteries were:



Breakwater Battery and Tank Traps

- Two 6-inch coastal gun batteries, each of two 6-inch guns: one battery at Port Kembla Harbour's southern side, known as the Breakwater Battery, and the other located around Hill 60, known as the Illowra Battery. Each Battery had two 6-inch guns, i.e. a total of four 6-inch guns were defending the Port Kembla complex from enemy shelling or direct assault.
- A 'heavy' Coastal defences battery of two 9.2-inch guns -The Drummond Battery- located in concrete gun installations atop Fort Drummond, and now used as the Headquarters of the WIN Television Studios.
- Mobile guns deployed by the regional anti-Aircraft Battery (the 8th Heavy AA Battery). This type of battery did not require heavy concrete fortifications.
- An RAAF Radar installation (about 1942).

The heavy/concrete support or control installations included:

- A control tower at the Breakwater Battery and a concrete blockhouse at Hill 60.
- Two tunnels bored through Hill 60 to access observation posts/gun emplacements built into the cliffs.
- Bunkers containing searchlights to assist the battery fire.
- A series of anti-invasion 'tank traps' which were largely located in the Windang region.

- A series of observation concrete ‘pillboxes’ located at places such as Hill 60/Berkeley Heights/Dunsters’ Lane, and as far south as the hillside west of Kiama township.
- The development of the Albion Park airfield, as a secondary/emergency/alternate landing ground for the RAAF and the USAF.
- The development of the Mount Ousley major road system, as an alternate to the Bulli Pass road – as essentially, Mount Ousley was built to meet the forecast military traffic needs of WW2.
- A small Army Camp at Hill 60 (now demolished completely); Army camps at Kembla Grange racecourse and Dapto Showgrounds, camps at Fairy Meadow (became a Migrant Hostel and is now the Innovation campus of the University of Wollongong) and a camp at Berkeley, which also served as a post WW2 migrant hostel, before being demolished.

It is planned to provide two more articles in this series as follows:

- 1) In the second article we will review in detail the colonial fortifications with a particular emphasis on the Cliff Road Battery, which was fully refurbished for the Australian Bi-centennial celebrations, and is now again celebrated on Australia Day, with a period costume-based march to the Battery and a re-enactment firing.
- 2) In the final article we will review the WW2 era fortifications in detail, especially, but not only, the Breakwater Battery Museum complex, Hill 60 and Fort Drummond.

In conclusion, it is important to state that the military installations around both the Wollongong and Port Kembla harbours, are surprisingly intact - and represent a very serious set of heritage assets.



References:

Colonial Era

Scott, G J.: *The Smiths Hill Fort Project Monograph* 1982. (Held in Wollongong City Library Heritage Collection)

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Our Military History

THE COLONIAL ERA DEFENCES

By MICHAEL HOUGH



In the second of this series, the aim is to explain and detail the colonial era military defences of the Illawarra region.

These Colonial era fortifications were the result of investment by the colony of New South Wales pre-federation, in protecting the coastal assets of cities, like Wollongong, against perceived ship-born assault and invasion.

Broadly, this investment took place over the period from the late 1870's through to the early 1900's.

The colonial military defences of that era were designed to protect Wollongong Harbour from seaborne invasion, and their design and layouts reflected the capability of the artillery of that time - which essentially was the capability of the smooth bore muzzle loading cannon, usually engaging only in daylight hours.

Three coastal artillery batteries were designed (but in practice only two were actually built and operated) as follows:

- The **outer** Smiths Hill (longer range) battery designed to engage the ships approaching the harbor from the North or East. This battery had two x 80 pounder guns, plus a quick-firing Nordenfelt Gun.

An interesting variation early in the life of this Outer Battery was that initially there were two 'Half Batteries' - one half battery based at Bulli, with two movable guns, and one half battery based where the Smiths Hill fort is located - and the two half batteries were then amalgamated into the single unit (now to be called a Company), whose soldiers staffed the Smiths Hill Fort.



- The **inner** (Flagstaff or Signal Hill) battery - which was designed to engage the ships that actually succeeded in entering the harbor. This battery initially had three, smooth bore muzzle loading 68 pounder guns in very simple defence positions, and these guns were later replaced with a single more powerful and modern gun, called a Disappearing Gun. All versions of this inner harbour defence battery were located further up what was then called Signal Hill, towards the current operating Lighthouse - where (on the seaward side of the ring road) you can still visit the 'disappearing' gun emplacement.
- A (never built) battery, which would have engaged the ships sailing north towards Wollongong Harbour from e.g. the Port Kembla direction.

