



# THE AIMING POST

## The Royal Australian Artillery Historical Society Of Western Australia Newsletter

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### PRESIDENT'S CHRISTMAS MESSAGE



Dear Member,

On behalf of my Management Committee colleagues, I wish you all a most joyous Christmas and a very happy and healthy New Year.

As we enter the new Millennium, many of us will reflect on our lives through the 20th century - the highs and lows, the thrills and spills, together with the successes and disappointments and in amongst it all will be the part that the military life has played.

I greatly enjoy meeting with Gunners of all ages, as it is very clear that Artillery service has encouraged and indeed provided great comradeship and fostered relationships that last forever.

As you are aware, the Royal Australian Artillery Historical Society was formed to develop and maintain Artillery heritage in Western Australia, and whilst most would regard this role applicable to physical aspects - equipment and memorabilia, it is obvious that traditions and links are an integral part.

The recent establishment of the 3 Field Regiment Members Association is one certain way that we can maintain links with serving Gunners as well as those who have most recently left the active list and, by this group forging close working links with this Society, it is my belief that our Artillery heritage will well and truly be preserved.

The Year 2000 is a milestone and a time to reflect and also to look ahead with great confidence. At this time I would like to thank members for their wonderful contribution and support for our activities and to wish you all a safe and happy festive season.

**UBIQUE**  
**Ray Bird**  
**President**

### **Society Visit to Gingin and Chittering**

On 24 October, members of the Society enjoyed a bus trip to Gingin and the Chittering Valley. The first stop was the “Uniforms of the World”, a private museum on the edge of Gingin. Members enjoyed the extensive collection of memorabilia and uniforms, which comprise the collection. The scope of the collection is extensive ranging from Ambassadorial Full Dress Uniforms to prisoner of war sarongs. Morning tea was taken on the shady grounds surrounding the Museum.

The bus then proceeded to the centre of Gingin and the war Memorial. Members commemorated the service of Gunner KL Troy of 2/4<sup>th</sup> Light Anti-Aircraft Regiment, 9<sup>th</sup> Division AIF who was killed while serving his Boffors at El Alamein. Member, Bob Schurman recounted some personal anecdotes regarding Gunner Troy, which added a personal element to the commemoration for those who did not know him.

Three generations of Troy family members are commemorated on the Memorial and also on Honour Boards displayed in at “Uniforms of the World”. Gunner Troy’s name will shortly be added to the Memorial Boards at the Leighton Battery Heritage Site.

## **Rottnest Fortress - Part 3 - Oliver Hill Battery**

Rottnest Island was ideally placed to relation to Gage Roads on which to mount counter-bombardment batteries to protect shipping. With the decision of the British Admiralty to declare Fremantle as a Convoy Assembly Port, this substantially increased the necessity for improved coast artillery protection.

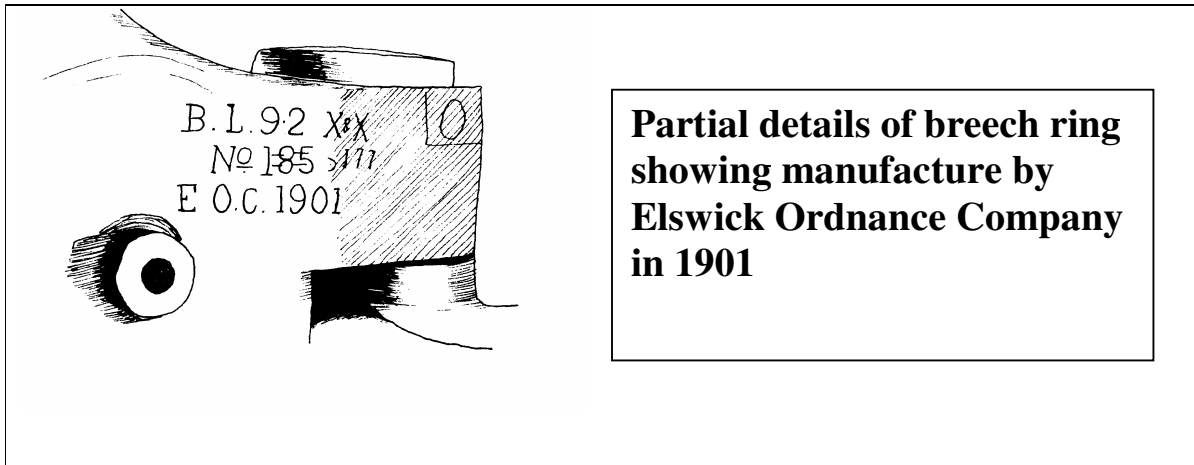
The island was not the ideal platform in that the main lighthouse, which was placed on the highest feature on the island, shielded the arc of the guns. The topography of the island meant that there were areas of the arc of fire which required the guns to be fought using indirect fire, rather than the gun layers being able to see the target from the guns

After much discussion as to the calibre, number and whether the guns should be of the standard form or turret mounted, it was finally decided that two - BL 9.2 in (234 mm) Mk 10 guns on the standard Mk VII mountings would be emplaced. The guns had a maximum fighting range of 31,400 yards (28,500 metres) with Super Charge.

In Australian service Super Charge was only issued to batteries requiring the extra 3,000 yards because of their positioning. The guns at Rottnest did not come into the necessary criteria so the magazines only ever held the standard charges. Super Charge places considerable extra stress on the gun mountings and causes greatly increased barrel wear. A point of interest is that at maximum elevation the trajectory of the shell reaches about 5000 metres in height before starting its downward path.

