# SABRETACHE

**The Journal and Proceedings of the Military Historical Society of Australia (founded 1957)**

**SEPTEMBER 2022**

The aims of the Society are the encouragement and pursuit of study and research in military history, customs, traditions, dress, arms, equipment and kindred matters; the promotion of public interest and knowledge in these subjects, and the preservation of historical military objects with particular reference to the armed forces of Australia.

## Constitution and Rules

The Constitution and Rules of the Society, dated 2021, are available on the website at www.mhsa.org.au.

## *Sabretache*

The Federal Council is responsible for the publication of the Society journal, *Sabretache*, which is despatched to each member of the Society quarterly.

## Membership subscription

The annual membership subscription, due on 1 July each year, is $40 plus branch subscription. Details of subscriptions and meetings are available from branch secretaries. Non-branch members should contact the Membership Officer.

## Federal Council

PO Box 5030, Garran ACT 2605

## Branch Secretaries

ACT: James Smith, c/o 165 Belconnen Way, Hawker ACT 2614
Queensland: Ian Curtis, PO Box 243, Maleny QLD 4552
South Australia: Paul Skrebels, PO Box 247, Marden SA 5070
Victoria: George Ward, PO Box 854, Croydon VIC 3136
Western Australia: Richard Farrar, 2a Zamia St, Mt Claremont WA 6010

## Fellows of the Military Historical Society of Australia

| | | |
|---|---|---|
| Mr Tony Harris FMHSA | 1992 | SA |
| Mr Peter Shaw FMHSA | 1992 | WA |
| Mr Peter Epps FMHSA | 2000 | WA |
| Major Ian Barnes OAM RFD ED KStJ FMHSA (Decd) | 2002 | VIC |
| Brigadier A.R. 'Tan' Roberts FMHSA (Decd) | 2002 | ACT |
| Mr Pat Hall FMHSA | 2008 | WA |
| Mrs Rhonda Grande FMHSA | 2008 | WA |
| Major Paul Rosenzweig OAM JP FMHSA (Retd) | 2009 | SA |
| Mr Don Wright FMHSA | 2011 | QLD |
| Mr John Meyers FMHSA | 2018 | QLD |
| Mr Anthony Staunton FMHSA | 2018 | QLD |
| Mr Colin Simpson FMHSA | 2019 | ACT |
| Dr Paul Skrebels FMHSA | 2019 | SA |
| Mr Wayne Gardiner OAM RFD FMHSA | 2019 | WA |
| Mr George Ward FMHSA | 2021 | VIC |

## Editorial

The ongoing tensions in the Asia-Pacific region has re-focused many military planners' attention. However, with such a large area the Pacific presents serious problems. The concentration of force may prove difficult, particularly when Chinese medium- and long-range missiles are factored in. While the heavy lifting will be done by the United States forces, Australia can still, and will, contribute in its own way. With limited forces, Australia must prepare for a conflict that has differed from those that have preceded.

Retired Major General Greg Garde told me during a recent interview of the 'MCG effect': that the entire Army – Regular and Reserves – would not even three-quarters fill the Melbourne stadium. With this in mind, a new force that works in a more flexible, agile and dangerous way, may be the way forward. By drawing on the traditions of initiative, improvisation and high-level training, Australian forces could be used in an autonomous manner that better reflects the country's smaller-sized military. Force capability would require alteration to maintain independence, but through creative thinking and planning Australia could make a contribution in its own way.

**Justin Chadwick**

SEPTEMBER 2022

VOLUME LXIII — NUMBER 3 ISSN 0048 8933

## CONTENTS



Published by authority of the Federal Council of the Military Historical Society of Australia. The views expressed in this journal are those of the relevant contributor(s) and not necessarily those of the Society.

# RAAF Station Darwin Airfield Defence, 19 February 1942 – Part Two

Sean Stuart Carwardine[1]

**19 February 1942**

Ten days after the bombing of Pearl Harbour, four days after the fall of Singapore, and three days after RAF and RAAF airmen battled for two days in defence of Palembang airfields, Japanese aircraft were first seen over Australia on 19 February 1942. On their way to Darwin Japanese aircraft flew over Bathurst Island and were observed by the local missionary, Father McGrath, who sent a warning message. After the message was sent, one RAAF Guard assisted in evacuating McGrath from the radio station to safety before the Japanese aircraft attacked the island. The Japanese destroyed the only aircraft on the aerodrome on Bathurst Island, an American C-53 transport. These two airmen of the Guard mustering gained the unfortunate title of being the first RAAF airmen to be directly attacked on Australian soil.

From Bathurst Island the Japanese headed inland and then turned north towards Darwin. Scherger was driving back to the base when the bombing commenced upon RAAF Station Darwin. He had entered the front gate, which was still operated by Guards, and while driving down the main road of the station was strafed by a Japanese aircraft. According to Scherger, a machine gun pit, situated near the Station Headquarters building and the only one aligned with the main road and main gate, was already firing back at the aircraft.[2]

Leading Aircraftsman Clyde Jones, a Guard, recalled that he spent most of his time at the bomb dump at the north-south and east-west runway intersection. The duty performed at the bomb dump was to secure the area from intruders, investigate and report any problems with the bombs, and act as a spotter against aircraft. On 19 February 1942, Jones recalled that he left the bomb dump at the change of shift and walked back to his barracks near the guard room at the front

1 Since the article in the Sabretache 2017, the Sean Stuart Carwardine has completed a Doctor of Philosophy titled 'Defending the Nest: A History and Analysis of Airfield Defence Policy in the Royal Australian Air Force'. The author has now written three articles; 'The Development of the RAAF's Aerodrome Defence Scheme 1929-1939' for Sabretache, 'Ground Defence of Palembang airfields for the RAF Regiment', Centurion journal and 'Security Forces in High Intensity War' for the Air Power conference 2018. He has lectured junior ground defence officers as part of the Initial Ground Defence Officer Course at the RAAF Security and Fire School at RAAF Base Amberly, presented a paper at the RAAF Security Force Conference and a historical lecture for No 2 Security Force Squadron birthday.

2 Peter Grose, *An Awkward Truth: The Bombing of Darwin February 1942*, Allen & Unwin, Crows Nest, 2011, p. 110.

gate. He stated that he heard anti-aircraft fire and from the veranda could see aircraft above Darwin township. As the aircraft attacked the RAAF station, he took cover in a slit trench near the front gate, staying there until after the raid. Jones affirms that at the Guard Room (front Gate of RAAF Station Darwin) there was Sergeant Fred Nelson and Corporal Hector Sinclair both Guards remained at the Main Gate watching civilians from Darwin using any means of transport they could to go south. Jones later walked back to the bomb dump with a Thompson machine gun and took up his position with the other Guard and waited for what he thought was to be a Japanese invasion. Jones and the other Guard stayed at their post throughout the second air raid that day.

Leading Aircraftsmen Robert Borg, Bob Meredith were Guards manning a machine gun post around the airfield during the attack. According to Meredith, they engaged the Japanese aircraft with their twin Vickers and were being engaged in return by the same aircraft. Kenyon reported that he was manning a twin Vickers machine gun position from 5 November 1941 until 2 March 1942. From 3 March 1942 he was attached to the Advanced Operational Base Millingimbi with three other RAAF Guards, 'to repel the invasion'. Kenyon returned to RAAF Station Darwin on 10 June 1942 and manned another twin Vickers machine gun post until 5 October 1942.[3] Another Guard, Alfred Kenyon, was moved from Parap aerodrome to RAAF Station Darwin on 5 November 1941 and manned a twin Vickers machine gun post during the raid on the 19 January.

Another Guard at RAAF Darwin on 19 February 1942 was Sergeant W. Bowie. In a letter, Bowie details the weapon pits that they used for the defence of Darwin aerodrome. The gun pits were circular but without sandbags all the way to the ground on the inside and did not have a firing step on the ground. They had two layers of sandbags around the top edge of the pit and they made 'L' shape slit trench heading off the pit where the spare ammo, food and water and number 3 and 4 of the gun crew stayed. When in action the No 1 fired the guns and the No 2 faced towards the No 1 to spot any strafing attacks from behind. If the gunner moved around then the No 2 moved with him, watching his back and changing the canisters of ammunition as they emptied. The ammunition belts were of the metal type as used in aircraft and not the cloth type used by the Army. This meant that the metal parts could be picked up from the bottom of the pit after the action and new belts made from loose rounds. Bowie indicated that the mounting used in the pit could be used for ground attacks. The Vickers were mounted in pairs but could not be used with the true Vickers tripod.[4]

Bowie noted that when the air raid siren sounded, he observed Guards jumping into the machine gun posts all over the open airfield. He recalled that after his post engaged the aircraft with Vickers machine guns, he had to stop firing as

3 A.M. Kenyon to Jim Gable, letter, 9 October 1999, original held by author.
4 Wilf Bowie to Alan Giltrap, letter, 18 July 1999, original held by author.

his position was covered with black smoke from burning Hudsons. Bowie stated that 'this saved our gun pit' as once all the main targets were destroyed, Japanese aircraft continued attacking any visible gun posts that had fired at them. Based on Bowie's description of the area and the smoke from the Hudsons, an examination of Darwin's air photograph places his gun position on the east/west runway on the bush side facing the officer's mess.

Guards continued to man the main gate of the station, bomb dump, spotter posts and all except one of the machine guns positions around the airfield. The Guards were not the only airmen engaging the enemy as, according to author James Rorrison, Wing Commander Tindal manned a machine gun in the headquarters weapon post. However, as Tindal's water-cooled machine gun was mounted on the trench's parapet he was exposed and lost his life. There was another twin Vickers machine gun in that same post as Tindal, manned by Flight Sergeant Coombes (RAAF Service Police) and Squadron Leader Swan. After the first raid, Swan organised Warrant Officer Chapman (RAAF Station Darwin WOD) to take boxes of ammunition out to the machine gun pits, which he delivered by motorcycle.

Rorrison stated that during the airfield attack United States Army Air Force (USAAF) officer Pell (pilot) and his P40 were taking off. His fighter had reached about 100 feet when it was hit by 20mm cannon shells fired from a Japanese aircraft. Pell jumped free and he may have survived the short parachute jump and landed alive, but for a second Zeke aircraft that machine-gunned his prone body. What is rarely reported is that having witnessed Pell jumping from his aircraft, a RAAF Guard ran from his Vickers machine gun position exposing himself to enemy fire in an attempt to save Pell. However, Pell was deceased by the time the Guard reached him. Guards' bravery on that day was also highlighted by the quick reflexes of a sergeant Guard who ran from his machine-gun pit to reach the dazed USAAF pilot Lieutenant Glover after he crashed.[5] The Guard led Glover to the machine-gun post's safety before the Japanese Zekes conducted further strafing runs over the crash site.

The Japanese pilots described the engagement of their aircraft from machine-gun posts on Darwin airfield as 'significant fire' which posed a 'danger'.[6] The Japanese reports outline that 14 of their aircraft received 'massive amounts of damage' from the airfield machine-gun defence. It is worthy to note Ingman's comment that 'two Japanese aircraft shot down as a result of the Darwin raid had been attacking the airfield only', these aircraft had .303 inch holes all over with a few striking the fuel tank. According to Lewis and Ingman, a 'Kaga Vals' with the serial number A11-254, was hit with machine-gun fire at the airfield and crashed

5 There are five Sergeant Guards on the airfield on 19 February 1942. One maintained the security at the front gate of the station. However, there is no record of the locations (except Bowie) of the machine gun post these Sergeant Guards were manning.

6 Tom Lewis and Peter Ingman, *Carrier Attack Darwin 1942: The Complete Guide to Australia's own Pearl Harbor Carrier Attack*, Avonmore Books, Kent Town, 2013, pp. 91-92.

near Winnellie.[7] The machine-gun fire from RAAF Station Darwin could only have come from RAAF Guard manned machine-gun posts. According to James Rorrison there was constant firing coming from the machine guns, firing in all directions by the unexperienced RAAF gunners as the Zeke's and Val's pilots targeted the gun pits. All gun positions were operating (firing), one or two gunners found the love of firing their guns. The first raid seemed to fade and then was over as the Val and Zeke pilots disengaged from the RAAF base and airfield in ones or twos. Rorrison outlines the Guards seemed reluctant to stop firing. Rorrison acknowledges that the RAAF Guards, '…seemed sorry to have to stop as the firing of MG's subsided slowly'.[8]

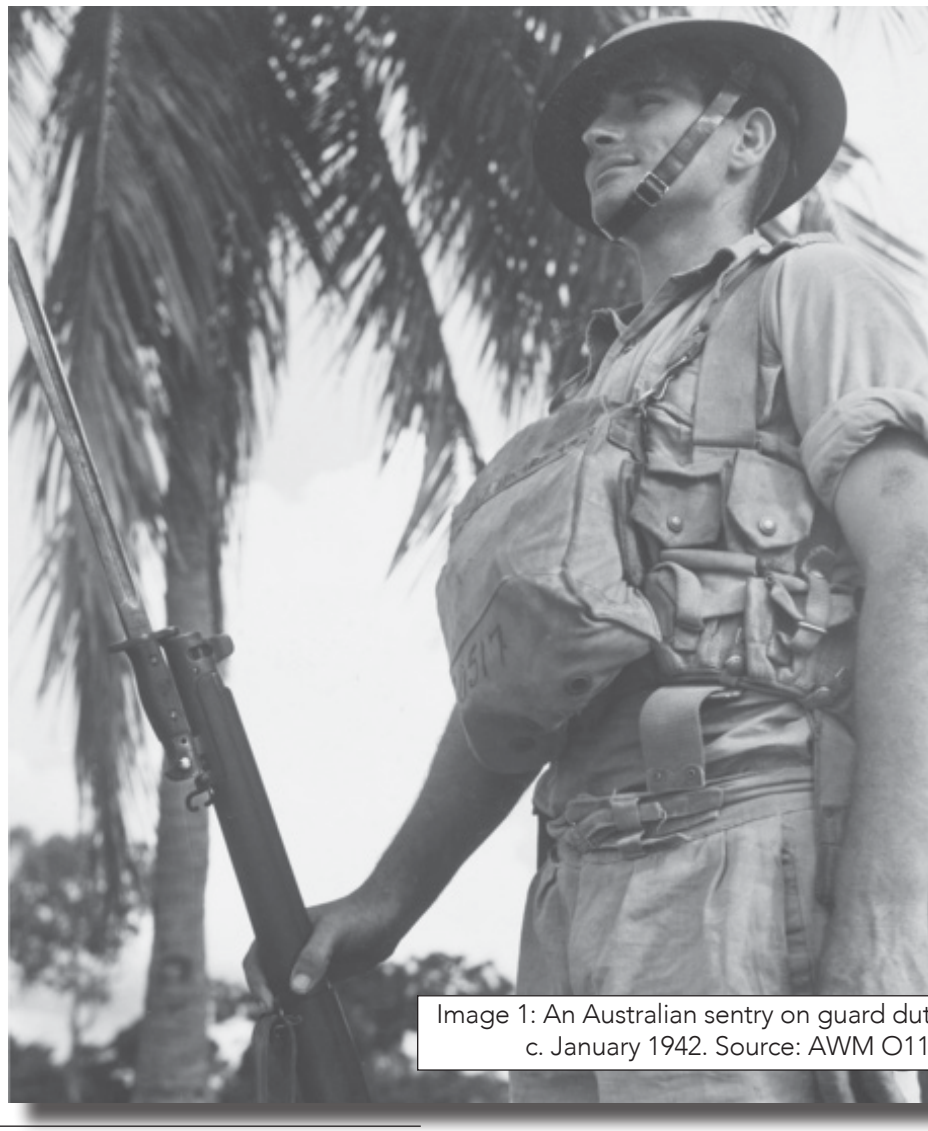


Image 1: An Australian sentry on guard duty at Darwin. c. January 1942. Source: AWM O11048.