As summarized above, the Outer Battery (Smiths Hill), was built and remains intact, whilst the inner (or Signal Hill battery) was demolished, partially to make way for the road we now call Endeavour Drive, and the three original guns were preserved and (eventually) re-located up towards the top of Flagstaff Hill, near the modern lighthouse.

The military justification for this replacement was that the guns were considered obsolete, and this three gun battery was deliberately replaced by a relatively unique weapon - the six inch calibre 'disappearing' gun - again mounted much higher up Flagstaff Hill, which was planned to replace and improve the close range power of the three earlier (simpler design) guns of the original Inner Battery.

Each of these installations will now be summarized, and accompanying photos show selected details both past and present of these military heritage items.



Early Signal Hill Fort (Flagstaff Hill) - Guns

Staffing of the Fortifications

The coastal batteries were staffed by volunteer units that would now be called Army Reserve units, and even in that early period the unit names and structure(s) underwent a number of organisational changes as follows:

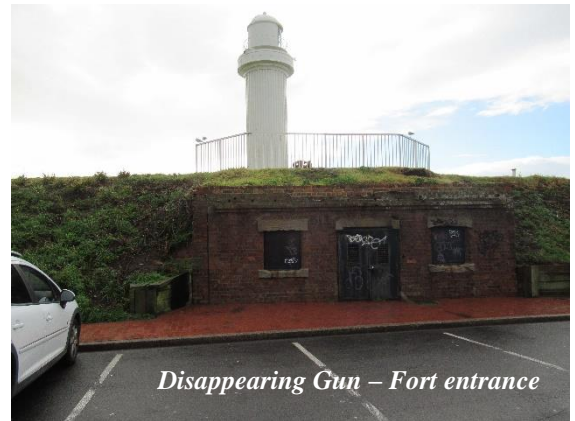
The New South Wales Artillery No 6 Battery was formed in 1878, and one of the first officers was Captain P Owen - who would have been a relative of Evelyn Owen.

Subsequently, No 7 Battery was formed at Bulli in 1884, under Captain H O McCabe [who died in the Mt Kembla mine disaster - and for whom McCabe Park is named.]

In July 1893, the No 6 and No 7 Batteries were amalgamated to form the unit which operated the Harbour defences, including the Smiths Hill Fort, called No 6 Company, 2nd Garrison Division, NSW Artillery, redesignated No 4 Company NSW Artillery (Garrison) in 1899, and in 1903 No 4 NSW Company Australian Garrison Artillery.

The active life of this Company ended in 1914, as by the turn of the century, these types of batteries were considered obsolete.

As the most obvious modern remnant of these colonial defence installations is the Smiths Hill Fort, here are the basic details as briefed by speakers to the Australia Day crowds who attend the annual (Rotary sponsored) re-enactment firing of the battery cannons at 1300 hrs on that day.



Disappearing Gun – Fort entrance

Smiths' Hill Fort (now sometimes known as the Cliff Road Battery)

HISTORY

THE SMITHS HILL BATTERY operated from 1893 until around the early 1900's, when it was decommissioned due to being obsolete.

WHEN BUILT?

1892/1893 i.e. it is approximately 126 years old in 2019.

COST TO BUILD - 2000 BRITISH POUNDS and the construction plans of the Fort were obtained from the Army Museum in Sydney, copied and are lodged in the Illawarra History section of the Wollongong City Council library.

WHY?

To PROTECT Wollongong Harbour from Russian invasion, i.e. a fear that the Russians would land briefly and seize assets e.g. coal, gold, foodstuffs.

DEFENSIVE ROLE

The Smiths Hill Fort's Role - it operated as the outer battery protecting approaches to Wollongong Harbour (it is important to remember that shipping - not road - was the main way of travelling between Sydney and Wollongong at this time).

Its More Recent History

In 1946, the Fort was handed over to the Wollongong City Council, and the Council requested A.I.&S. (now known as Bluescope Steel) to dump slag and cover the battery, so that it was then covered by lawn, and the area was known as Battery Park.

A group of military history enthusiasts successfully applied for a Bicentennial Grant to uncover the Battery as part of the 1988 Bicentenary. There was a re-enactment firing, and the battery was then left uncovered.