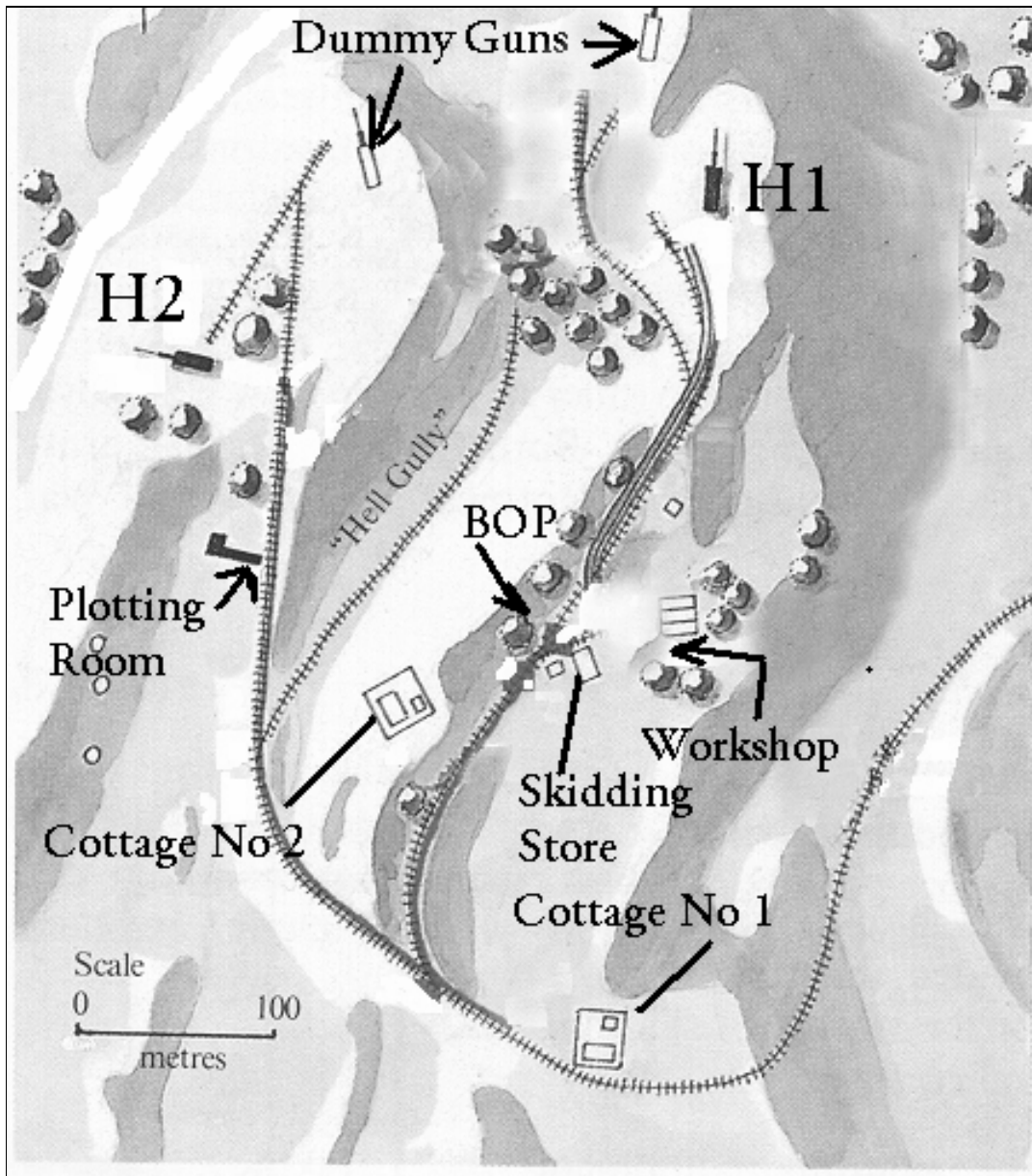
The role of the battery was counter bombardment (targets in excess of 10,000 yards (9,150 metres)). The guns had a 360-degree traverse. They were normally power operated by hydraulic and electrical means but could be hand operated in an emergency. The power came from two 180 hp VCR Ruston Hornsby engines buried between the two guns in a feature known as Hell's Gully. They were coupled to a DC generator supplying electrical power at 440 volts. It was into Hell's Gully that the light railway ran. A tunnel gave access to the power station, magazines and the gun floor shelters.

The construction of the battery was undertaken at the same time as the other military activities associated with the development of the Rottneest fortress. Although the barrels of the guns were dated 1901 and 1902, they were the standard 9.2 in gun being emplaced around the British Commonwealth. The barrels had been relined in 1936 and the breech mechanism had been replaced with the latest model. The Mk VII mountings were the most up to date available and allowed the guns to elevate to 35 degrees. Both guns arrived in 1937. They were mounted and proof fired in November 1938.



Three hundred Armour Piercing shells fitted with Fuze No.346 were received in the first consignment of ammunition. Fuze 346 allowed the armour piercing shell to penetrate into the interior of the ship before it exploded. It could also be set to explode on impact. This latter feature was necessary if the gun was firing on an unarmoured target such as a destroyer because the AP shell could pass through the ship without exploding.

The Battery Observation Post for the battery was originally built in the vicinity of the gun position. This proved to be very unsatisfactory and in 1942 it was moved into the three storied Fortress and Battery Command Post at Signal Ridge near the main lighthouse. This building still exists today. It contained range finding and other fire control instruments to pass fire direction and control information to the fortress and battery plotting rooms, direct to the guns or any other battery in the Fremantle Fortress area.