7 Lewis and Ingman, *Carrier Attack Darwin 1942*, pp. 91-92.

8 James D. Rorrison, *Nor the Years Contemn: Air War on the Australian Front 1941-42*, Palomar Publications, Buranda, 1992, pp. 166 – 172.

## After the Raids

A historian declared that most aerodromes designed before the war were for peace time use, RAAF Station Darwin was a 'copybook' example.[9] Additionally, the 'scapegoat' of the whole raid on the 19 Feb 1942 was the RAAF and a stigma still exists.[10] Based on a scarcity of evidence, this assertion does not recognise the many airmen that stayed to protect the base. Bowie reported that after the first raid he and a corporal Guard left their position to find food to take back to their post. While doing this Bowie asked an officer (unknown) what was happening and subsequently learned that 'an order to evacuate the base had been given'. Both Guards, carrying food, headed back to the gun posts. Bowie further stated that he and the other sergeant Guards discussed the evacuation order and decided they would instead remain at their posts. According to Bowie, the collective agreement between all the 100 or so Guards was that they held more of a fighting chance in the pits with weapons when the expected invasion begun. As a result, all the Guards stayed in the weapon pits and waited, while others were leaving the base. Bowie also recalled that sometime later, Swan approached and stated that only Guards manning the .50 calibre Browning machine guns were to stay. However, Bowie reported that every Guard continued to remain on duty. During the second raid Bowie records that the RAAF Guards lost their first airman to direct combat with the enemy when Corporal R. 'Bob' Simmons died in a large explosion from a Japanese bomb.

There is further evidence that RAAF Guards continued to perform their duty throughout the bombing raids on RAAF Station Darwin. After the second air raid the guard room at the main gate still had Guards, Corporal Nelson (a middle-aged WWI veteran) and Leading Aircraftman Sinclair, on duty. These airmen remained at the main gate and reported watching civilians and military using any means of transport to go south along the main road. Leading Aircraftman Jones indicates that apart from the Guards at low level anti-aircraft pits and at the main gate the base was empty. For the next several weeks Clyde did gate guard at the main gate of the base and after that he was sent back out to the bomb dump position.[11]

Corporal Nelson reported that a day after the raids the main water line to the base was destroyed in the raid. Nelson described that he and several Guards begun building an improvised water line to the base using hollow steel posts from the destroyed fence. During this activity, Nelson recalled that a RAAF officer (unknown) admonished Nelson claiming that they were '…destroying Government property'. Rorrison stated that Nelson replied '…in a way that is not really what one can print'.[12]

---

9 Timothy Hall, *Darwin 1942: Australia's Darkest Hour*, Methuen Australia, Sydney, 1981, p. 89.
10 Hall, *Darwin 1942*, p. 157.
11 Clyde Jones to Alan and Jackie Giltrap, letter, 17 July 2001, original held by author.
12 Rorrison, *Nor the Years Contemn*, p. 190.

Image 2: RAAF guards in training, 20 January 1943. Source: AWM NWA0025.

Others report firsthand witness accounts of machine-gun posts being in continued operation at RAAF Station Darwin in the following weeks. In early March 1942, Sergeant C. Cugley (Guard) was posted to No 12 Squadron Darwin. As Cugley arrived at the RAAF station he recalled, 'I could hardly believe my eyes ... buildings destroyed, and aircraft burnt in destroyed hangers'. Continuing, Cugley indicated he was amazed that, 'the Guards [at the Station] were still handling the machine gun posts around the aerodrome'.[13] On 4 March a secret message was sent from RAAF Area Command Headquarters Darwin to the Air Board, which stated 'Noteworthy that 4 aircraft dispersed under cover concentration 8 .5 guns and 2 AA double Vickers guns in accordance recently issued paper on aerodrome defence. Larger percentage tracer and concentration guns in small area most desirable'.[14] This one message indicates the Guards protected the aircraft under the camouflage netting. At the start of March, the Lowe Commission was formed and met at Darwin. They were tasked with find out the lessons learnt from the attack and what could be done in the future. The Lowe Commission would be a clouded investigation in the events of 19 February 1942, one example is that the message above would never be handed over as evidence nor discussed in the Lowe Commission.

13 Findings and Further and Final Report - Commission of Inquiry on the Air-Raid on Darwin 19th Feb. 1942. Original. Mr. Justice Lowe, NAA A816, 37/301/293.

14 Passive Defence measures at RAAF Station. Policy 1941 – 1943', NAA A1196, 15/501/195.

**Lowe Commission**

On 5 March 1942, as Cugley observed a destroyed RAAF Station Darwin, the Lowe Commission Inquiry commenced with many witnessed were interviewed in the coming weeks. The transcripts reveal the views of the witnesses regarding RAAF airfield defence. Major General Blake stated that the aerodrome was 'hit hard', that 'the RAAF had underestimated the enemy' and described his earlier inspection of the station and the machine guns posts internally on the airfield. Lowe Commission counsel assisting, John Barry, K.C., also asked the senior naval officer based in Darwin, Captain Thomas, about the anti-aircraft defence of the RAAF station. Thomas replied that '... the aerodrome in the Darwin area is not protected by Army AA guns, and the aerodrome needs more AA protection'.[15]

On the same day, Officer Commanding NWA, Air Commodore Wilson, was interviewed. Wilson again outlined that the RAAF station had low-level anti-aircraft machine gun defence around the airfield. Wilson also pointed out that Griffith's idea of moving aircraft away from the station for servicing was a 'good idea' as these aircraft could not be attacked. He then described the defensive plan of the station being 'around the perimeter' as 'unsound'. However, he did support the grouping of machine guns at the southern end of the north/south runway. Additionally, Wilson stated, 'Ten guns in groups of two making 20 in all. American guns, which we obtained from the Americans in the Darwin area...all the .5 guns we had [were firing]'. In the interview, Wilson was asked what he found in his investigation of the attack on the station. In response he stated, 'The grouping of guns was most effective because the Japanese fighters [only] made one dive at the aircraft protected by group guns'.[16]

Four days later on 9 March 1942, Group Captain Scherger was questioned by the commission. Scherger outlined that after the first raid he drove around the aerodrome and noticed the three Hudson aircraft under the camouflage netting were undamaged. Scherger stated, '... these aircraft were under the protection of RAAF AA machine guns and they were under camouflage netting'. When the commissioner asked, 'The guns were a factor in saving the Hudsons?' Scherger replied, 'It must have been that factor'.[17]

Next, the commission asked about the training of officers and airmen. Scherger answered, 'I put the blame on the RAAF system because very few officers in the Air Force know anything about leading men'. He continued by outlining the training of airmen, 'Airmen are promoted because he is a good tradesman, not a leader ... We rather think men, being technical men, are not being properly employed unless they are employed full time on technical duty...the solution is

15 Lowe Report, NAA A816, 37/301/293.
16 Lowe Report, NAA A816, 37/301/293.
17 Lowe Report, NAA A816, 37/301/293.

infantry training'. The commission then asked about the men manning the low-level anti-aircraft machine guns. In response, Scherger handed the commission his proposal for the development of station defence squadrons and stated, 'I am in favour of an aerodrome defence arm of the Air Force, but all airmen need to be trained in infantry tactics'.[18]

On 20 March 1942, Wing Commander Griffith was interviewed. He outlined that he rewrote the defence scheme and organised for the transfer of the American machine guns. Additionally, he stated overwhelmingly that all machine-gun posts were manned and that he had spotters posted around the aerodrome. In describing the attack Griffith declared, 'A large number of zero[sic] fighters attacked the aerodrome using explosive bullets and, I believe incendiary bullets. The aerodrome defence guns maintained constant fire throughout [the attack]. As

Image 3: RAAF guards conducting bayonet practice, c. 1943. Source: AWM NWA0230.

18 Lowe Report, NAA A816, 37/301/293.
19 Lowe Report, NAA A816, 37/301/293.

a matter of fact, their conduct was very heartening, and I saw at least one aircraft hit and fly away very low'.[19]

Next, the commission questioned Griffith in relation to the confusion following the first raid, lack of leadership, rumours regarding orders to evacuate, and the manner in which RAAF personnel left the base following the attacks. The commission was seeking information on how rumours arose as to the order to leave and how airmen seemingly left on their own accord and by any means available. The exact wording of the question that followed was, 'These men [referring to those leaving the base] have had some military training – for instance, to march in threes?' to which Griffith replied, 'Yes, and the majority can slope arms and that sort of thing'. The commissioner then asked, 'Seeing you were going to evacuate temporarily the aerodrome – that was the substance of the rumour was it not – why not assemble all men in military fashion and march them out?' Griffith denied giving any order to evacuate, stated that Swan would have been responsible for such orders and organising parades, but that in his view a parade would have been dangerous in the circumstances. Griffith's response was to a pointed and direct question on whether the men could march in threes, in the context of airmen and officers leaving the base without direction or leadership. His one sentence response was not intended to be a summary of wider military discipline or training needs (which may have been lacking) or a reflection on airfield defence training (of the Guards), as commonly misunderstood by some authors and current serving members.

When Squadron Leader Swan was interviewed, he was asked if he observed the machine gun posts during the attack. Swan stated, 'They fired at the aircraft attacking, speaking personally - I consider the troops put up a good show against the dive bombers ... and all the gun posts were manned and firing'. The next question reverted again to the training and leadership of the RAAF, to which Swan indicated that, 'you could not make soldiers out of a man by giving him a uniform and the RAAF needs to train all personnel as infantrymen then as tradesmen'. Swan was asked, 'You have a lot of tradesmen?' He answered, 'Yes, who are not soldiers'. Swan's answer to the above question aligns with the view that airmen are not trained as soldiers. Then he states, 'I would like to amplify the fighting side [of the RAAF]. At present, we have only a certain number of men [Guards] who are set up to definitely man the machine guns and perform the different guard duties. Everyone else is a tradesman or non-technical airmen'.[22]

What is interesting in the files, is that the just released ABM No 5 Ground Defence (Issue No 2, 19 April 1942) was handed to the Lowe Commission in April 1942 as evidence that RAAF Station Darwin had an airfield defence policy. However, it was the ABM No 5 Station Defence Version 1 (Issue No 1, 1941) that had been

20 Hall, *Darwin 1942*, pp. 84-85.

21 Rorrison, *Nor the Years Contemn*, p. 66.

applied by Eaton and Griffith prior to and at the time of the bombing. In October 1941 Scherger and other senior officers produced a 52-page ABM No 5 Station Defence, which contained station defence squadrons proposed for each RAAF Station. The April 1942 ABM No 5 Ground Defence policy that was ultimately released removed station defence squadrons and was only a five-page document.

## Concluding comments

Overall, the evidence clearly demonstrates that despite limited resources and support RAAF Station Darwin had an aerodrome defence plan and had trained airmen manning machine guns in low-level anti-aircraft posts, in accordance with RAAF obligations and responsibility under interservice agreements and the ABM of the time. RAAF station commanders saw the need for increased and effective airfield defence and consistently made requests for more resources and equipment. In the Lowe investigation Scherger described the Guards as 'magnificent, and it seems odd indeed that they were not recognised'. Additionally, Scherger remembered that there were excellent NCOs and airmen who showed not the least sign of panic and who, anticipating a Japanese landing, emphatically expressed their intention of fighting. The Air Board's reaction to this event, and Scherger's description, expressed in colloquial terms was, 'You don't give gongs for a shemozzle'.[23]

This overview of the airfield defence of RAAF Station Darwin demonstrates that the ABM was followed by senior commanders, although consistently under-resourced. Airmen of the Guard mustering commenced permanent duty manning gun posts in October/November 1941 and stayed on the airfield during and post the attacks of February 1942. The grouped Vickers and Browning machine guns at the southern end of the runway saved the Hudson aircraft under the camouflage netting.

The situation at RAAF Station Darwin on 19 February 1942 requires a new contextual investigation. Records show that many airmen from the station did evacuate, under order or rumour, in a disorderly fashion, using any transport available to leave the base. However, the same records and by primary resources, it is now indisputable that RAAF airmen of the Guard mustering engaged the enemy aircraft. These Guards used initiative, fervour and bravery to protect their RAAF station, assets and personnel and did not evacuate the base despite being advised of orders to do so. These Guards witnessed the evacuation of the base, and rightly decided to stay in their posts with the firm belief they were to face an enemy invasion.

22 Lowe Report, NAA A816, 37/301/293.

23 Douglas Lockwood, *Australia Under Attack*, New Holland, Sydney, 2013, p. 167.

# Floatplanes used by the Australian defence forces

Michael Firth[1]

In looking at the floatplanes used by the Australian defence forces, it is important to have a definition of a floatplane as opposed to a sea-plane. In this article a floatplane is considered to be one of the three main types of seaplanes. For the ease of clarity, the definitions to be used are as follows:

Seaplanes are planes which can land, float or take off from water and the types include floatplane, flying boat and amphibian.

Floatplanes use pontoons or floats instead of wheels to operate on water, like the Supermarine S.6B Racer which won the Schneider Trophy in 1931 and is said to have influenced the design of the Supermarine Spitfire

Flying boats have boat-like hulls which are used for buoyancy on the water, a famous flying boat was the Boeing Model 314 'Clipper' flying boat, which was doing trans-Atlantic and trans-Pacific flights prior to American entry into the Second World War.

The amphibian seaplane was a type of flying boat and has retractable wheels so it could operate on land as well as water. An example of this is the Consolidated PBY Catalina which was widely used by the United States forces and others in the Second World War.

The sea-planes used by the Australian forces which fall under the definition of float-plane, as above, are as follows:

**Maurice Farman Seaplane CFS7 (1914-1917)**

The Maurice Farman Seaplane CFS7 is the floatplane version based on the Maurice Farman MF.11 reconnaissance/training biplane designed by Farman Aviation Works in France. The aircraft was described as a pusher type with the engine and propeller situated behind the cockpit holding the crew members. The number CFS7 refers to the serial number given to the aircraft by the Central Flying School (CFS) at Point Cook, Victoria. This aircraft was said to be the first floatplane in Australia and was donated to the CFS with the offer being accepted by the government at the start of September 1914. It was purchased originally by Mr Lebbeus Hordern, of Anthony Hordern & Sons, in April 1914 and he donated it to the CFS on the outbreak of war.

1 Michael Firth is a member of the Western Australian branch of the MHSA.

With the declaration of war, the aircraft was crated up along with a BE2a and shipped to Rabual on the HMAS *Una*. The plane left Australian shores in November 1914 returning in January 1915. The planes were never used and remained in their crates the whole time. In June 1917 it was converted to a land-based plane for the cost of £40/14/-. The aircraft was originally supplied with a 70 HP Renault engine, but this was changed to an Australian-built Renault engine in July 1916. The last recorded mention of the plane was in June 1917.