The Rotary Club of Wollongong Central then approached Council to take over the battery as a service project. In 2007, the Rotary Club of Illawarra Sunrise adopted the project, after the RC of Wollongong Central ceased to operate as a Rotary Club.

In short, Rotary has maintained the project for the past approximately 30 years.

THE GUNS *Two x 80 pounder RML guns. (RML stands for Rifled Muzzle Loading), and one x 2 pounder (1.5 inch calibre) NORDENFELT quick firing gun.*

The two big guns are still in their original positions, although they were sent to Bendigo Ordnance Factory for a restoration - in preparation for the 1988 Bicentenary Celebrations.

The two big Cannons were converted from 64 pounder SBML guns in 1872 at the Royal Gun Factory, Woolwich England. They weigh 5 tons each, and they fire three types of shell: Solid (80 Pound Weight), Shrapnel Containing 288 Metal Bullets, and Case (Containing 50 Eight Ounce Smaller Shot).

The effective range of the Gun Battery is shown by the range distances which are painted on the battery wall near the northern main gun.



Smiths Hill Fort – Range markers

HOW DID THEY OPERATE?

The Guns have never been fired in active service against an enemy. They are operated by a Gun Team of nine men, with each gun under command of a Sergeant. The Officers controlling the battery worked in the DRF (Direction and Range Finding) post on the Northern (Sydney) side of the Guns. An underground ladder leads up to this position from the underground ammunition storage and work rooms.

The Signal or Flagstaff Hill Installation – The ‘Disappearing’ Gun

At present, all that a modern visitor sees is a large round hole, and some blocked-off underground buildings (located near the top of Flagstaff Hill near the modern lighthouse). This is all that remains of the ‘disappearing gun’.

Some details: There is an Armstrong type disappearing gun still in existence in New Zealand - located in the Maungauika North Head Historic Reserve at Devonport (Auckland) Harbour.

For details see:

https://www.youtube.com/watch?v=bke-gyh_9Fg

https://www.youtube.com/watch?v=Q_aT1sUcyTM

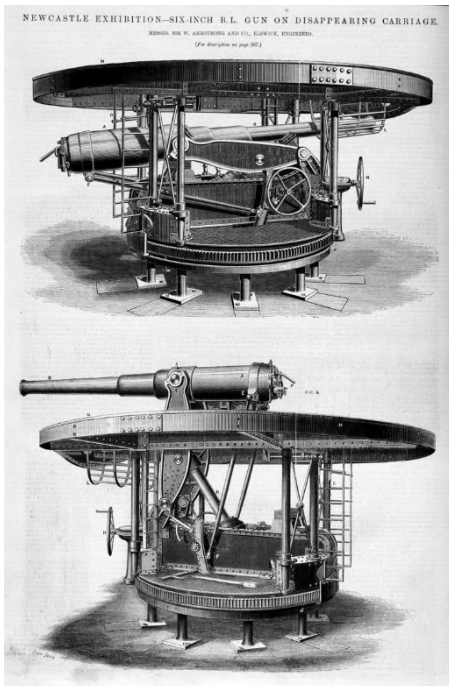


Disappearing Gun installation



Disappearing Gun Complex – Modern View

Source: www.albatross.org.nz



Armstrong Disappearing Gun
Design Drawing - 1887

Concluding Comments

There is a surprising amount of this colonial era coastal defence artillery history still physically intact, of which the 'jewel in the crown' is the Smiths Hill Battery - comparable in importance and originality to the Old Courthouse, adjacent to the actual harbour.

The Smiths Hill Battery complex is the only intact, surviving Colonial era fort of its type in Australia that has never been dismantled or demolished, and apart from the brief period when the guns were sent away for refurbishment prior to the Bicentennial celebrations, the cannons are intact and in their original locations, within an unaltered battery layout.

There are obvious challenges - such as dealing with the issue that badly planted Norfolk Island pines are destroying the structural stability of the Battery.

These two colonial era forts represent great historical and tourism potential - and Destination Wollongong is to be commended for currently developing a proposal for active tourism, based around tourist access to, and better usage of, both the Smiths' Hill Battery, and the disappearing gun complex, particularly the (currently closed) underground complex.

In Part 3 of this series, we will cover the WW2 era defences - which essentially were designed to prevent attacks against Port Kembla Harbour Industrial complex, rather than the original but by then, less important, Wollongong Harbour.



References:

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