**Oliver Hill Battery in 1942**

The top floor of this building was the Oliver Hill Battery Observation Post and it was from here that the Battery Commander observed, directed and controlled the fire of his battery. The floor below was a Fortress Observation Post and during a battle would have been occupied by the Fire Commander of the Northern Fire Command (after 1943 the Fremantle Fire Command was divided into two Fire Command areas, the Southern Fire Command directing the batteries on Garden Island). It was the task of the Fire Commander to direct, coordinate and concentrate the fire of all guns under his command onto one or more targets. During a night action when the searchlights were employed, the Fortress Engineering Officer responsible for searchlight control would also be found here.

The other floor was occupied by other fire control personnel and a signals group using both wireless and telephone equipment. The official army name for the area on which this building was established was "Signal Ridge" and the building itself was often referred to unofficially as "Queen Anne's Mansion". The origin of this name is not known. The building was difficult to conceal. Under normal circumstances much of it would have been underground however it was necessary to obtain as much height as possible for the range finding equipment to operate efficiently. At the same time the Battery Plotting Room in the gun area was enlarged to take the 102 Fortress Plotter, which had to be installed in conjunction with the provision of radar for fire control.

A standard facility at a 9.2-in battery was the miniature range. This range consisted of a seascape around which models of ships could be moved so the fire control officers could practice the methods of engaging targets without having to involve the guns.

Oliver Hill Battery strength totaled approximately 160 all ranks and from November 1942, a number of AWAS served with the battery. Included in their duties was the manning of the fire control instruments. They were accommodated in hutted accommodation north of and at the foot of Oliver Hill, now covered by a tuart tree plantation.

Dummy guns were built out of salvage material to the west of the battery position and across from the road leading to the main lighthouse. These were not constructed until quite late in the war as there appeared to have been some argument as to where they should be placed.

As the strategic situation improved some of the batteries around Australia were closed down and others such as Oliver Hill Battery were placed in combat storage. Later those units which were to form part of the peace time facilities were placed under "Care and Maintenance" which meant that in the event of a threat the guns could be brought back to combat readiness in a short time. It was envisaged that Oliver Hill and Bickley Batteries were to be the peacetime training units together with the 5.25 in battery at Leighton. In the event, the Leighton battery was the only facility to be re-activated after 1945.

Once the decision had been made to abandon the Coast Defence Branch of the Regiment, all of the equipment was removed and sold. It is understood the diesel engines and generators went to Corrigin to provide the town electricity supply. Fortunately the Oliver Hill guns and their emplacements were handed over to the Rottnest Island Authority as a historic monument to the island's wartime history. Today they form an important tourist attraction for the island's visitors. Whilst the feature on which the battery was positioned is widely known as Oliver's Hill, its correct nomenclature is Oliver Hill.

Although 9.2 inch guns remain in positioning Gibraltar and on Robbins Island in South Africa, the Oliver Hill Battery remains the most accessible and best interpreted site with guns still in position thanks to the efforts of the Rottnest Island Authority and the Rottnest Voluntary Guides Association. Ongoing conservation and interpretive work will ensure that it remains a world class attraction.

### **Centennial of Women's Suffrage**

The Society in conjunction with the Rottnest Island Authority was fortunate to receive a \$7,000 grant from the Centennial of Women's Suffrage Committee to commemorate the Australian Women's Army Service in World War II. The use of women in non-traditional and leadership tasks was seen as providing positive role models for future generations.

The project will involve interpretation, commemoration and education components. The interpretive and commemorative components will be launched at the Leighton Battery Heritage Site on Saturday 4 December. At that time two plaques will be dedicated, one for Rottnest Island and one for Leighton. The interpretive panels will also be officially launched. A full report will be provided in the February issue of Aiming Post.

## **The Muzzle Brake**

One could be excused for thinking that muzzle brakes were not invented until World War 2 when. The Germans in particular, started producing guns on a large scale fitted with this equipment. In fact, a Frenchman Colonel Chevalier Treuille de Beaulieu is generally considered to have been the inventor of the muzzle brake. In 1842 he invented the muzzle brake for a rifle barrel perforated with holes having axes (in the surface of the barrel) inclined to the rear.

For a weapons engineer, a gun with a muzzle brake had several advantages. It permitted a high muzzle velocity, a high rate of fire, increased accuracy, greater mobility and decreased dead weight. De Beaulieu's invention however was before its time in the conservative military milieu of his day. It was another 20 years in 1862 before he convinced the military authorities to undertake a trial involving a heavy 160 mm naval gun. Trial shoots showed that the accuracy of rounds fired doubled, recoil was reduced to a quarter of its former value, and the loss of muzzle velocity was only about 5%. Even so the authorities were not impressed and de Beaulieu was reduced to commenting, rather cynically "that he had introduced an idea too new for a world unprepared to receive it."

The development of the recoil system by a German engineer Haussner, dating from 1888, placed the muzzle brake further on the back burner until the inadequacies of the recoil system were realised during the Great War. Attention by French, Italian, American, Russian and Swiss arms manufacturers again took place but again the major arms manufacturers did not show a great deal of interest in the project.