The Farman planes served in Europe on the Western front and in the Middle East being operated by many allied countries including Great Britain, France, Italy and Australia. Australia also acquired several other MF.11 land-based planes including examples from the British Indian Army.

The main Australian operators of the MF.11 planes, all variants were:

No. 5 (Training) Squadron AFC in the United Kingdom
Mesopotamian Half Flight
Central Flying School AFC at Point Cook, Victoria

Description:

Two-seater biplane seaplane (pilot and observer/gunner)

Power Plant:

1x 52 kW (70 hp) Renault eight-cylinder VEE engine

Armament:

None

Specifications:

Wingspan: 16.15 m
Length: 9.38 m
Wing area: 52.11m²

Performance:

Maximum speed: 106 km/h
Range: 350km (648nm)
Service ceiling: 3,800 m

Image 1: Maurice Farman seaplan imported by Lebbeus Hordern. Source: SLNSW a128591h.

**Sopwith Baby (1917)**

The Sopwith Baby was produced by Sopwith Aviation with the floatplane's first flight in September 1915 and was adopted by the Royal Naval Flying Service. Over 286 of this type were produced by several manufacturers with some units being made under licence in Italy. The floatplane allowed naval vessels to provide information by over-the-horizon recognisance after being launched from the ship and then being recovered by a crane for future use.

The Australian Navy used a single Sopwith Baby flown from HMAS *Brisbane* between April and June 1917 in operations in the Indian Ocean. The HMAS *Brisbane* was searching for the German raider SWS *Wolf*. The Sopwith Baby had been loaned to the Brisbane from the sea plane carrier HMS *Raven II*. When the *Brisbane* returned to Australia in June 1917, it returned the Sopwith Baby, its pilot and maintenance crew, to the *Raven*. The *Brisbane* did not locate the *Wolf*, which returned safely to Germany early in 1918, but it was the first time an aircraft had operated from a RAN warship. In the future, the majority of planes used were of the flying boat type.

The Sopwith Baby was a single-seater floatplane used by the RNAS from 1915 and was also known as the Admiralty 8200 Type. The plane was a development of the two-seat Sopwith Schneider which was a military development of the civilian sports race version from the Schneider trophy racer. Its main role was as a single-seat scout and bomber biplane seaplane, operating from cruisers, seaplane carriers, naval trawlers and minelayers.

Description:
Single-seater scout and bomber seaplane
Power Plant:
1x 82 kW (110hp) Clerget Type 9B Rotary Engine
Armament:
Guns: 1x Lewis machine gun, bombs: 2 x 65 lbs
Specifications:
Wingspan: 7.82 m
Length: 7.01 m
Wing area: 22 $m^2$
Performance;
Maximum speed: 160 km/h (87 knots) at sea level
Range: 360 km (194 nm)
Service ceiling: 3,000 m

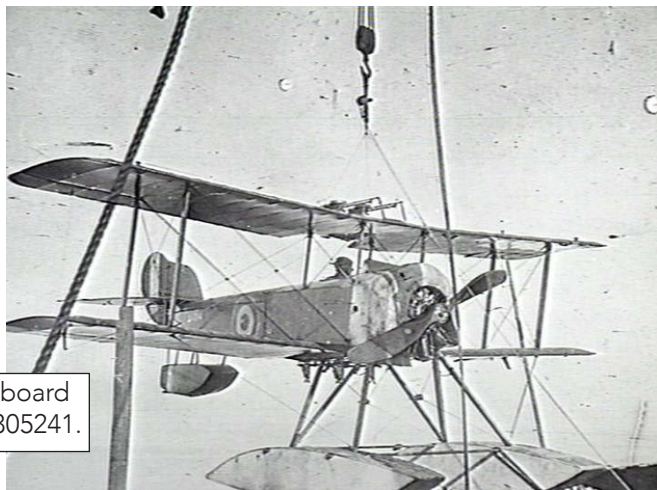


Image 2: Sopwith Baby being hoisted aboard HMAS *Brisbane*, c. 1917. Source: AWM 305241.

**Avro 504L (1920-1921)**

The Avro 504L was the floatplane version of the Avro 504 biplane which was built by the Avro Aircraft Company the first 504 being flown in January 1910. Over 11,300 aircraft were produced between 1913 and 1932, in over 20 variants and were produced under license in Japan, Russia and Denmark. The 504L floatplane is a post-war version based on the 504K version. The RAAF received 20 of the 504K biplanes in 1919 from RAF stocks. A total of 31 504L floatplanes were built with 25 of these planes being converted from 504K trainers.

Two of the 504L float plane versions were purchased by the RAN and they were assigned to the ships HMASs *Australia* and *Melbourne* for trials in Australian and New Guinean waters. The trails showed several faults with the aircraft, including lack of power under tropical conditions. With the formation of the RAAF in 1921, the navy handed all its planes over to the newly formed air force. By this time the navy had decided to purchase the Fairey IIID instead of the Avro 504L. The 504L used by the RAN had the British serial numbers A3-46 and A3-47.

The 504L was also used by Chile, Japan, Canada, New Zealand and Russia, using both military and civilian versions. As a training aircraft it was eventually replaced in British service by the Avro Tutor biplane series. During the 1920-30's, the 504 series aircraft was used by many 'barnstorming' touring groups.

Description:
Two-seater fighter bomber/trainer
Power Plant:
1x 130 hp Clerget engine
Armament:
None
Specifications:
Wingspan: 10.97 m
Length: 8.97 m
Wing area: 31 $m^2$
Performance:
Maximum speed: 153 km/h (83 knots) at sea level
Range: 400 km (216 nm)
Service ceiling: 4,900 m

Image 3: Avro 504L.
Source: Sea Power Centre.

**Fairey IIID (1920-1929)**

The Fairey III was produced by the Fairey Aviation Company with the first prototype flight of the Fairey III reconnaissance biplane in September 1917. The plane was developed in response to a request from the Royal Navy for a new type of carrier-based reconnaissance/bomber. Over 980 planes of this model were produced with the first units seeing combat in 1918. It went on to provide sterling service during the interwar period being finally retired in 1941. There were five main variants with the IIIA and IIIB seeing service in the First World War and the IIIC, IIID and IIIF being post-war variants. Over 220 planes of the IIID were produced. The Fairey III was a very successful military general-purpose biplane of the 1920s.

Australia decided to initially purchase six Fairey IIID Mk I twin float seaplanes in 1921. The planes were destined to be part of the RAN air service with the planes being issued with the serial numbers ANA-1 to ANA-6. Once the RAAF was formed, the planes were handed over and the serial numbers were changed to be AN10-1 to AN10-6. A couple of the planes were used for survey work along the East coast during 1924 and 1925 including the photographing of the Great Barrier Reef. During this period a couple of the planes were lost due to accidents, so the remainder were relegated to training roles. The last plane was phased out of service in 1929.

The Fairey IIID was considered a popular airplane but it was difficult to maintain. It was known for its loss of performance in tropical and sub-tropical regions. The Fairey was a two-seater version being produced with either the Rolls Royce Eagle or Rolls Royce Napier engines. The model after the IIID was the Fairey IIIF which went through seven marks depending on its construction, the type of engine and whether it was a two or three-seater.

Description:
Two-seater General-purpose reconnaissance biplane
Power Plant:
1x 272 kW (365 hp) Rolls Royce Eagle VIII twelve-cylinder broad-arrow liquid-cooled engine
Armament:
1x Lewis machine gun in observer's rear cockpit; Bombs two x 230lb Specifications:
Wingspan: 14.05 m
Length: 11 m
Wing area: 46.45 m²
Performance:
Max speed: 163 km/h
Range: 885 km (478 nm)
Service ceiling: 5,029 m

Image 4: RAAF Fairey IIID A-10, c. 1924.
Source: AWM P00589.005.

**Breda Ba.25-I (I for Idro) (1943)**

The Breda Ba.25 was the main basic trainer for the Italian air force during the 1930s being produced by Societa Italiana Ernest Breda from 1931. Originally designed as a single seater it was changed to a two-seater biplane trainer, remaining in production until 1938. There were over 750 planes produced in eight variants with the floatplane variant being called the Ba.25-I. Of this variant, 42 planes were produced. The floatplanes were mainly used by the Italian air force, but several units were flown by the Paraguayan air force.

During the battles in the Middle East, the allied forces searched to locate aircraft which could be returned to an airworthy state. The Australian squadrons involved in this included Nos 3 and 450 Squadrons RAAF. It was No. 3 Sqn that located a Ba.25-I in the port of Augusta on Sicily. The floatplane had been converted back to a single-seater configuration and was given the squadron code 'CV'. The squadron used the plane for a short time before they handed it over to the Free French Forces.

Description:

Italian Two-seater military basic trainer

Power Plant:

1x Alfa Romeo D2 9-cyl. air-cooled radial piston engine, 180 kW (240 hp)

Armament:

None

Specifications:

Wingspan: 9.98 m

Length: Breda 25 Idro – 9.1 m

Wing area: 25.0 $m^2$

Performance:

Maximum speed: 205 km/h (111 kn)

Range: 500 km (270 nm)

Service ceiling: 7,500 m

Image 5: Breda Ba.25-I, Sicily, c. 1943.
Source: AWM MEC2327.

**Vought OS2U-3 Kingfisher (1948)**

The Vought OS2U Kingfisher was designed as an observation floatplane, being launched by catapult from United States battleships and cruisers. The Kingfisher first flew in 1938 and by the end of the production run, over 1500 planes had been produced in six different variants. The OS2U-3 variant was the main wartime variant being was used in float plane and land-based forms. The plane was flown by several countries including the Royal Netherlands Air Force in the Dutch East Indies. The 18 planes obtained by the RAAF came from aircraft originally destined for the Dutch East Indies but diverted to Australia after the fall of Java in 1942.

Initially the planes were allocated to Seaplane Training Flight (later 3 OTU) for training flying boat pilots, but by 1943 they had been allocated to No. 107 Squadron RAAF. The roles still included flying boat pilot training but had been expanded to include convoy escort and anti-submarine duties. The squadron was located at RAAF Base Rathmines, NSW, until it was disbanded in 1945. The remaining planes were transferred to RAAF Base at Lake Boga, Victoria for storage or disposal.

In 1947 one plane, number A18-13, participated in the 1947-1948 Australian National Antarctic Research Expedition. It was embarked onto the expedition vessel HMAS *Wyatt Earp*, after being re-painted yellow. During February and March 1948, the plane made several flights including operating off the Ninnis Tongue Glacier. After the expedition returned at the end of March 1948, the Kingfisher was returned to storage at Lake Boga before being sold off in 1953.

Description:

Two-seater observation/spotter/reconnaissance seaplane

Power Plant:

1× Pratt & Whitney R-985-AN2 Wasp Junior 9-cylinder air-cooled radial piston engine, 450 hp (340 kW)

Armament:

Guns: 2 x .30 in (7.62 mm) M1919 Browning machine guns (one on flexible mount for observer); bombs: 650 lb (295 kg)

Specifications:

Wingspan: 10.940 m

Length: 10.241 m

Wing area: 24.33 $m^2$

Performance:

Maximum speed: 275 km/h (149 kn)

Range: 1,461 km (789 nm)

Service ceiling: 5,500 m

Image 6: Vought Kingfishers, Lake Boga, August 1942. Source: AWM 150454.

This is just a brief look at the floatplanes used but most of the other seaplanes used by the Australian defence forces were flying boats or amphibian seaplanes. In writing this article the main aim was to only use internet searches and websites for the research information, as can be seen by the extensive list of web-sites below. The internet today holds a great deal of information from a range of sites with authoritative backgrounds in which information can be checked and used for reference.

**Websites (accessed December 2021)**

http://www.adf-serials.com.au/1a10.htm
http://adf-serials.com.au/breda25.htm
http://www.adf-serials.com/cfs.htm
https://aeropedia.com.au/content/breda-ba-25/
https://aeropedia.com.au/content/fairey-iiid/
https://aeropedia.com.au/content/farman-mf-11-hydroplane/
https://aircraft.fandom.com/wiki/Vought_OS2U_Kingfisher
http://www.aviastar.org/air/england/supermarine_s-6b.php
https://avro504.org/avro-504-history/
https://www.boeing.com/history/products/model-314-clipper.page
https://www.britannica.com/technology/seapflyiung
http://britishaviation-ptp.com/avro_504k.html
https://collections.slsa.sa.gov.au/resource/PRG+280/1/8/166
http://www.flugzeuginfo.net/acdata_php/acdata_sopwithbaby_en.php
https://www.militaryfactory.com/aircraft/detail.php?aircraft_id=461
https://www.militaryfactory.com/aircraft/detail.php?aircraft_id=920
https://www.militaryfactory.com/aircraft/detail.php?aircraft_id=1060
https://www.navy.gov.au/aircraft/avro-504l
https://www.navy.gov.au/aircraft/fairey-iiid
https://www.navy.gov.au/aircraft/sopwith-baby
https://www.navy.gov.au/aircraft/vought-os2u-kingfisher
https://naval-encyclopedia.com/naval-aviation/ww2/us/vought-os2u-kingfisher.php
https://www.navyhistory.org.au/australian-naval-aviation-part-1/2/
https://warmachinesdrawn.blogspot.com/2016/11/avro-504l.html
https://weaponsandwarfare.com/2017/06/07/maurice-farman-m-f-11/
https://en.wikipedia.org/wiki/Avro_504
https://en.wikipedia.org/wiki/Breda_Ba.25
https://en.wikipedia.org/wiki/Farman_MF.11
https://en.wikipedia.org/wiki/List_of_aircraft_of_the_Royal_Australian_Air_Force
https://en.wikipedia.org/wiki/List_of_aircraft_of_the_Royal_Australian_Navy
https://en.wikipedia.org/wiki/List_of_Australian_Army_aircraft
https://en.wikipedia.org/wiki/Vought_OS2U_Kingfisher

# A Writer's View on Studying Second World War History on Stamps

Chris Yardley[1]

Pursuing my fascination in trying to determine the message the designers of postage stamps are sending and my interest in military history, being in Covid lockdown has not been too bad.

Additionally, my reading of recent philatelic news has been positive and it would appear that people have found the time and renewed passion for stamp collecting during lockdown and are spending money through public auctions – all good. My research is enabling me to define the general observation that you can find postage stamps to illustrate almost any subject you care to investigate.

At the end of 2019 I self-published through the good offices of Thorpe-Bowker of Melbourne and IngramSpark Publishers Australia my book:

*A Great War Study: The Centenary commemorative postage stamps 2014-2018.*

During 2020 and 2021 I have completed and self-published through Balboa Press:

*The Second World War: representing human conflict on postage stamps.*

I have learnt through the first book the necessity to use multiple sources to find all the postage stamps issued across the world. My interest has taken me beyond the constraints imposed by some of the 'stamp cataloguers' of the world whereby they will only recognise the stamp issues of postal authorities who have had the stamp issue generally available over the post office counter in the country of origin for at least six months and that those stamps are never sold at a discount. My problem with that is that it excludes stamps issued by a third party as a revenue earner for the country it represents. I'll go further to state that the third party will be seeking to optimise revenues and will be producing attractive designs within subject areas they expect to sell as collectables and/or souvenirs in addition to being used to send mail through the postal system. I believe that all postage stamps reflect the

1 A lifelong stamp collector, Chris was a computer hardware and systems salesman until he retired in 2005, expecting then, to have time to get his collection in order. Instead, he recognised a niche whereby he uses his stamps to illustrate and develop historical themes. He has written previously for Sabretache and contributes a monthly article to *Le Grognard*, the newsletter of the ACT Branch of MHSA and other relevant journals. He is the author of *The Second World War: representing world conflict on postage stamps.*

living history, albeit changing, of the subject that they choose to issue.

I deduce that some third-party issuers do not necessarily want to sell their entire stamp printings at the specified time of issue and hold stock back for future sale – why not if they accept the issue is not just for everyday use to send mail? My basis for this assertion is the evidence through Ebay, for example, when unknown older material appears – often offered as at a discount. Black Friday 2021 saw a large number of unexpected issues sponsored by a dealer in Cornwall I did not know of until that day.

I have taken a whole world approach to this project. Overall, I have looked at the world as six regions – defined in my index. I have found 10,000 stamps that specifically relate to the Second World War from 215 postal authorities.

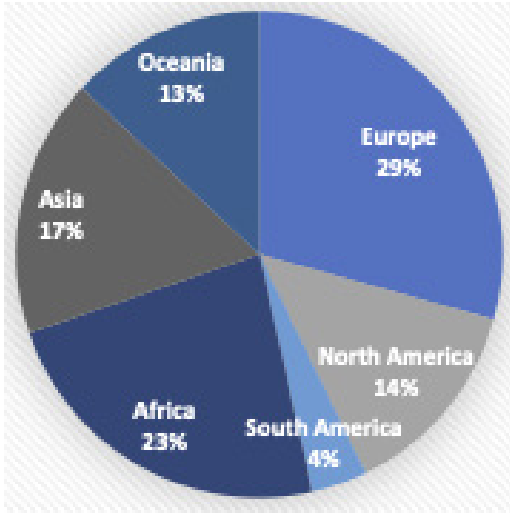


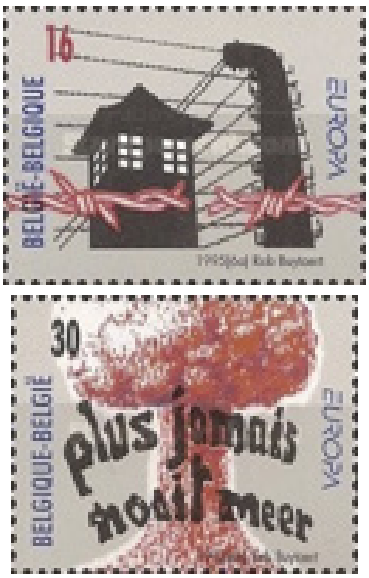

Image 1: The geographical spread of the 215 postal authorities who have issued Second World War-specific stamps over the period 1939-2021.

**Europe: A theme for a continent**

I anticipated every European country would have been influenced by the war although I had in mind the maxim that the winners celebrate whereas the losers might want to forget. Several European postal authorities, in fact, waited until the EUROPA (the European Organisation of Postal Authorities) initiative of 1995 to commemorate the 50th anniversary of the end of the war. The spread of design/messages from the 49 contributing European countries are a future project but a few specific examples are shown below: EUROPA recommend an annual theme for its members, but this seems to me to be of a 'class' classification unique in military historical terms.


Image 2: Slovenia, 1995. 'Peace and Freedom'. The 50th anniversary of the end of the Second World War.

I would describe the Slovenian stamps (Image 2) as reflecting an independent country (from 1991), after the split-up of the Soviet Union. Engraving designer Rudi Španzel visualised the theme of the ravaged country by the skeleton during the conflict and finally a sense of freedom. The two stamps were issues se-tenant, (two images side-by-side) and as shown as a miniature sheet each stamp included twice with a four-language explanation of the context.

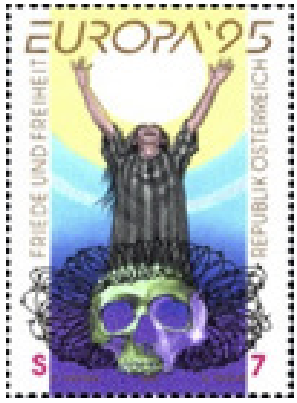



Rob Buyloert, the designer, uses the symbolism of a barbed-wire enclosure and a stylised atomic explosion to tell his Belgian story.

Image 3: Belgium, 1995. 'Peace and Freedom'. The 50th anniversary of the end of the Second World War.


Image 4: Czech Republic, 1995. 'Peace and Freedom'. The 50th anniversary of the end of the Second World War.

The Czech Republic used the traditional intaglio print convention, faces and flowers to symbolise the chosen theme.




Austria has used a single image to tell its story, incorporating a skull enclosed within a halo of barbed wire and the exultation of a prisoner released from bondage. The Holocaust is a repeated theme of the Europa issue.

Image 5: Austria, 1995. 'Peace and Freedom'. The 50th anniversary of the end of the Second World War.

A war memorial is repeated on two different coloured images. The countries of the post-Soviet era often use the official memorial as images.


Image 6: Belarus, 1995. 'Peace and Freedom'. The 50th anniversary of the end of the Second World War.


Image 7: Germany, 1995. 'Peace and Freedom'. The 50th anniversary of the end of the Second World War.

As a member of the EUROPA community, Germany has envisaged the theme through a photograph of retreating soldiers and the symbol of the larger European Community to commemorate the end of the war.


Image 8: Germany, 1995. Two miniature sheets issued outside the EUROPA mandate commemorate The 50th anniversary of the end of World War II, and The 50th Anniversary of the Liberation of the Concentration Camp Prisoners. It is historically interesting to note that the locations of the camps are noted.

**North America**

One of the foundation postage stamp issues that prompted my book were the miniature sheet/maps each including ten definitive postage stamps of the US Postal Service 1991-1995 telling the United States story. The detail on the maps, showing the geographical emphasis of the five years of the war, are really too small to follow, but the stamp images (50 in all) describe the US perspective 50 years after the events related.


Image 9: United States, 1994. The fourth of five historical/philatelic issues recognising the events of The Second World War during the 50th year anniversaries of those events.

## South America

Just eight countries post have responded to the Second World War. To my mind the most interesting acknowledgement is from Columbia.

Columbia was able to maintain its sovereignty throughout the war, as well as avoid sending troops into battle. The country ceased diplomatic relations with the Axis powers in December 1941, following the Japanese bombing of Pearl Harbor. As the war ended Columbia overprinted three of their own stamps with the profiles of the Allied leaders (Stalin, Roosevelt and Churchill).

Uruguay declared itself neutral in 1939, but like Columbia overprinted four of its own stamps to declare the Allied Victory.

Image 10: Columbia, 1945. The political leaders of the Allied Nations in the Second World War.

## Africa

If I have learned anything from this study, it has been the influence of the French colonial system in Africa and Oceania, such as the Central African Republic, Chad, Madagascar and Senegal. French colonial stamps were influenced from France and designs were consistent across the colonies. The stories represented on their stamps are consistent, the messaging disciplined and controlled, and I perceive that the independent countries they have become still use stamp images to explain their place in the world – and make revenue through the quality of the design and volume of material.

## Asia

The countries of Asia became very much involved in the Second World War with the December 1941 Japanese attack on Pearl Harbor and the plans for the Greater East Asia Co-Prosperity Sphere. Existing stamps were overprinted by the occupiers – letting stamp users know who was in control.


Image 11: Straits Settlements (Singapore) 1942. Overprinted "DAI NIPPON – 2602 – MALAYA. (top), Overprinted in Japanese (bottom).

## Oceania

Within Oceania the Marshall Islands issued two 'histories' of the war to commemorate the 50th and 70th year anniversaries. The first set graphically illustrate key events through 1939 to 1945 in 156 images. The second set highlights the United States leaders on five miniature sheets each describing elements of the war year by year. The following are a sample showing the integrity of the stamp issue and visual impact.

What I found particularly useful in viewing the Marshall Islands' issues sequence of stamps has been to appreciate the breadth of Allied activities being undertaken.


Image 12: Marshall Islands, 1991. The 50th anniversary of the evacuation of Dunkirk (1940).


Image 13: Marshall Islands, 1993. The 50th anniversary of the Battle of the Bismarck Sea (1943).


Image 14: Marshall Islands, 1994. The 50th anniversary of the Allied landings in Normandy (1944).


Image 15: Marshall Islands, 1994. The 50th anniversary of General Douglas MacArthur's Return to Philippines.

**Eighty years later the Second World War stories are still relevant**

The world's postal authorities, and their agents, watch the calendar when planning future stamp issues, particularly anniversaries. Recent issues reflect the revenue enhancing, souvenir-oriented appeal of modern design incorporating a service fee regimen that provides both local and international service fees within an issue.


Image 16: Marshall Islands, 2014. The 70th anniversary of World War II (1944).

# Fuengirola: The Spanish Ulcer

## Andrew Wilson

The Battle of Fuengirola was a relative sideshow when considered in the broader scope of the Peninsular War but remains conspicuous for two reasons. It is the second of only three occasions where the British military faced Polish troops on the battlefield, and was a significant defeat for a numerically superior British force.[2] It may have been for these reasons that the battle was omitted from British medallic recognition and largely from historiography.[3]

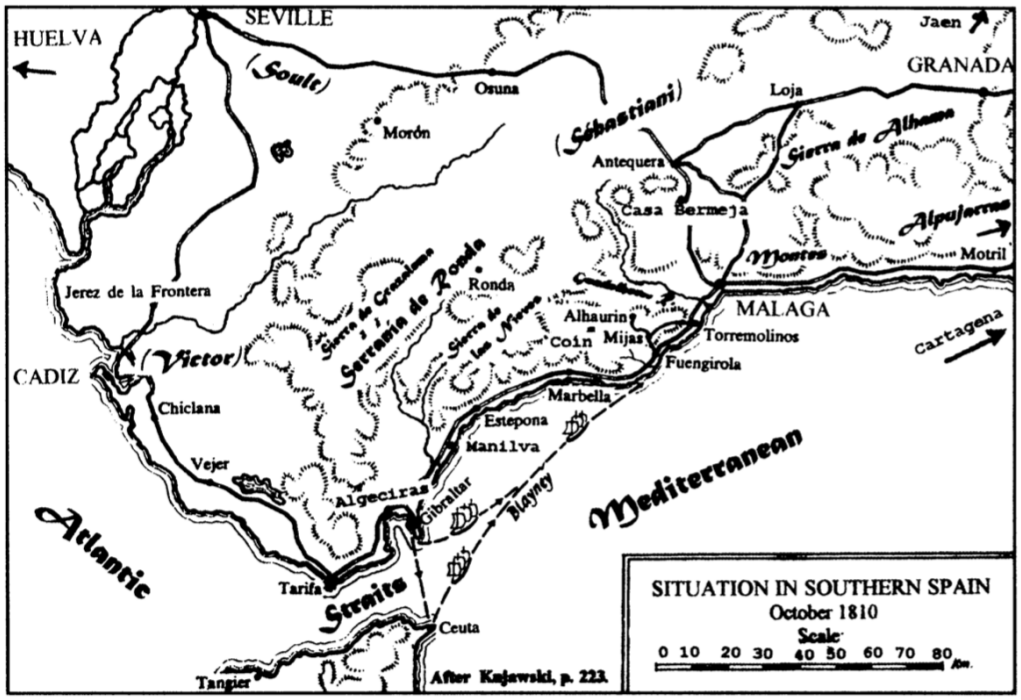



Image 1: Map of Fuengirola. Source: Kujawski M. Z bojow polskich w wojnach Napoleonskich: Maida Somosierra-Fuengirlo-Albhuera, 1967.

1 Dr Andrew Wilson is a medical practitioner based in Queensland who has had an interest in military history since childhood. His passion for phaleristics is derived from the tangible link that medals provide with key historical events. With his focus shifting towards early 19th Century campaign medals, he enjoys writing academic articles both about the recipients of medals as well as the actions that they represent. Dr. Wilson is a published member of the Orders and Medals Research Society, and is active amongst the medal collecting community in Australia.

2 C Osman, *A History of the Peninsular War Volume III*, Clarendon Press: Oxford, (1902); G Nafziger and M Wesolowski, *Poles and Saxons of the Napoleonic Wars*, Emperor's Press: Chicago, (1991).

3 L Gordon, *British Battles and Medals*, Gale & Golden: Aldershot, (1962), p. 127.

The Treaty of Fontainebleau, signed on the 27 October 1807, committed Spain to defeating the House of Braganza in Portugal, a country whose deeply-rooted ties to Great Britain prevented her from taking part in Napoleon's blockade of that latter nation.[4] Subsequent to the collapse of the Spanish government and the abdication of two kings, Joseph Bonaparte's installation on the Spanish throne in August 1808 heralded the beginning of a period of French domination.[5] With the bombardment and subsequent invasion of Andalucia on the 20 February 1810, General Horace François Bastien Sebastiani de La Porta (General Sebastiani) made short work of the disorderly Spanish Army of the Centre opposing his southern reach.[6] The stage was set for an Iberian war on two fronts.

It was the valiant defence of the ancient port city of Cadiz that upheld resistance in the face of overwhelming odds.[7] From 5 February 1810, Cadiz established itself as French marshals Victor's and Soult's Spanish ulcer, the source from which Spanish cuadrillas and partidas mercenaries based their strength.[8] Following two abortive insurgent operations masterminded by General Luis Roberto de Lacy and supported by redcoats, a plan was formulated to draw French forces

Image 2: Lord Andrew Blayney's sword. Source: Muzeum Narodowe w Krakowi.

4 BH Stein, SJ Stein, *Crisis in an Atlantic Empire: Spain and New Spain, 1808-1810*, JHU Press: Baltimore, (2014), p. 15; Mace M, Grehan J, *British Battles of the Napoleonic Wars 1793-1806: Despatches from the Front*, Pen & Sword Books: Barnsley, (2013), p. 17.

5 EJ Goodman, *Spanish Nationalism in the struggle against Napoleon*, Cambridge University Press: Cambridge, (1958), pp. 330-334.

6 Marshal Sebastiani. Obituary', The Gentleman's Magazine, John Bowyer Nichols and Son: London (1851), p. 537; B Park. The New World: Extra Series, Issues 5-105, Winchester: New York, (1842); TM Barker, 'A Debacle of the Peninsular War: the British-led amphibious assault against Fort Fuengirola 14-15 October 1810', *Journal of Military History*, 64 (2000), pp. 9-12.

7 D Gates, *The Spanish Ulcer: A History of the Peninsular War*, Da Capo Press: Boston, (2001), pp. 7-8.

8 AJM Rocca, *Memoires sur la guerre des Français en Espagne*, Jules-Guillame Fick: Paris (1887), p.85.

away from Malaga in preparation for another offensive there to relieve Cadiz. This amphibious assault, it was postulated, would be conducted by some 20,000 Spanish rebels but would hinge on a diversion taking Sebastiani's IV Corps away from their intended landing ground. The lynchpin would lie at Fuengirola.

The city of Fuengirola, or Suel as it was known in Arab times, became a Moorish bastion in conquered Al-Andalus. Suel or as it later became known, Suhayl, was fortified by Abd al-Rahman III the 1st Caliph of Cordoba to protect his kingdom's southern approach. The Castle of Sohail was erected in AD 956, and stood the test of the Christian Reconquista during the Middle Ages when the surrounding town was sacked. From hereon, Castillo Sohail guarded the approach to the Spanish kingdom from Fuengirola, overlooking the Alboran Sea (Image 1).