The Swiss however continued with their experimentation and eventually all major weapons developed by them were equipped with the muzzle brake. One of the disadvantages with the equipment is that the more efficient it is, the more it makes the gunners lives untenable because of the gases directed backwards. The ornate designs lead to the expense of difficulties of manufacture and often they cannot be manufactured economically



During the Second World War the German extensively used guns fitted with muzzle brakes. Possibly the first muzzle braked equipped guns used by Australian forces may have been the 6 pr Mk IV anti-tank gun. Although British forces used the 25pr so equipped, from 1942, it was only issued to units operating in areas where attack by armoured forces could occur. The Australian Army did riot convert 25pr gns used in the field mode until 1962. There were a number modified and fitted to the Australian Self Propelled gun, the Yeramba, which was produced in the late 40's, early 50's.

Sources: Journal of the Royal Artillery October, 1944.  
British and American Artillery of World War 2 by IV Hogg  
Guns of the Regiment by Steve Gower



### **OBITUARY – DOUGLAS HUGH MORRIS**

Member Doug Morris passed away on 24 October 1999 following a long illness. Doug was a Foundation Member of the Society and was responsible for the composition of our Constitution and the Registration of the Society as an Incorporated Body.

He was a pre-war member of 3 Field Brigade and enlisted in 2/3 Aust Field Regiment RAA on the outbreak of WW2. Wounded and captured on Crete, Doug spent in excess of four years as a Prisoner of War in Germany.

He had a distinguished post war career in Law and served in 3 Field Regiment RAA Citizen Military Forces and later in the Legal Corps.

Doug is survived by his wife, Dorothy, and two married daughters. He will be sadly missed.

## **Fire and Emergency Service Training at Leighton**

The Leighton Battery Heritage Site was a disaster scene on Wednesday 15 September as fire, emergency and ambulance vehicles converged on the site in response to an emergency call. A fire of unknown origin had destroyed the emergency lighting system and filled the tunnels with smoke. An unknown number of visitors and guides were trapped underground.



Fortunately, this tale of woe was only a scenario for training of Fremantle Fire Station staff in emergency breathing apparatus. Ten appliances, command posts, emergency vehicles and ambulances were deployed on site. After orientation and refresher training, emergency teams entered the smoke filled tunnels and completed search routines. A rescue was affected on six simulated casualties in an operation, which extended for 45 minutes.

Using breathing apparatus, guide ropes and infrared cameras, three person teams conducted a systematic search of the tunnels and reported progress. The Command post controlled the operation; monitored time spent underground, rotated teams and plotted progress. With lighting turned off and exhaust vents covered, the smoke generators filled the tunnels with smoke and raised temperatures above 35 C. Conditions were therefore very realistic and challenging. The feedback from all who participated was that it was the best exercise, location and environment that they had ever trained in.

The Society was pleased to provide a training opportunity for the Fire and Emergency Services as a community service. Mutual benefit was obtained as well. The Fremantle Brigade received up to date diagrams and maps of the tunnels in the event of a real emergency. The Society was able to confirm its visitor monitoring procedures and to update its emergency checklist and equipment.



## **Army Punishment for Minor Misdemeanours**

An interesting item on the Service Record of an Australian soldier from World War 1, which recently came into our hands, seemed to warrant further research. It appeared that the soldier had used obscene language to a superior officer whilst on duty in the line in France. For this misdemeanor he was awarded 7 days Field Punishment No.2 and 14 days stoppage of pay. Enquiries amongst the “Old and Bold “ in our Wednesday Action Group failed to clarify the meaning of the term.

A search of the library’s copy of the Defence Act only confused the matter further for in the index there was an entry ‘Field Punishment, Definition of’ and the appropriate Regulation, but nothing was found in the main body. There were obscure references within the publication most of which indicated the punishments were not to be awarded to Citizen Military Force personnel during peacetime. We have to admit that the original date of issue of our copy of the Defence Act was 1929 and many amendments thereafter. Not to be put off, we then found in the library a publication, which set out the whole sorry story from the British Army point of view.

As during World War 1, the same punishments were apparently awarded in the AIF personnel, this was the situation. In 1881 flogging was finally abolished due to public pressure and “summary punishment” in the field was substituted. Regulations under the Army Act provided that a soldier under going detention might be kept in iron fetters and handcuffs for a term not exceeding three months during which time he could be attached to a fixed object for two hours per day in three days out of any four consecutive days for a total of 21 days in all. If the soldier’s unit was in the trenches, the punishment was put on hold until the unit returned to the rear and it was then recommenced, until the total punishment awarded had been served.

These new punishments were first applied during the Egyptian Campaign of 1882. There were two types of summary punishment awarded namely Field Punishment No.1 and Field Punishment No.2. In the latter the prisoner was not liable to be attached to a fixed object. Amendments approved in 1907, allowed for no modification to the original concept of the sentence except for permitting straps and ropes to be employed for the shackling of prisoners in place of irons.

A common form of the No.1 Field Punishment consisted of strapping the prisoner to a gun or limber wheel in a manner known to the troops as the "Crucifixion". This punishment was handed out for what appeared to be the most trivial of offences. An example quoted was a batman found guilty of drunkenness was given 28 days. He was seen in the corner of a farmyard tied by his wrists and ankles in the form of an "X", hence the name the troops gave to the punishment. He was so kept in that stance for several hours a day until the period of punishment had expired. Unfortunately the letter of the law was not always followed, men were sometimes kept until they fainted and in detention units, if they complained, they were assaulted by the sadistic staff.

There is a recorded instance of a British soldier in France being awarded three months Field Punishment No.1 for disobedience of an order. He later deserted and was shot by firing squad. An endnote in the source book stated that Field Punishment was abolished in the British Army in 1923 against the wishes of most of the British senior army officers. Haig and Robertson in particular wanted it retained. The endnote answers the question as to why the term was not to be found in the Australian Defence Act of 1929.