Image 3: Battle of Fuengirola by January Suchodolski. Source: Polish Army Museum.

During the Peninsular War, Fuengirola and Sohail Castle were used as a French depot from which to besiege General Lacy's garrison at Marbella to the southeast. This latter fortress, it was postulated by the British Gibraltar commanders including Lord Andrew Blayney, held the key to a British-led insurrection in Andalucia. Patchy intelligence suggested revolutionary sentiments amongst the Spanish in Malaga, and this in combination with a fallacious overestimation of the region's guerrillas, planted the seeds for a disastrous plan. Blayney, the capable commander of the 89th Foot, sought to launch an amphibious assault on Fuengirola in order to draw Sebastiani's forces from Malaga and Marbella. Having succeeded in his diversion, Blayney would rendezvous with Spanish irregulars and fight his way inland, whilst landing troops at Malaga and inspiring a revolution in situ. Although Blayney was

quoted as mistrustful of Spanish intelligence, perhaps his military ambition clouded his judgment, for he placed great faith in his Spanish allies to provide a fulcrum for his invasion.

During the latter part of 1810, 150 men from the Duchy of Warsaw garrisoned Sohail Castle. This unlikely French ally was derived from the Prussian territories ceded to France as terms of the Treaty of Tilsit.[9] Captain Franciszek Mlokoosiewicz commanded the Poles of the 4th Infantry Regiment, with two 16-pounder and two 2-pounder cannons manned by only three Spanish veteran gunners at his disposal.[10] To the castle's west lay higher ground, but to its seaward east, Castillo Sohail commanded an impressive position over the waterline.
Chosen for the landing were the 353 soldiers of the 2nd Battalion of the 89th Foot, 932 soldiers of the 82nd Foot, 65 men of the Royal Artillery, 640 men of the Imperial Toledo Regiment, and 516 German, Italian, Polish and French riflemen many of whom had defected. This assorted contingent of approximately 2,500 men were supported by a significant naval contingent consisting of HMS *Rodney*, HMS *Topaze*, the Spanish ship *El Vencedor*, HMS *Onyx*, HMS *Sparrowhawk*, HMS *Rambler*, HMS *Encounter* and six gunboats.

On 11 October 1810, the 14-gun brig-sloop HMS *Rambler* accompanying her sister ship, the 32-gun HMS *Topaze*, set out from Gibraltar with the 89th Foot and a band of deserters aboard two transports. Due to poor organization, unfavourable weather conditions and the decrepit El Vencedor being withdrawn from the operation, the expeditionary force did not set sail until 1130hrs on Friday, 12 October.

First, HMS *Rambler*, 'made sail on shore to reconnoiter the Coast', whose logbooks hint at Bayley's unpreparedness. Bayley's plan was to land his forces southwest of Castillo Sohail at the Cala del Moral. Hilly terrain lay between this inlet

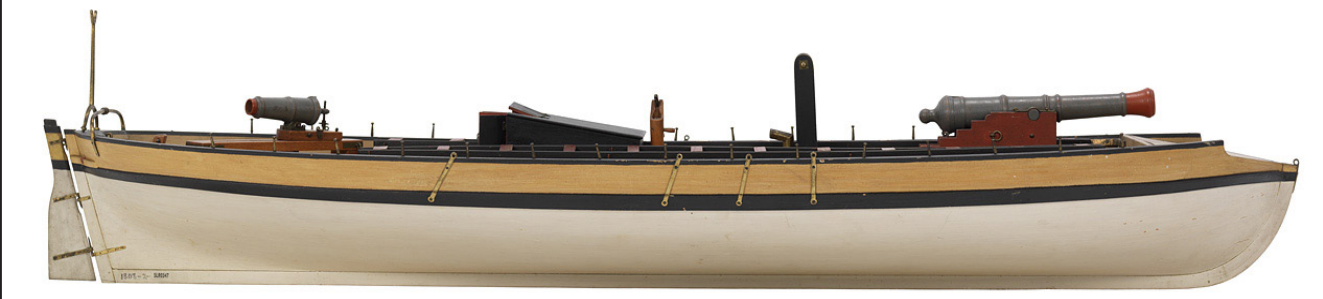


Image 4: A typical gunboat of the Napoleonic era. Source: Royal Museums Greenwich.

9 Hubert Zawadzki, 'Between Napoleon and Tsar Alexander: The Polish question at Tilsit, 1807', *Central Europe*, Warsaw, 7, (2009), pp. 110-124.
10 F Mlokosiewicz, *Recollection of the Spanish War in 1810*, Biblioeka Warszawska: Warsaw, (1842), pp. 1-4.

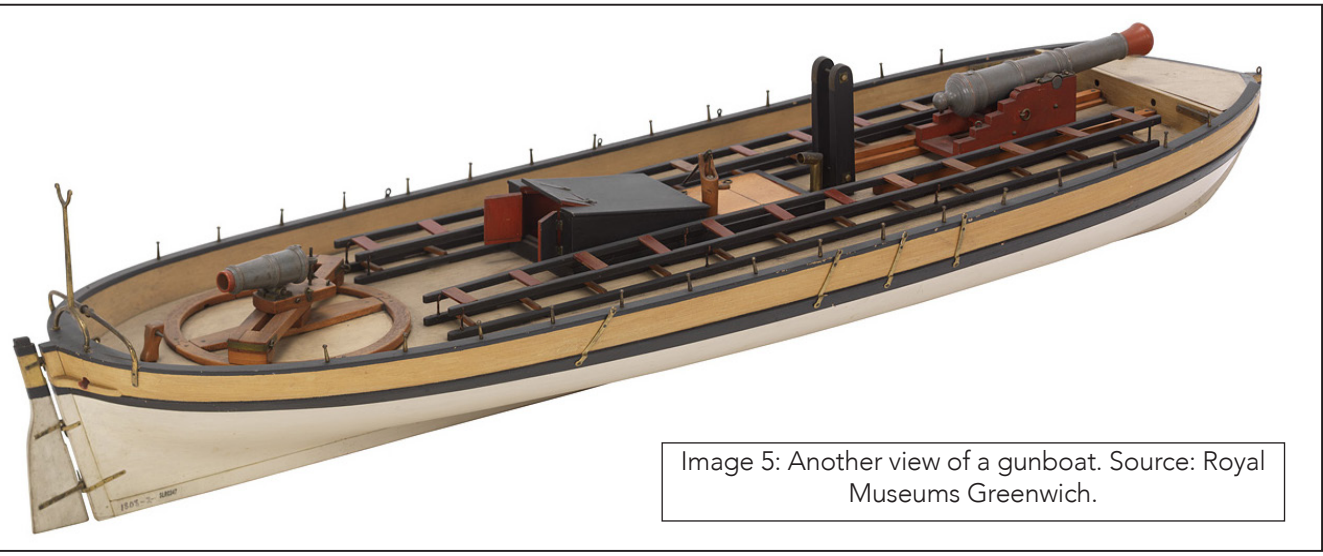


Image 5: Another view of a gunboat. Source: Royal Museums Greenwich.

and Sohail Castle, needing to be taken to provide a perched position overlying the Polish garrison. Landing from the Topaze and Rambler at 0830hrs, which used their shallow draughts to anchor closely to the shore, the infantry and artillery proceeded to these ridges unmolested. As Mlokosiewicz stated after the battle, he was unable to see the British approach from the castle ramparts.[13] Instead, he skirmished with 40 Spanish irregulars who stole some cattle from in front of the fortress's wall, an indication of their malnutrition. These fighters, whose support Blayney's expedition relied on, were in no state to contribute meaningfully to the British cause.

The battle broke out initially in the town of Mijas inland of the Cala del Moral. A small detachment of 60 Poles under Lieutenant Chelmicki opened a withering fire upon Blayney's foreign troops. The Spaniards, insistent on taking Mijas rather than cutting off the Polish northeast retreat towards Castillo Sohail, yielded an opportunity to trap these men. Consequently, Chelmicki was received into Sohail Castle having sustained minimal casualties, yet having dampened the momentum of the British assault.

At 1400hrs on 14 October 1810, the British became visible over the crest of the mountains for the first time and Mlokosiewicz's scouts sent reports to Sebastiani's headquarters at Malaga. Almost immediately as the castle's ramparts came into view, Blayney sent an emissary to request the Polish surrender. Refusing to parley, Mlokosiewicz's garrison came under heavy fire from the British warships and the detachment of Royal Artillerymen armed with 18-pounders hauled from the ships by their crews. At 1800hrs, 30 minutes since the bombardment was opened, Gunboat No. 18 was sunk by one of the old Spanish cannon manned by the Polish troops, a huge blow to British morale. The Polish cheered at the British warships, whose decks were littered with dead and wounded. However, for the Poles the action

13 'French Papers: Andalucia', Dublin *Pilot*, 1 December 1810, p. 3.

was not without loss, suffering 12 dead and three wounded over the course of the day. This exchange of shot continued into the dusk, when a downpour wet the powder and prevented any further firing.

The initial day's fighting had seen Blayney's attempt to cow the defenders of Sohail Castle into surrender fail dismally. Instead, the British took heavy initial casualties and a blow to their morale. During the evening, Mlokosiewicz received 160 reinforcements from his unit and 80 French dragoons of the 21st Regiment.
On the morning of 15 October 1810, the battle continued with the British disembarking seamen and carronades to within three 350 yards of the castle, as well as approaching as close as possible to the beaches with their ships. With renewed vigour, the British pounded the southern walls of Castillo Sohail, causing a section of the rampart to collapse killing nine of her defenders. The Baker rifles of the British and Spanish irregulars raked the castle's embrasures and a second British emissary called for the garrison's surrender.

This dialogue rebuked, the British artillery redoubled its efforts until Chelmicki, along with 90 men of the Duchy of Warsaw, and 80 French dragoons charged their emplacements. The gunners and seamen manning the batteries as well as the Spaniards defending them were turned seaward at the point of the bayonet. Blayney alighted from a gunboat and advanced with the 89th Foot, buoyed by the sight of the 82nd Foot rowing in from the El Vencedor. The British made a determined rush and retook the gun pits, with the situation appearing to have stabilized in their favour.

However, in a dramatic turn of events, Major Bronisz and 200 Polish reserves from the town of Ahaurin, hurtled into the British left flank. Fearing that this was Sebastiani's advance guard, Blayney moved forwards to assess the situation and was captured in the act. Leaderless and disorganized, the 89th and irregulars retreated with the gunners and seamen in tow. The 82nd Foot and more seamen landed to cover the withdrawal, and the gunboats and sloops readjusted their fire from Castillo Sohail, over the heads of the infantry.

At 1430hrs the warships showered the advancing Poles and French dragoons in grape and round shot, halting their advance. As the British boarded lighters taking them to safety, ships' crews busily tossed ammunition overboard to lighten their displacement and hasten their departure. According to HMS *Rodney*'s logbook, three men of the covering party were killed with a further four wounded. Two officers and 49 men of the 89th Foot, several gunners and sailors were killed, with over 200 taken in captivity. The humbled force, under the guard of HMSs *Rambler*, *Topaze* and *Encounter*, headed back to Cueta and Gibraltar with their tails firmly between their legs.

A shocked British public received the news, albeit a version edited to include the arrival of 3,000 men of Sebastiani's corps sweeping the outnumbered British from the battlefield.[11] In fact, the first of the French reinforcements arrived on the

16 October 1810, to find the seaside fields strewn with bodies and cartridges. The National Museum of Krakow proudly displays Blayney's sabre captured from him during the battle, immortalizing his shame (Image 2).

Conferred the Legion de Honneur, Mlokosiewicz was duly rewarded for his gallantry at Fuengirola. Whilst no actions of the Peninsular War received recognition in the form of a medal, the Battle of Fuengirola was not honoured with a clasp to the Naval or Military General Service Medals 1793, despite its significant commitment of logistics and manpower. Notwithstanding the advent of individual naval date and 'Boat Service' clasps, the Battle of Fuengirola was erased from memory. It is unsurprising that medals authorized through gritted teeth some 37 years after the Andalucian incursion took place, made no effort to recognize sacrifices ordinarily worthy of commemoration.

The Battle of Fuengirola was one of several failed attempts to relieve Cadiz, the siege of which was terminated with the Duke of Wellington's victory at Salamanca on 22 July 1812. Tactically extraneous, Lord Blayney's disaster in the shadow of Castillo Sohail was nevertheless a warning to those relying on the support of Spanish guerrillas in combined operations. Whilst no aspersions can be cast over the gallantry of British soldiers during the operation, in truth the Battle of Fuengirola was lost before it began.


Image 6: The obverse of Master's Mate Edward Shacklock's Naval General Service Medal 1793. Shacklock fought with HMS *Rambler* at Fuengirola. Source: Author's collection.

Image 7: The reverse of Master's Mate Edward Shacklock's Naval General Service Medal 1793. Source: Author's collection.


Image 8: Clasp detail.

# Development of the 20mm Hispano Cannon

Kevin Driscoll

The 20mm Hispano Cannon served the British and many of her allies throughout the Second World War, Korea and well into the jet age. The story, however, begins in May 1935 when Britain became aware of the Swedish Government searching Europe for a single seat fighter type aircraft fitted with a 20mm cannon. The British government had heard about the development work being carried out by Hispano-Suiza on a 20mm cannon and the British air attaché in Paris was tasked to investigate further and report. The air attaché duly reported several European countries were also following the development of the Hispano-Suiza HS 404 cannon and examples of the cannon had been sold to Belgium, Japan, the United States and the Soviet Union. The British reaction was to release a requirement for a single engine fighter aircraft fitted with a 20mm or 23mm cannon capable of destroying a bomber type aircraft with a two-second burst. It was left to the aircraft designers to identify how many cannon were required and how they would be installed.

Later in 1935 the Air Ministry purchased a French Dewoitine D.510 fighter fitted with a Hispano-Suiza HS 404 cannon. This purchase was followed by visits to the Hispano-Suiza factory by Air Ministry officials to witness test firings of the cannon with the result that six HS 404 cannon were purchased for study and testing in Great Britain.[2] The HS 404 at that time was lighter and had a faster rate of fire than any other 20mm cannon on the market. The first two HS 404 cannon were received in the United Kingdom early in 1937 about the same time as the Dewoitine D.510 was arrived. Trials of both the aircraft and the cannon were carried out by the Aircraft and Armament Experimental Establishment at Martlesham Heath. When the HS 404 cannon were purchased, 20mm explosive projectiles were under development in Europe even though an explosive 20mm projectile was technically in violation of the St Petersburg Declaration of 1868.[3] The explosive 20mm projectile came into being, was adopted, and played a significant role during the life of the cannon.

As the British understanding of the HS 404 cannon increased, Boulton Paul Aircraft Limited, a recognised aircraft turret designer and manufacturer, were

---

1 Kevin Driscoll is a retired technical author with a background of RAAF service as a warrant officer in the armament trade. After leaving the RAAF he worked in management positions in Australia and Singapore. Since then he has written technical manuals for defence and industry and has numerous articles published in *Armourer* magazine.

2 R Wallace Clarke, *British Aircraft Armament, Vol 2: RAF Guns and Gunsights from 1914 to the Present Day*, Patrick Stephens, Sparkford (1995), pp. 63-64.

3 GF Wallace, *The Guns of the Royal Air Force 1939-1945*, Kimber: London (1972), p. 77.

asked to investigate the design of a 20mm turret suitable for installation in a heavy bomber.[4] The chief engineer of Boulton Paul Aircraft Limited, JD North took on the task, and after inspecting the 20mm Hispano in operation realised the cannon was not a fully developed weapon. Boulton Paul then undertook the task of thoroughly investigating the functioning of the weapon.

Working in conjunction with the Road Research Laboratory, Boulton Paul Aircraft went so far as to develop an apparatus to accurately record the movement of the cannon mechanism during firing. A refined version of this apparatus became the standard method of investigating gun functioning during the war and was invaluable in sorting out some of the teething troubles of the early production guns of 1940.

Britain recognised the potential of the HS 404 cannon and the decision was made to adopt the weapon for future aircraft installation. British government policy was to be self-sufficient in the supply of weapons for its armed forces and under this policy it was necessary for the 20mm Hispano cannon to be manufactured in the United Kingdom. The main gun manufacturers, Birmingham Small Arms (BSA) and Vickers, were fully engaged in the manufacture of two other important weapons for British forces. BSA was further developing and manufacturing the .303-inch Mk II Browning machine gun and Vickers was committed to their Type K or gas-operated weapon. Neither firm had the capacity to take on production of the 20mm Hispano cannon. Additionally, Hispano-Suiza was not of the mind to grant a manufacturing license to a rival arms manufacturer even if they were in England. It was therefore agreed Hispano-Suiza would set up a manufacturing plant in England and the British Manufacturing and Research Company (BMRC) was established.[5] The name being a contradiction, it was not British; it did no research

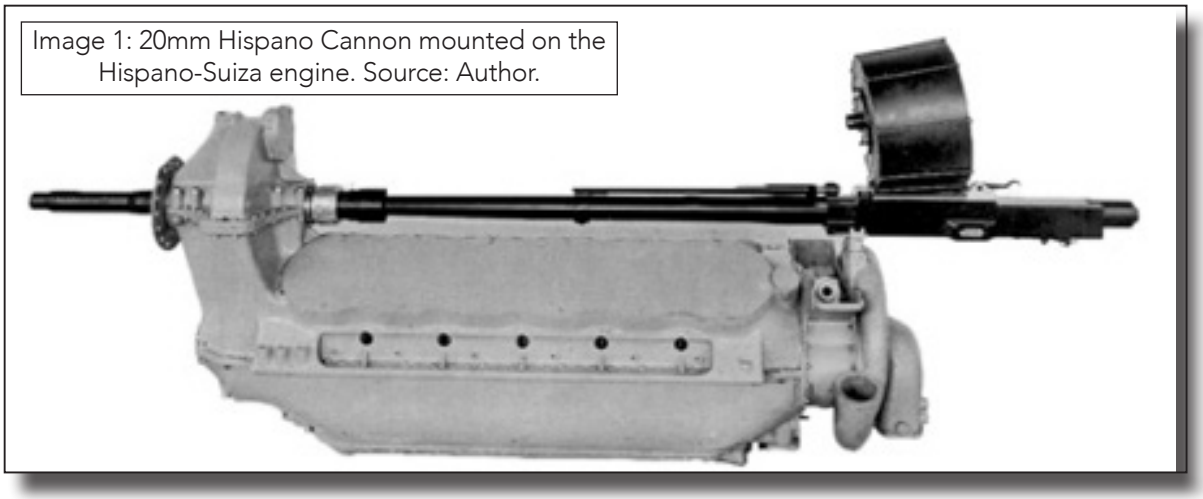


Image 1: 20mm Hispano Cannon mounted on the Hispano-Suiza engine. Source: Author.

4 Wallace, *The Guns of the Royal Air Force 1939-1945*, p. 79.
5 Clarke, *British Aircraft Armament, Vol 2*, p. 65.
6 Wallace, *The Guns of the Royal Air Force 1939-1945*, p. 80.

but was meant to be a manufacturing facility only. The BMRC factory was built at Grantham in Lincolnshire.[6]

Co-operation between French authorities, who were carrying out development work on the cannon at Châtellerault Arsenal, Hispano-Suiza in France, BMRC at Grantham and the Air Ministry was very strong and there was a free flow of information between the various groups. However, it was identified by the research carried out by Boulton Paul and recognised by the Air Ministry that considerable future work was required on the cannon before it would be suitable for operational use by the RAF. It also became apparent that when the gun was sufficiently developed to enter operational service, with war looming, the manufacturing capacity of the BMRC Grantham factory would be inadequate to meet the Air Ministry demand for weapons. The question of future control of the gun's development was also raised.

Hispano-Suiza, for obvious reasons, maintained that the HS 404 was their design and they would retain control of the weapon's development and configuration. BMRC was manufacturing to French drawings supplied from Hispano-Suiza in France with all development work being done there. A review of the French drawings by BSA production experts showed the manufacturing methods were specifically designed for the specialist manufacturing tooling installed in the Hispano-Suiza factory in France and that French manufacturing practices did not lend themselves to the high-volume rapid production that would be required in time of war.

After considerable discussion between the French authorities, BSA and the Air Ministry, it was decided the French drawings would be redrawn to reflect the production machinery and manufacturing methods available in England. It was further agreed the Air Ministry would assume responsibility for development of the British version of the cannon. Additionally, it was agreed the British drawings would be dimensioned in metric and that parts manufactured to the British drawings would be interchangeable with French built components. These decisions were bitterly resented by Hispano-Suiza and relations between Hispano-Suiza and BMRC collectively, and the other parties, were significantly strained and never recovered.

During 1938 and 1939 French and British trials continued identifying a number of major defects. The breech block return spring had a very short life. The spring weakened after firing several hundred rounds and when weakened the firing pin would not strike the cartridge primer with sufficient force to fire the cartridge. This left a live round in the chamber with the breech block potentially unlocked. The design of the extractor required attention and the extractor spring also had a short life.

The coil spring deficiencies were overcome by the introduction of a triple wire spring then under development at the Châtellerault Arsenal in France. During

6 Wallace, *The Guns of the Royal Air Force 1939-1945*, p. 80.

the Spanish Civil War, the French military had a friendly arrangement with Franco's forces and as a result samples of Russian equipment captured from the Republican forces were passed to the French. One such item was a Russian 20mm gun with the main springs manufactured of a triple wire not previously seen in weapon design. The French developed the technology for manufacturing the triple wire spring and with an improved extractor, the problems were overcome.[7]

It was believed the unlocking plates of the cannon breech block were bouncing when the breech block closed and it was thought possible a cartridge would fire without the breech block being fully locked. This appears to have been a baseless perception. To overcome the perceived problem, the French developed locking plates with elaborate inertia blocks which were designed to eliminate the bounce. In time it was established the inertia block locking plates contributed nothing to the performance of the cannon and the design of the locking plates reverted to the original design.

The HS 404 cannon was specifically designed for mounting on the engine block of the Hispano-Suiza engine and it was proving difficult to provide a suitable turret mounting for the cannon.[8] This problem was overcome by the addition of 'ribs' to the top and bottom of the cannon body which facilitated the cannon being mounted in a turret cradle.

A lot was happening simultaneously with the weapon and it was decided the first order to be placed with BMRC would be for cannon manufactured to Hispano-Suiza's French drawings. The nomenclature of the cannon would become the Hispano 20mm Gun Mk I. When new drawings became available BMRC was to change over to the British-produced drawings which incorporated the changes described previously. This weapon, based on BSA manufacturing processes and drawings, was then identified as the Hispano 20mm Gun Mk II. All shadow factories and the Royal Ordnance Factory at Enfield manufactured the Mk II cannon from the commencement of production.

As indicated, the problem of lightly struck primer caps was largely overcome by the introduction of the triple wire spring. However, further episodes of a similar nature occurred at frequent intervals. It was established that the problem was being caused by 'crush up' of the cartridge case. Being a rimless cartridge case, the cartridge came to rest when the short cone of the cartridge case contacted the short cone of the barrel chamber. The 20mm Hispano cartridge was designed to be slightly longer than the chamber of the barrel so that the cartridge would be slightly compressed by the breech block and the firing pin would satisfactorily impact the cartridge case primer. However, the cartridge cases were compressing too much and the firing pin was not consistently impacting the primer. It was thought this

7 Wallace, *The Guns of the Royal Air Force 1939-1945*, p. 85.
8 Clarke, *British Aircraft Armament, Vol 2*, p. 65.

problem would be rectified by improving cartridge case manufacture to give a more consistent hardness to the metal, however, that was not to be.

Whilst cannon development continued, Westland Aviation Limited devised the Westland Whirlwind against specification F.37/35 and the aircraft first flew in late 1938.[9] The Whirlwind was a twin-engined, single seat interceptor which entered service armed with four 20mm Hispano Cannon.[10] The first of 200 production aircraft P6966 went to 25 Squadron RAF on 22 May 1940. However, the Whirlwind did not live up to expectations in combat and the programme was curtailed after 114 aircraft had been delivered.

During the early months of 1939 the Air Ministry authorised a trial installation of Hispano cannon in the wings of a Spitfire. When the war commenced, this project was elevated in priority and in early 1940 an installation was put into limited production. One squadron of cannon-armed Spitfires saw action during the Battle of Britain. The results, though, were mixed but largely disappointing. When the cannon worked, they were devastating, however, more often than not the guns jammed or failed to work satisfactorily. The troubles were largely put down to the weapon installation and feed problems. For the wing of the Spitfire to accept the 60-round magazine, the gun had to be turned on its side and the upper surface of the wing modified with a bulge to accommodate the magazine. The ejection of the spent cartridge case was from the bottom of the cannon and the side mounting caused problems discharging fired cartridge cases from the aircraft wing.

At about the same time, and with the knowledge gained from the four cannon installation in the Westland Whirlwind, a four-cannon installation was being trialled on a Bristol Beaufighter. The Beaufighter installation permitted the 60-round magazines to be changed in flight by the observer, therefore, significantly increasing the aircraft firepower. The Beaufighter did useful work as a night fighter during the 'Blitz' and the installation was far more successful than the Whirlwind, however, again results were mixed and more work was required. One area that had to be changed was the front gun mount. Originally a gas-operated recoil reducer was installed on the Hispano which was compatible with the hollow propeller shaft mounting of the cannon, but in the Beaufighter installation the cannon fired through a tunnel in the fuselage of the aircraft and a modified front mount and recoil spring had to be developed.

As the first of the Mark II cannon was coming off the production line, they were immediately put on an endurance trial. The weapon suffered from frequent misfeeds which were attributed to the magazine but also suffered an unacceptable number of lightly struck primers due to 'crush up'. It had been hoped improvements in cartridge case quality would cure the 'crush up' faults, however Air Ministry was

9 HF King, *Armament of British Aircraft 1909-1939*, Putnam: London (1971), p. 451.
10 Anthony G Williams and Emmanuel Gustin, *Flying Guns of World War II*, Airlife Publishing: Marlborough (2022), p. 100.

advised not to expect any cartridge case quality improvement under the conditions of wartime manufacture. This called for drastic action and the chamber of the cannon barrel was reduced in length by two millimetres and the firing pin protrusion increased. Shortening the chamber and increasing firing pin protrusion largely solved the problem of lightly struck cartridge case primers and modifications were introduced retrospectively to both Mark I and Mark II cannon.

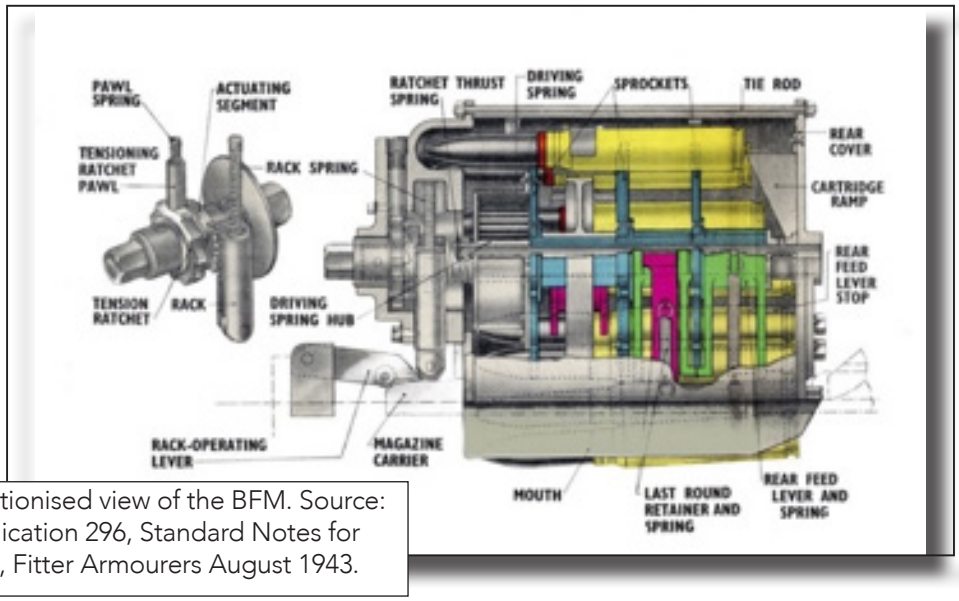



Image 2: Sectionised view of the BFM. Source: RAAF Publication 296, Standard Notes for Armourers, Fitter Armourers August 1943.

On 10 May 1940 Germany invaded France and, on 22 June 1940, French officials signed the Armistice with Germany. Because of the occupation of France, BMRC was cut off from its parent company and the Châtellerault Armoury was also under German control. The fall of France vindicated the decision of the British to manage the development of the Hispano cannon in England. A British works manager for BMRC had been appointed by the parent company in France, but as BMRC was isolated the British government took over the company. A board of directors was appointed and the works manager was appointed managing director.

In late 1940, the main BMRC factory was manufacturing the Mk I Hispano cannon and the BMRC shadow factory was producing the Mk II Hispano cannon. For no apparent reason, the managing director of BMRC challenged why the Mk II cannon was being manufactured and proposed all manufacture revert to the Mk I drawings. This proposal raised questions about the managing director's assertions and air trials of the two guns were carried out to compare the merits of the two types of cannon. The trials showed no appreciable difference between the two weapons with the exception that the new unlocking plates of the Mk II Hispano had a short life expectancy. After due consideration the Air Ministry decided to continue with manufacture of the Mk II cannon for a number of reasons, including the fact that all four shadow factories were tooled up for the Mk II using British drawings that

incorporated British standard manufacturing practices.

By the end of 1941 there were four factories producing 20mm Hispano guns: BMRC at Grantham; BSA at Newcastle-under-Lyme; The Royal Small Arms Factory, Enfield; and the Royal Ordnance Factory at Poole.[11] One of the main manufacturing difficulties was the manufacture of the six-foot long barrel; each of which initially took six hours and forty-five minutes to drill. BSA set to work to improve this time by designing new cutting tools that would work efficiently at higher cutting speeds. Machine speed was progressively increased from 350 revolutions per minute (rpm) to 450rpm with a corresponding reduction in drilling time to four hours and ten minutes. Further improvement in cutting tool design saw machine speed climb to 1250rpm and the barrel drilling time reduced to one hour and sixteen minutes.

Weapon performance was improving as operational and maintenance experience increased. However, the weak point of the cannon was identified as its 60-round magazine. As indicated earlier, the magazine was bulky and, in some instances, required the gun to be installed on its side which had a tendency to create problems clearing ejected cartridge cases away from the gun and into the aircraft ejection chute.