It is a matter of further interest in view of the British soldier being shot for desertion that the Australian Government refused very firmly the direction that Australians be shot for desertion. As far as the Australian authorities were concerned, our troops were all volunteers and there was no greater disgrace than to be sent back to Australia to be dishonourably discharged.

On a visit to the battlefields of Belgium and France in 1997, the tour group was taken into a public cemetery where there were the headstones of a number of British soldiers executed for desertion. The headstones were just titled "A Soldier of the Great War". Later that year there was an article in the "West Australian" indicating that in the town involved, a sealed courtyard section of the local town hall, which had been used as a British HQ in WW1, had been opened to the public and the execution post, to which the deserters had been tied, was still in position.

#### Information Source

"For the sake of Example, Capital Courts Martial, 1914 -18, The Truth".  
Author Anthony Babington, 1993.

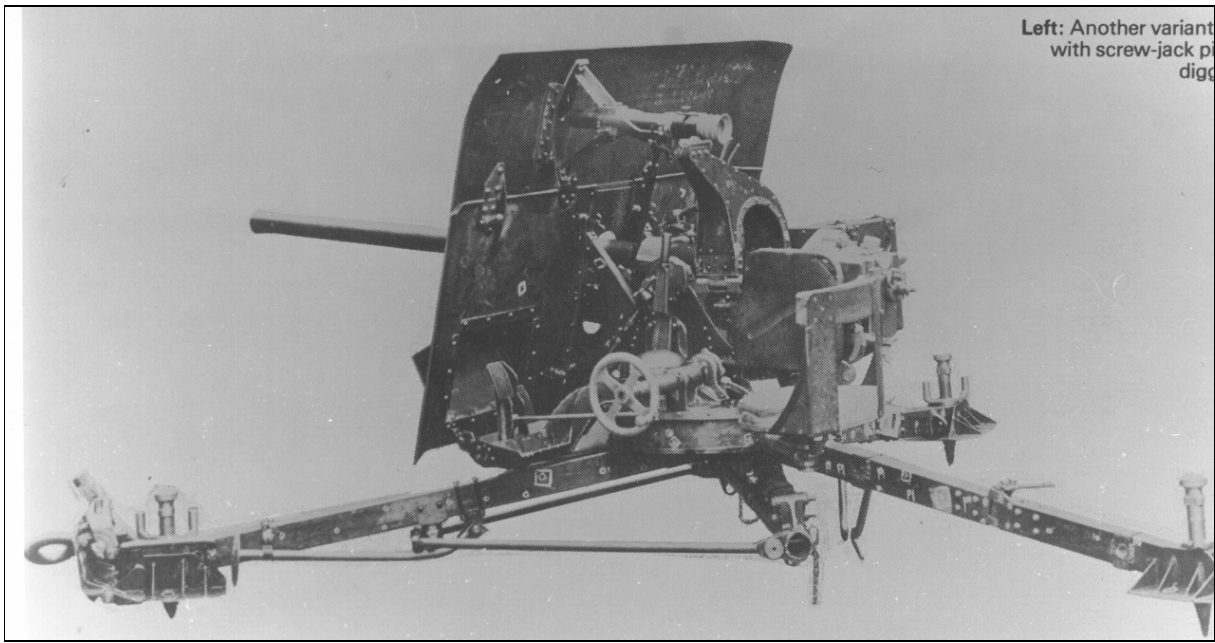
## **The Australian QF 2pr Anti Tank Gun**

This was a British designed gun, which was formally accepted into British service on 1st January 1936. It was developed to provide a lightweight gun capable of being manhandled by infantry units however in service it proved too heavy and special artillery units were formed in 1938.

At the time of its acceptance it was considered to be the best anti tank gun available in the world. By 1939 German armoured vehicles had developed to the point where they were sufficiently armoured to defeat the 40 mm projectile fired by the 2 pr except at very close range and they were equipped with a 75 mm gun which enabled them to stand back out of effective range of the 2 pr and shell it into submission. Firing an armour piecing shot, the 2 pr had a maximum range of 7300 metres however at 900 metres it could only penetrate 42 mm of armour. The German Mk III tank had frontal armour of 50 mm and this tank was soon joined by the Mk IV with frontal armour up to 80 mm thick.

It was quickly realised that the 2 pr was inadequate and a 6 pr was developed. Before the 6 pr could be put into production, the British forces were forced to withdraw from France and in doing so lost over 500 of the 2-pr guns. To have ceased to manufacture the 2 pr guns would have meant a delay of many months before the 6 pr guns became available so it was decided to keep up the supply of 2 pr to the army. At least this would provide the forces with some means of anti tank defence and the 2 prs were adequate against the Italian tanks being employed in Libya.