The requirement for an alternative to the magazine was identified by the Air Ministry during 1938, and during 1939 designs of a belt feed mechanism (BFM) were evaluated and a shortlist of designs were selected for future development. Designs from AV Roe, Boulton Paul, Martin Baker and Hydran were selected for development. Boulton Paul soon dropped out of the competition citing pressure of other commitments.[12] The Hydran design was tested during 1940 but after the initial tests further design was halted. AV Roe and Martin Baker continued work on designs throughput the war, but neither company was able to develop a satisfactory product.

The French, very early in the life of the HS 404 cannon, also recognised the weak link in the gun system was the magazine. The 90-round capacity was deemed too low and the bulk of the magazine made it difficult to install the cannon in other than engine mounted configurations, limiting it generally to a single weapon in fighter aircraft. The Châtellerault Arsenal had commenced design and initial trials of a BFM and had their first prototype operating in the early months of 1940. The French design used a disintegrating link belt to bring the round from the ammunition storage bin and deliver it to the BFM which stripped the round from the disintegrating link and positioned the round for loading into the chamber of the cannon. The used link was then either dumped overboard or recovered to the parent aircraft. The mechanism was spring driven and relied on the recoil of the weapon to maintain spring tension within the BFM.

11 Wallace, *The Guns of the Royal Air Force 1939-1945*, p. 91.
12 Wallace, *The Guns of the Royal Air Force 1939-1945*, p. 100.

The BFM was demonstrated to the British and steps were immediately taken to arrange its manufacture in England. An immediate order was placed with BSA for 50 BFM units and they were produced in record time. Ground and flight trials clearly demonstrated the improvement the BFM made to the performance of the Hispano gun when compared to the Austin manufactured magazine then in use. The BFM Mk I was in full production by September 1940 and, fortunately, the early French development work was concluded before France fell to the Germans. When manufacturing the 50 BFMs BSA recognised, and the trials confirmed, more work was required on the design, and this was to be carried out concurrently with early production. BSA was fully committed to other work and advised they could not take on full-time production of BFM units, so Molins Machine Company, a company well versed in the design and manufacture of machinery for the cigarette industry, was given the task of both manufacturing and improving the BFM. Molins' engineers set about the task and several minor improvements were made that improved the efficiency of the unit. By mid-1941 BFMs were available to aircraft manufacturers and new aircraft designs were being developed which would see the number of Hispano cannon installations significantly increase.[13]

Austin, who had been manufacturing 60-round magazines for the Hispano gun, were given a contract for BFM manufacture and BSA was also eventually persuaded to manufacture the unit. Molins remained the prime contractor and was recognised, even after the war, as the superior manufacturer of these units. Molins during August 1942 suggested a modification which fitted an extra sprocket to support the nose of the cartridge. Trials demonstrated the value of this modification and all existing units were progressively updated to Mark I* standard.

While the Germans were searching for methods of improving their weapons by looking at designs other than linear machine guns, the British Air Ministry was concentrating on improving the Hispano gun and BFM. Consideration had been given to turret mounting Hispano cannon for bomber defence, however, it was believed the length of the Hispano would be a hindrance. It was known the Hispano Mk II cannon was of its current length because the HS 404 cannon was originally designed to mount on the Hispano-Suiza aircraft engine. Barrel length had not been reached through ballistic consideration, therefore the Air Ministry initiated a programme to ascertain the impact on muzzle velocity and weapon operation if the cannon barrel was shortened. After experimentation and testing it was found the barrel could be reduced in length by approximately 12 inches (304mm), forward of the gas block, without unduly affecting muzzle velocity or gun operation. The shortened barrel gun was, for identification purposes only, identified as the Hispano 20mm Mark IV gun. This gun was not put into production.

About this time, the Air Ministry was investigating shortening the barrel of

13 Wallace, *The Guns of the Royal Air Force 1939-1945*, p. 105.

the Hispano, the Army Design Department at Enfield proposed a variation of the weapon and had entitled the drawings 'Hispano 20mm Mark III Gun'. The Army Design Department proposal was not adopted but the Mark III designation was never applied to any other version of the cannon.

With the knowledge that the barrel of the cannon could be shortened without undue detriment to muzzle velocity or gun performance, a general review of the weapon was carried out to incorporate small changes and to reduce the weight of the cannon. The result of this review was formalised and put into production as Hispano 20mm Mark V cannon.[14] The development of the Mk V cannon was carried out at Royal Ordnance Factory at Poole and BMRC were unaware of the Mk V cannon until presented with the drawings and asked to manufacture the weapon. BMRC again protested (to deaf ears) that they were not consulted or involved in the design and development of the Mk V weapon.

In summary, the Mark V Hispano 20mm cannon was 30 lbs lighter than the Mk II cannon and had an increased rate of fire.

A significant weight reduction came about by the removal of the pneumatic cocking unit which weighed 24 lbs (10.9 kg). The original design of the 20mm Hispano installation integrated the pneumatic cocking unit into the aircraft pneumatic system to permit the cannon to be cocked or re-cocked in flight. As a result of the history of lightly struck primers and the potential for pilots to inadvertently load a new round onto the base of an unfired round, pilots were forbidden to re-cock the weapon inflight. The pneumatic cocking unit was therefore considered redundant and after its removal, arming before flight was achieved by mechanical means, generally by an armourer using a lanyard to pull the breech block to the rear to be engaged by

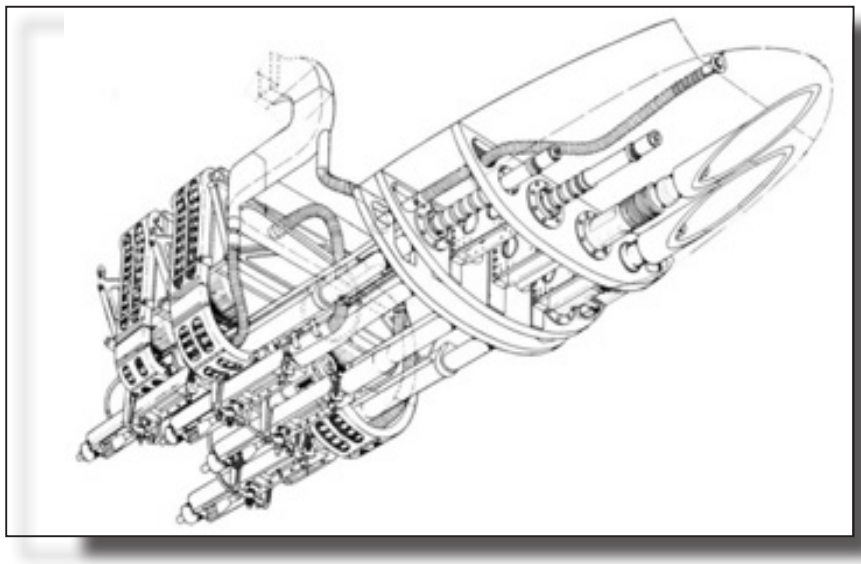


Image 3: Mosquito FB40 Hispano Cannon Installation. Source: Mosquito – Mk. 40 Descriptive Manual. De Havilland Aircraft, 1945.

14 Williams and Gustin, *Flying Guns of World War II*, p. 68.

the sear. An electrical safety switch ensured the sear was not disengaged from the breech block before the pilot intentionally fired the guns.

The higher rate of fire resulted in reduced component life. Initially the life of the weapon during war time was established at 10,000 rounds, however analysis showed the actual life of the weapon was generally less than 1000 rounds before the parent aircraft was destroyed. After consideration of the combat life of the weapon, the Air Staff agreed to accept 1500 rounds as the acceptable life of the smaller components. Further analysis of the gun on operations showed the smaller components of the weapon had a life of 2500 to 3000 rounds and the barrel demonstrated a consistent life of 5000 rounds.

By mid-1943 the first production Mk V guns were coming off the production line and were under test and evaluation. Aircraft mounting problems were encountered and this was analysed to erratic recoil. To overcome this problem, the British adopted the US-designed Edgewater front mounting which completely cured the erratic recoil problem. The Mk V gun was accepted by the Air Staff during the latter months of 1943 and the weapon continued virtually unchanged for the remainder of its British service life.

The HS 404 cannon and its British derivatives served the Royal Air Force and Royal Navy for the better part of 30 years as both fixed, forward firing cannon, and later as turret mounted weapons in post war Lincoln and Shackleton aircraft. After the war the Mk V Hispano cannon remained the standard cannon for the last of the high-performance piston-engined fighters and the first of the British jet aircraft. Development work continued on the cannon postwar which resulted in the Mk 6, a modified cannon designed to fit the American weapon cradle. The Mk 7 fired electrically primed ammunition and the Mk 8* was a modified Mk V firing 900 rounds per minute. The final development of the cannon was the Mk 9 which was a modified Mk 8 firing electrically primed ammunition.

During the war the United States produced 20mm Hispano cannon for itself, the British and her allies applying their own nomenclature. The AN-M2 was the American equivalent of the British Mk II cannon. This was followed by the M3, the engineering equivalent of the British Mk V cannon. As in Britain, the US went on to develop a weapon to fire electrically initiated ammunition as well as a variant capable of achieving a significantly higher rate of fire. The British developed and adopted the 30mm ADEN cannon, which had its origins in the German Second World War MG213/MK 213 revolver cannon, when the Hawker Hunter was introduced. The United States Navy persevered with the Hispano design and produced the Colt Mk 12, 20mm cannon firing a hybrid cartridge at better than 1000 rounds per minute. That was the end of the line for the Hispano HS 404 design as an aircraft gun.

Without doubt, the 20 mm HS 404 cannon and its extended family, deserve their place in the history of the aircraft cannon.

# The Optical Munitions Branch: The Commonwealth Solar Observatory at War, 1939-1944

Rohan Goyne

This article will examine the crucial and little-known role of the Optical Munitions Branch (OMB) of the Commonwealth Solar Observatory (CSO) located at Mt Stromlo in Canberra between 1939-1944 as part of the home front scientific industrial contribution to the Australian war effort.

At the outbreak of the war the immediate needs of the Australian armed forces for optical munitions were estimated below:

| Priority | Instrument | Quantity |
|---|---|---|
| 1 | Sighting telescope 24B | 3,500 |
| 2 | Height and range finder OB7 | 65 |
| | Ring sight telescope | 83 |
| | Identification telescope | 86 |
| | Dial sight No. 7 | 1,500 |
| | Director No. 12 | 2,500 |
| | Spirit levels of various kinds | 3,000 |
| 3 | Signalling telescopes | 1,200 |
| | Range finders No. 13 | 265 |
| | Binoculars No. 2 | 3,500 |
| | Stereoscopes | 250 |
| | Parallax bars | 50 |

Source: D.P. Mellor, *Australia in the War 1939-45: The Role of Science and Industry*, Australian War Memorial, Canberra, 1958, pp. 246-281.

As a response to this advice, Director of the CSO, Dr R Woolley, was asked to attend the first meeting of the Optical Munitions Panel along with T.H. Laby and L.J. Hartnett. Thus, both Woolley and the CSO became involved in the work of the Panel from beginning to end. At this time, the CSO staff included the following:

- Dr R Woolley (Director and an original Optical Munitions Panel member)
- Dr C W Allen (Physicist)
- Mr N Chamberlain (Physicist)

- Dr S Gascoyne (Physicist)
- Mr D Stibbs (Research Assistant)
- Mr J Dooley (Research Student)
- Mr H.J. Banham (Foreman of the Mechanical Workshop)
- Mr Francis Lord (Optical Technician)
- Mr S Elwin (Technician and Assistant to Lord)[1]

Image 1: The Commonwealth Solar Observatory Buildings, Mt Stromlo, Canberra, ACT. Source: Author.

The OMB computed designs for many instruments, including sighting telescopes and periscopes, and it fulfilled eleven different contracts for the construction of optical munitions. The first optical munition to be made in Australia was designed at the CSO.

The OMB received grant money from the Department of Munitions to conduct research and undertake tests in relation to optical munitions, as well as for the establishment of a mechanical workshop for related optics production. After sorting out some initial communication and quality control problems, the OMB became a very professional glass working centre.

The OMB workshops produced many lenses and prisms, and Mt Stromlo Observatory still maintains a position as a world-leader in optical systems. The OMB staff involved in the optical munitions work were pioneers in the production of these optics, and people from most of the Optical Munitions Panel associated firms made a visit to the CSO to learn how to improve the standard of their optics work.

1 Optical Munitions Panel, www.asap.unimelb.edu.au/bsparcs/exhib/omp/org/panel.htm. Accessed 1 August 2021.

By the end of 1943 the OMB had such expertise and equipment that it was possible for them to produce new optical instruments, from the initial design through to the finished piece, without any external assistance.

The OMB invented and manufactured vital optical instruments. For example, in 1943, an improved sight for the 6-pounder anti-tank gun – which was also being manufactured in Australia – was invented from scratch and manufactured at Mt Stromlo in Canberra. It also invented and manufactured optical predicting sights for aircraft which were also being developed and manufactured in Australia from 1939-1945.[2]

Dr Woolley searched far and wide for staff to work at OMB. He visited the foreign internment camp at Hay in NSW where he recruited four of the SS Dunnerra passengers to work at OMB because of their skills and occupations from their former lives in Germany.[3]

In conclusion, the little known story of the OMB needs to be re-emphasised in Australia's domestic wartime history. The OMB invented and manufactured vital optical munitions without which the Australian armed forces could have adequately played its part in the defeat of the Japanese Empire in the Pacific Theatre.

Image 2: CSO Workshop 1946. Source: MSO Archives, L16992.

3 NAA MP76/,4281 & NAA MP76/1,9672.

4 Jenny Horsfield, *A Bookshop in Wartime*, Australian Scholarly Publishing, Melbourne (2020

# Charge at The Nek survivor: Walter Weatherall, 10th Australian Light Horse Regiment

## Geoff Tilley[1]

Like so many research projects it always starts out with the comment 'My relative was in the war but really don't know a lot about what they did, they never spoke about it'. This seems to be the case with so many returned service personnel, never speaking about their experiences. In some cases, they were told never to talk about it. It's not until many years later when these veterans have passed on, this is when relatives find mementoes of their loved ones of their time spent overseas.

In the case of this story the family had their loved one's possessions stored in a Coles shopping bag. It was at a Remembrance Day Service, that I was asked about their grandfather's service and possessions. With the exchange of his details the story started to unravel of a light horseman from the infamous charge at The Nek on the Gallipoli Peninsula. I have not gone into detail of the charge as it has already been written in detail by many other authors. This is just Walter's story, a survivor from that charge.

Walter Frederick Weatherall – also spelt Wetherall – was born in York, Western Australia on 20 February 1890 to parents William Henry and Ellen. Walter's parents were married in 1883 at York, where William and Ellen had nine children. Three girls and six boys with Walter the fifth sibling.[2]

Walters parents died in 1899 only a few days apart of each other. Walter's father, 36, was travelling by horse and cart to his wife Ellen, 38, who at the time was sick in hospital, when the horse pulling the cart reared up. William fell from the cart striking his head, later dying from head injuries sustained from the fall, leaving Walter with his siblings orphaned. Two of his brothers were sent to the Swan Boys Orphanage in Midland with the other siblings left in the care of his sister Maude. Both parents were buried in the Beverley District of Western Australia.