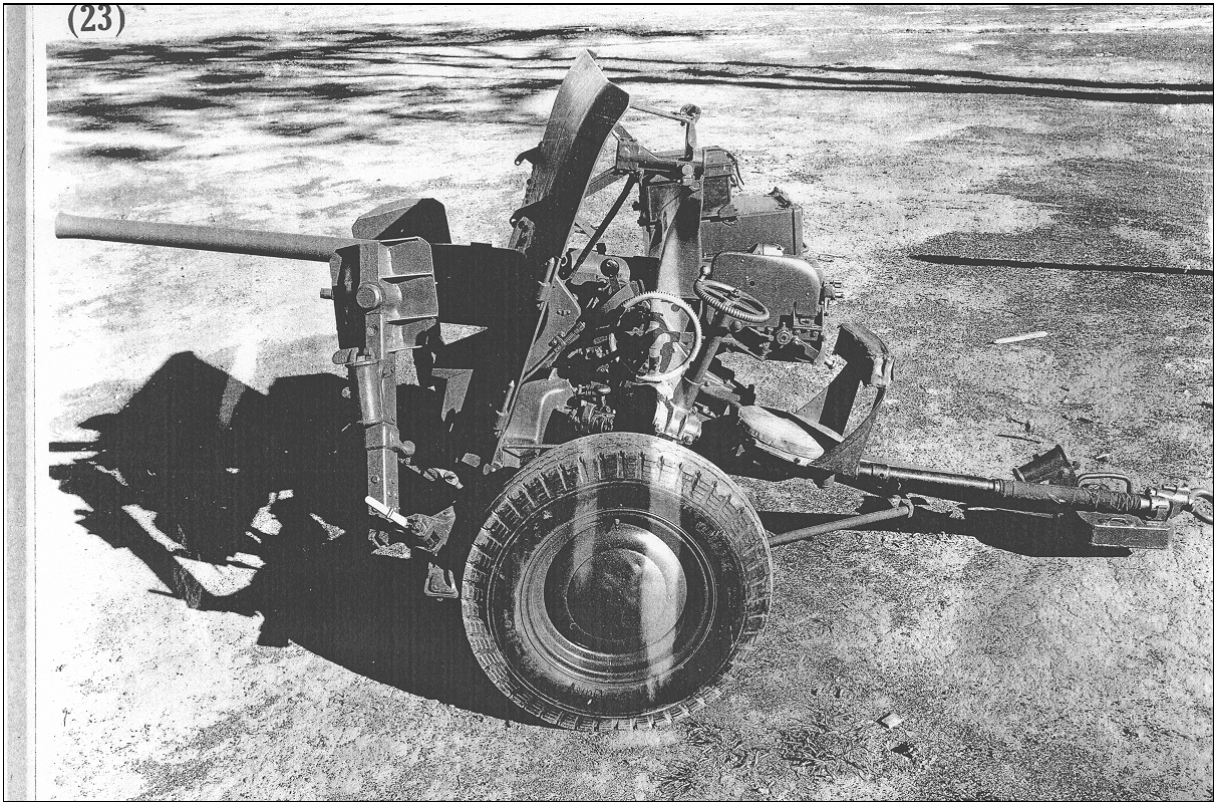
The Australian Army asked early in 1940 if it would be possible to produce 1000 2-pr guns in Australia. Three weeks after the evacuation of Dunkirk, a sample gun was received from the United Kingdom with the drawings, upon which to develop a manufacturing base. Some 30 sub contractors were engaged by General Motors Holden - Australia who had been appointed as the coordinating contractor for the project. At first it was said it could not be done. We did not have the machine tools and equipment for the production of guns, after all GMH had basically been a vehicle assembly concern. Naturally equipment could not be acquired from the United Kingdom and major items were not readily available from other industrial countries.



Great ingenuity and skill was shown by what industrial base was available in Australia. A lathe was recovered from a scrap yard in Melbourne where it had lain for more than 25 years, another recovered from a yard in Adelaide had to be cleaned of an accumulation of soil and vegetable matter before it could be put into operation. A critical lathe, which was reclaimed and modified, for the specialised boring of barrels bore the manufacturing date of 1859. The specialised tools had to be designed and manufactured here in Australia.

Despite these handicaps, within seven months of the official order for 1000 guns being placed on 4 September 1940, the first 2 pr gun was handed over to the Army for proofing and testing and passed in April 1941.

In all 1000 guns plus spares were produced for the Australian Army. Units were shipped overseas. Towards the end of the contract, a production rate of 120 guns per month was being achieved. GMH manufactured the barrels, organisations such as Chubbs, the safe manufacturers, produced the breech blocks, other contractors produced the carriages, and so on. The motif on the top of the barrel identifies the manufacturer. All the GMH barrels seen to date are the Mk 10 which was the Mk accepted for production in 1936. There was very little change after this.



Ordnance QF 2-Pr Mk 10A on Carriage 2-Pr Mk 3  
as issued to infantry battalions

The Australian Army tested a number of variations to the towed version. Some were mounted on “portees” which was a standard truck with the gun mounted at the rear. An example of this type of mounting is at the “Dizzy Lamb” display at Wanneroo. A number of guns were mounted on bren gun carriers and one of our members, Graeme Stephens, who is also a vintage military vehicle enthusiast with a bren gun carrier and 2-pr gun in his inventory, is in fact, working towards to fitting out of one of these units.

In the early days of the war with Japan, experiments were undertaken to see if the 2-pr gun could be adapted for use as a light AA gun in view of our complete absence of weapons of this calibre in our inventory. The 2 pr were also used as a sub calibre equipment for the twin 6 pr guns employed in the harbour defence role.



The 2-pr gun was a match for the Japanese tanks; even one of their heaviest equipment only had frontal armour of about 25 mm. One of the most publicised actions in World War 2 involving Australian anti tank actions, was the ambushing of Japanese tanks at Gemas, Malaya by a battery of the 2/4th Anti tank Regiment in which 7 of the tanks were destroyed. The 6-pr gun eventually replaced the 2 pr for tank attack units as they became available.

### Information Sources

British and American Artillery of World War Two. I. V. Hogg.

War Record of General Motors Holden

World War Two AFVs. George Forty.

Japanese Weapons and Equipment. US Army

## **Bunker Bits – Searchlights and Cable Stations**

Interesting additional details regarding the Cable Station on Curtin Avenue Cottesloe has come to light thanks to member Reg Kidd. In a letter to the Aiming Post, Reg wrote:

“ ... I served there [at the Leighton Battery] as a Sergeant in May and June 1943 as part of the CASL Section later absorbed into the Coast Artillery. I can confirm that the original entrance during construction was never used as an entrance and all movement into the underground tunnels was via the eastern side of the battery, which I believe is still filled in. The camp area was across the road in what was then the W.A. Rope and Twine factory area. The huts were built to blend in with this group of buildings and were weatherboard structures with tiled roofs. There were several large huts and a mess hut from memory.”

“My responsibility was the two searchlights and generators located on the beach area with the concrete directing station on the hill across the road from the battery. I expect that it is still there but heavily overgrown with shrub etc. It was not practical to approach the southern concrete searchlight emplacement as between the railway line and the shore, the local municipality had their sewage plant which was an area where the night soil was tipped into shallow trenches and covered with sand, the pans being dipped into a hot tar vat before being redistributed. If one walked on a straight line from the battery to the searchlight

emplacement the results were disastrous. Many a new arrival was caught this way and kept on walking out into the sea.”

“The attached press cuttings are interesting and provide a background to the searchlight activity which to my knowledge has never been mentioned in connection with the Leighton battery site. The two searchlights were the ‘eyes’ of the Battery in the hours of darkness and formed part of a line of searchlights, which stretched from the North and South Moles up to Fort Swanbourne. From memory, there were two in the Harbour Area, two at Leighton and three at Swanbourne. The Fortress Engineers who manned and maintained these lights and generators were amalgamated with the Coast Artillery in 1943 and I moved on to a Field Artillery unit in the Islands.”

“I provided the data for Harold Smith to pass on to the local paper. Harold was a Captain in the Fortress Engineers in charge of the Albany installation and later the searchlights on Rottneest. It is a pity that some mention is not made of the siting and role of the Coast Artillery Searchlights which were a most important part of all Coast Artillery Batteries and [which] were never entirely supplanted by radar for Close Defence situations at night.”

The articles referred to Appeared in the “*Post*” newspaper on 23 January and 7 February 1999. The first article was about the listing of the Cable Station on the Register of Heritage Places. In the article, mention was made that there was a World War 2 “air raid shelter” built in the sand dunes opposite the station so that communications were not cut in case of damage to the main building.

In the second article, Harold Smith provided the following details:

“ ... No-one seems to realize that there were two coast artillery searchlights on the beachfront from 1942 until the end of World War 2. These were part of the Leighton Coast battery and were installed by sappers of the Fortress Engineers RAE attached to that battery.

These emplacement housed[d] 90 cm Australian-made searchlights powered by generators some distance behind them. One emplacement was on the beachfront just past the battery site and this was a substantial concrete structure. The second was under the present Vlamingh memorial.

“The sand hill was excavated and the emplacement constructed of heavy timber, roofed with sleepers and then the sand was replaced. After the war, it was probably collapsed and buried and is probably the bunker referred to in the “*Post*” report. It had a substantial cable leading to it and a large switchboard and telephone communication. The two searchlights were controlled from a directing station on the hill behind the cable station on the seaward side of the main road [Stirling Highway]. This was a substantial concrete structure which was visible for many years but has since been vandalized and overgrown with vegetation.”

“The searchlights were the ‘eyes’ of the Leighton Battery’s six-inch guns during the hours of darkness and were manned from dusk to sun-up by crews who attended to the power-plants and searchlights which were exposed at irregular intervals to search to ocean in front of the battery.”

The Cable Station was built in 1926 to receive the submarine cable linking WA with London. The cables importance as a link to the outside world is illustrated by the provision of a bunkered facility as described by Harold Smith. Professor Leslie Marchant who provided research for the original article in the “*Post*” is interested in hearing from anyone who worked in the bunker during the war. He can be contacted at the Australasian Region History Centre at Notre Dame University.

By way of editorial comment, it is noted that several articles have appeared in the “*Aiming Post*” which have highlighted the role of searchlights in coast defence. Readers may recall the article of the Sydney and the mystery ship illuminated off Rottneest. Other articles dealt with equipment particulars. A 90 cm searchlight from the collection of the National Artillery Museum at the North Head Fort was used in the celebrations in Sydney when the awarding of the Olympic games was announced. Undoubtedly it will be pressed into service again for the 2000 Games themselves.

Thanks are extended to Professor Leslie Marchant, Reg Kidd and Harold Smith for their interest and research.

## **The War Record of General Motors -Holden in Australia.**

*The lost publication sought in a previous "Aiming Post" has turned up. Just where, we are not prepared to say.*

The importance of the publication is that it is a valuable record of the initiative and resourcefulness of Australian industry, which had to harness itself to war. It is the story of one Australian firm, which with many other industrial firms, gradually built up an industrial base from which equipment was produced to fulfil the requirements of our fighting forces. The organisation was responsible for working to produce amongst many items of equipment that required to equip our artillery units. Our next few issues of "Aiming Post" will cover this particular aspect.

Since colonisation, the principal idea of the Imperial Government of Britain, was for colonies, such as Australia, to provide the raw materials with which to feed the hungry industrial might of Great Britain. Australia was looked upon as the "Bread Basket" of the Empire. Industrialisation of the colonies was frowned upon because it reduced the market for the added value goods, which were being produced in Britain's factories.

After the Great War respective Australian Governments recognised the need to build up the industrial base of the country, particularly in respect to defence requirements. As a result by 1939, Australia was capable of producing weapons, such as the 3 in HAA gun, small arms and ammunition, clothing and many other items of equipment required to meet the defence forces needs. Unfortunately these government factories were unable to meet the enormous increase in the service requirements when the Second World War commenced. With the United Kingdom industry so heavily committed in producing their own requirements the chance of Australia calling on their sources were extremely limited.

What antiquated and obsolescent military Australia did have, was required to equip the Second Australian Imperial Force with the result the Home Army was largely stripped of equipment. There was also the need to help Britain rearm after the tragic defeat in France.

Australian industry under L. Hartnett, who was the Managing Director of GMH and who had been appointed as Director of Ordnance Production, rallied to the call to bring the small civilian industry in full production for the services. By the end of 1945 Australia was producing or had produced 2 pr and 6 pr anti tank guns, 25 pr gun howitzers, 3.7 in Heavy AA guns, Polston 20 mm LAA guns, vehicles, aircraft, engines, ships and a host of other items.

This all took time to put into operation and at the commencement of the war with Japan the situation was rather depressing. At 1 February 1942 secret documents outlined the following shortages in ordnance used by the field and AA artillery.

- 3.7 in HAA guns.

Deficiency of 271 guns with 8 guns per month being built in Australia.

- 3 in 20 cwt AA guns.

Deficiency of 60 guns and no longer being produced.

- 40 mm Bofor LAA guns.

Deficiency of 1000 guns. Manufacturing just commencing and relying on whatever equipments could be made available from Britain and Canada.

- 25 pr and 18 pr guns and 4.5 in howitzers.

Deficiency of 301 guns with a production rate of 24 units per month.

- 2 pr anti tank guns.

A deficiency of 1800 guns with a production rate of 65 guns per month.

In the case of field artillery, the deficiency did not allow for the replacement of the 357 obsolete 18 pr guns and 4.5 in howitzers on issue or in reserve, with the modern 25 pr. Some of the stock of 25 pr guns were shortly to be lost in Malaya. It can be seen how in these items alone, the position was desperate.

The history of GMH's part in helping to reduce those deficiencies is a very interesting story and anyone who can find the time to read about the work that was done, will find it most rewarding.

#### Information Source

War Record General Motors Holden Ltd, Australia.

National Archives. Army War Effort Report, 1 February 1942.

## Where was the Logic?

In 1934 Australia was endeavouring to build up the RAAF by procuring up to date front line aircraft. Of course, as a member of the British Commonwealth, Australia was expected to purchase its aircraft from Britain, allegedly to maintain compatibility with the RAF.

At the time there was a delay of at least 18 months from the time of placing an order and its ultimate supply and it was seen by the RAAF that this delay was unacceptable. It was decided to develop an aircraft industry in Australia in order to build our own aircraft.

Because American aircraft development at that stage was ahead of the British and considering the delays which were emphasised by the fact that ten Avro Ansons ordered in 1935 still were not available in 1938, the Australian Government decided to develop an aircraft based on the North American trainer NA 16.

This drew severe criticism from the British aviation industry, one aviation magazine commenting "the decision to build American machines is a gross breach of faith with the British Air Ministry, with whom an agreement had been made that the equipment of the RAAF and the RAF should be identical - so that cooperation in war should be easier".

But wait there is more! In June/July 1938, Sir Edward Ellington, Inspector General of the RAF, was invited by the Australian Government "to report on the existing organisation and lines of the proposed expansion". He could offer no indication as to when aircraft on order by the RAAF from British sources would be delivered, and at the same time commented adversely on the manufacture of the Wirraway aircraft, which was developed from the NA 16.

When it was arranged for one of the NA 16 to be flown over the Laverton Air Base during his inspection, he spat his dummy and refused to watch. The story does not stop here but rather than bore you further let us say the story does not improve.

Source - Journal of the Australian War Memorial - No. 9 - October 1986.



## NOTICE BOARD

### **BUSY BEES**

The next busy bees at Buckland Hill are scheduled for:

**27 NOVEMBER      29 JANUARY      26 FEBRUARY**

### **WAGS CHRISTMAS LUNCH**

The Wednesday Action Group will hold its Christmas lunch on Wednesday 15 December at Hobbs Artillery Park. The cost will be \$5 RSVP on Wednesdays at Hobbs Artillery Park or at 9383 6544 before 8 December.

### **LEIGHTON BATTERY OPEN DAYS**

The Leighton Battery Heritage Site is open on a regular basis on the first Sunday of every month from 10 AM to 3:30 PM with of the tunnels every half hour.

### **ARTILLERY PORT**

Limited supplies of Artillery Port are available at the special pre-winter price of \$8 per bottle. Place your order at the Society's Annex at Hobbs Artillery Park any Wednesday.

### **HISTORY OF LOCATING ARTILLERY IN AUSTRALIA**

Research is currently being undertaken for a book on "History of Locating Artillery in Australia". If you have any information that may be relevant please contact John Posener on (02) 9982 4471 or Keith Ayliffe on (07) 5443 7102 or write c/- North Fort Museum, PO Box 1042, Manly NSW 1655.

**The Editor gratefully acknowledges the support of RK Glyde, the Society's Librarian and research Officer who has authored the historical articles appearing in this issue. Comments on the articles or additional material relating to the topics covered are always welcome.**

The Aiming Post is published by the Royal Australian Artillery Historical Society of WA (Inc) as a service to its members. It has an additional role of making information and material relating to Australia's artillery and defence heritage available to individuals and groups who share the Society's objectives. Articles, editorial comment or book reviews for publication should be submitted to the Editor, Robert Mitchell at:

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