By October 1914 Walter enlisted with the Australian Infantry Forces (AIF) at Guildford, Western Australia. He was appointed to the 10th Light Horse Regiment, 'A' Squadron with the serial number of 155. At the time of enlistment, he recorded his calling as labourer, with his next of kin as his aunt, a Mrs. W Aubrey of York. Walter later changed his next of kin details to his eldest sister, Maude Screaigh of York. In February 1915, Walter embarked from Fremantle, Western Australia aboard SS Mashobra, arriving in Alexandria, Egypt in March 1915.[3]

---

1 Geoff is a retired WA police officer who is a member of the WA branch of the MHSA with an interest in Australians in the First World War.

2 Ancestry.com.au.

3 War service record, NAA PP889/1, M19360.

Whilst in Egypt Walter's time passed by conducting further training with his regiment before embarking to the Gallipoli Peninsula. The 10th Light Horse Regiment arrived off Cape Helles on 18th May 1915. It was not until 21 May 1915 that the Light Horse regiment disembarked from their troop ships to destroyers, then onto rowing boats landing on the Gallipoli beach. The regiment first came under enemy fire whilst rowing ashore as it is recorded the men came under fire from the Turks with one man hit in the forearm.

On the Gallipoli Peninsula the 10th Light Horse Regiment was located at Pope's Hill, Quinn's Post, Walker's Ridge and No 1 Outpost. It was on 7 August 1915 that Walter's regiment was to form part of an assault against the Turkish trenches, at a position known as The Nek – a small patch of ground described as no bigger than a tennis court. The assault was to consist of men from the 8th and 10th Light Horse regiments, with four waves charging the Turkish trenches at set intervals. Each wave consisted of approximately 150 men. The first two waves of the assault were led by men of the 8th Light Horse followed by men from 10th Light Horse who were the third and fourth waves of the assault. Walter made up the third wave of the charge.

Before the time came for Walter to scale the trench parapet in the third wave, the men knew that they were charging to certain death. No man's land between the Australian and Turkish trenches was already littered with dead and wounded from the 8th Light Horse, due to a timing error. The artillery shelling ceased seven minutes short of the appointed time of the assault at 4.30am.

Even with the murderous Turkish machine gun and rifle fire the message still came from the the Australian commanders for the third wave to push on. For reasons unexplained it was believed that a signal flag was seen in the Turkish trenches, indicating some success with the assault. I cannot imagine what Walter's mind was telling him at the carnage he had just witnessed, yet he still climbed above the safety of the parapet of the trench to charge the Turkish trenches. He must have known that he was facing certain death with his mates, an incredible brave feat to do.

Walter was struck by a Turkish bullet in the abdomen. From the accounts of the charge the men barely made it to the Turkish trenches. The Australian light horsemen either fell back into the Australian trenches as they rose to charge or were cut down by the Turkish machine guns and rifle fire, falling either dead or wounded in no man's land. The men who were still alive from the charge, would have laid in no man's land either dying from their wounds, with some able to crawl back into the

Image 1: Walter Frederick Weatherall.
Source: Weatherall Photograph Collection

Australian trenches. We can only guess that Walter survived by falling back into trench as he was struck by a Turkish bullet. Walter's Squadron had suffered the heaviest casualties of about 50 per cent.[4]

Walter was evacuated from Gallipoli on the hospital ship Delta, then was admitted to the No 2 General Hospital on 14 August, returning to duty with the regiment on 9 November. Walter's remaining time on Gallipoli was short, with the Australian's evacuating the peninsula on 20 December. Walter returned to Alexandria, remaining with the 10th Light Horse Regiment for the Middle East campaign.

In May 1916, and then November, he was admitted to hospital for extended periods. He was taken on strength to a training regiment before been transferred back to the 10th Light Horse in February 1917. Promoted lance corporal in May 1917, he was hospitalised again Between October and December 1917, returning to duty in May 1918. He returned to Australia in August 1919 where he was discharged from the AIF on 25 November 1919, having been promoted to temporary corporal in May 1919 and corporal in July 1919. Returning to York, he met and married a Florence Louisa Sims in 1927. In May 1942, at the age of 52 years, he again enlisted for military service. His occupation was linesman where he was attached to a signals unit serving in West Australia only.


Images 2 and 3: Postcard sent to Walter by C Jones. Source: Weatherall Collection

3 See Neville Browning and Ian Gill, *Gallipoli to Tripoli: A History of the 10th Light Horse Regiment AIF, 1914-1919*, Hesperian Press, Victoria Park (2012); Peter Burness, *The Nek: A Gallipoli Tragedy*, Exisle Publishing, Wollombi (2012).

During my research of Walter, I established that his five brothers all enlisted in the AIF between 1915 and 1917. Incredibly, all returned. Walter's brothers are very much a part of his story.

Henry John Wetherall (1328), a saddler joined the AIF on 24 November 1914 where he was attached to the 4th Field Ambulance. He served in France returning to West Australia in February 1919.

Charles Patrick Wetherall (3569), a blacksmith joined the AIF on 9 August 1915 where he was posted to 16th Infantry Battalion (11th reinforcements). Served in France, where he was wounded in action in August 1916, he transferred from 16th Battalion to 4th Pioneer Battalion. He returned to WA in December 1919 and finally discharged in February 1920.

Image 4: Charles Patrick Weatherall. Source: Weatherall Photograph Collection

Image 5: Samuel Weatherall. Source: Weatherall Photograph Collection

Samuel Weatherall (2058) originally joined the AIF on 9 February 1915 with 16th Battalion (5th reinforcements). Serving on the Gallipoli Peninsula he was wounded in action in his left arm, thigh, right hand, and chest. He was sent to a hospital in England where in March 1916 he was invalided back to Australia. He re-joined the AIF, returning to France with 16th Battalion (24th reinforcements) with a new regimental number of 7343 in March 1917. He was again wounded in action in September 1917 and returned to WA in September 1918.

Alexander Lionel Earle Weatherall (1735) joined the AIF on 20 July 1915 where he was attached to the 10th Light Horse Regiment (11th reinforcements). He embarked from Fremantle in November 1915. Alexander served in the Middle East, no doubt with Walter and returned to WA in August 1918.

Image 6: Alexander Lionel Weatherall (seated right), Walter (seated left). Source: Weatherall Photograph Collection

Image 7: Herbert George Weatherall. Source: Weatherall Photograph Collection

Herbert George Wetherall (8051), the youngest of the Weatherall brothers, put his age up to 18 years joined the AIF in September 1917, posted to 11th Battalion (27th reinforcements), arriving in France in December 1917. George, as he was known, was wounded in action in August 1918 and invalided to England. He returned to WA in December 1918.

Walter's story would not be complete without mentioning Trooper Harold Rush (152), also of the 10th Light Horse, 'A' Squadron who was a 23 year-old farmhand from York. It is recorded that as Harold was about to go over the top to charge at the Turkish trenches, he turned to his mates saying, 'Goodbye Cobber God Bless You'. Harold was killed in the charge and is buried in Walker's Ridge Cemetery with his final words inscribed on his headstone. As Harold was from York, one cannot but wonder if Walter and Harold were together side by side in the trench at the time of the signal to go, shaking hands before the third wave of 10th Light Horse troopers were sent over the trench's parapet to certain death.

Walter lived out his final years in Northam, WA where he died on 26 July 1971 aged 81 years. He is buried in the Northam Cemetery with his wife.

Amongst the many items of his paybook, postcards, photographs, his identification discs, rising sun badges, shaving equipment and sewing kit I located 35 negatives amongst Walter's possessions. On developing these negatives, I was amazed to find various locations and group photographs of fellow 10th Light Horse troopers, of what appeared to have been taken during the regiment's time in the Middle East. I felt that these photographs certainly had a place in Walter's story. Unfortunately, I am unable to include them all in this article, but I found several certainly worthy of inclusion to put some perspective on Walter's story.

Image 8: Unidentified trooper on horseback. Source: Weatherall Photograph Collection

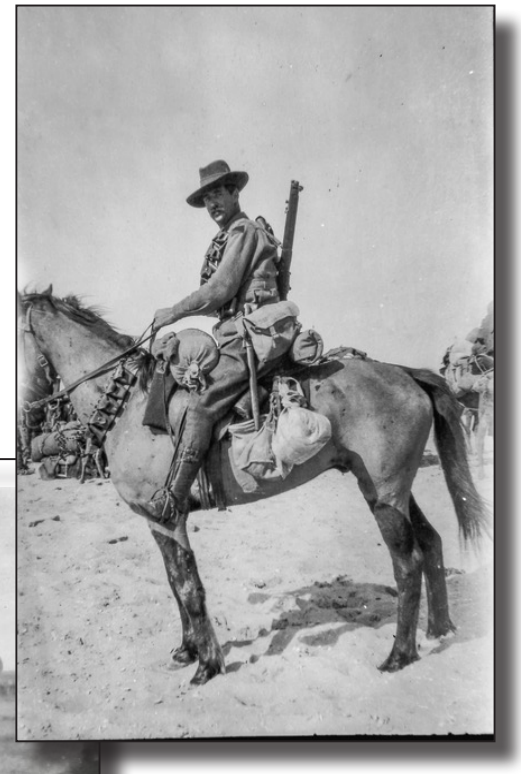
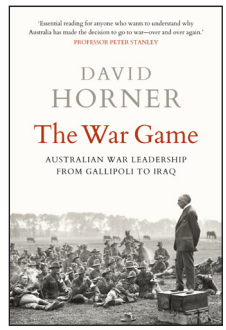


Image 9: Unidentified troopers, one holding a farm implement. Source: Weatherall Photograph Collection

Image 10: Unidentified troopers. Third from right middle kneeling appears to be aboriginal. Source: Weatherall Photograph Collection

## Reviews

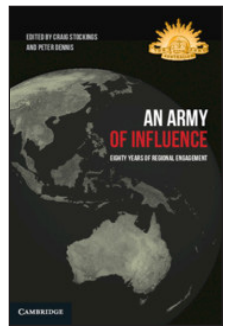



*The War Game: Australian War Leadership from Gallipoli to Iraq*
David Horner
Allen & Unwin, Crows Nest, 2022
Paperback, $45

David Horner is a stalwart of Australian military history writing, his contribution has spanned decades and included biographies, official and regimental histories. One area that Horner shows particular interest is on the strategic level. Many readers will know of his earlier works *Crisis of Command* and *High Command* and more recently *Strategic Command* and *Strategy and Command*, which have explored Australian senior command during peace and war. In *The War Game: Australian War Leadership from Gallipoli to Iraq* Horner continues this theme looking at the interaction between political leaders who decide to send the country to war and the commanders who implement those decisions. He looks at prime ministers, such as Billy Hughes, Robert Menzies, John Curtin, Harold Holt, John Gordon, Bob Hawke and John Howard and why and how they committed to armed conflict. But, just as importantly, are the senior soldiers that the politicians interact with. From the bellicosity of Hughes, to surrender of sovereignty of Curtin, to the decision to join a war without Cabinet approval, this book deftly moves over time and deals with each interaction in its own context.

What Horner has done in *The War Game* is touch on an important, but overlooked aspect of leadership and the interaction between politicians and the military. Like his recent books, this is recommended reading for an understanding of the civil-military nexus during wartime.

**Justin Chadwick**




*An Army of Influence: Eighty Years of Regional Engagement*
Craig Stockings and Peter Dennis (eds)
Cambridge University Press, Melbourne, 2021
Hardback, $69.95

One of the roles of the Australian Army History Unit is the dissemination of information that is relevant to serving officers and members of the Army. *An Army of Influence: Eighty Years of Regional Engagement* sets out to provide an analysis of regional co-operation. Drawing on the 2019 Chief of Army History

Conference the book brings together historians, strategists and practitioners to interrogate how the Army has dealt with regional challenges.

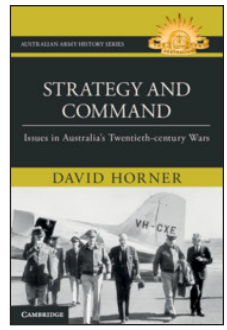
The scope of the book is wide and gives a balance between historical and contemporary matters. After establishing the context of the importance of regional engagement, subsequent chapters explore Australian relationships during the Second World War, Korea, Vietnam and East Timor. The chapter from the perspective of defence attache to Indonesia is very interesting.

Possibly the strength of An Army of Influence is the review of ongoing relationships. While most readers are aware of Australian peacekeeping and monitoring operations in the region, the impact of advisers and training partnerships is key to building and maintaining regional relationships.

Lessons learnt is a significant part of military culture. An Army of Influence is an excellent example of the importance of history and analysis that highlights the impact of Australian regional involvement and provides a glimpse into the future.

**Justin Chadwick**

*Strategy and Command: Issues in Australia's Twentieth Century Wars*
David Horner
Cambride University Press, Melbourne, 2022
Hardback, $59.99




The study of strategy and command sit along with tactics in the professional development of many military personnel, especially officers. As a fellow Infantry officer to the author, I was much influenced by his works during my 49 years in the Army. Professor Horner follows up Crisis of Command: Australian Generalship and the Japanese Threat and High Command with this latest publication, adding further to the profound influence he has had on the general readership and serious students of such matters with *Strategy and Command*.

He does this by calling on many previously published works to outline the development of command at the strategic level – the others being operational and tactical – across Australia's Defence Forces from the Boer War onwards. Command at the strategic level is an area of study not well discussed to date, so this book is a most welcome addition to the professional military history literature.

It provides an insightful examination of the practice of command at the highest level by Australians. Extensive endnotes underscore the depth of primary research so characteristic of Horner's work. This method enables access to many revealing sources of information that assists the reader see the world of decision-informing and decision-making 'as it was' at the time covered in each chapter. Such an approach is a strong one in giving authority to the discussion of what happened

over time.

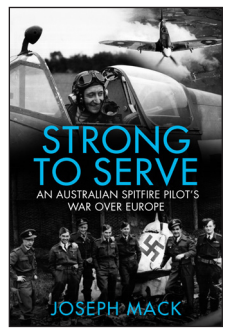
While the chapters are in effect a revision and update of previous publications, they take the reader through Australia's military endeavours from a 'highest command by uniformed personnel' perspective. In the Boer War during which Australia's contributions were colonial forces at the outset and then notional national forces by the end, the level of serious Australian input to the conduct of the war was non-existent, being totally under British control. This pattern only started to change during World War II as Australia developed its own senior commanders with experience and training in command at the highest level and government support necessary to protect the national interest. The book traces the progression from being under British and American command through to today where we now have a truly independent process to command deployments of the Australian Defence Force, even though such deployments are still under coalition arrangements.

The book is one of a concerted program called the *Cambridge Australian Army History Series* which brings important work to the readers of serious military history. These other books, like Horner's, are also modelled on stringent research and informed debate.

I found *Strategy and Command* easy to read, something not always characteristic of similar publications. The layout with endnotes facilitated reflection on the points made. One of the strengths of this work is that it brings together in one book many of Horner's papers, articles and chapters into one source which focuses on Strategy and Command. The revision and updated comment gives us a comprehensive coverage of this topic in a most timely manner given that Australia now has a mature command system at all levels across all three Services in what we term joint operations. The lessons of history and the benefits of those experiences as recorded by Horner seem, to me, to be in place in the command arrangements for today's joint operations at the strategic level. How we got to this point is nicely chronicled by Professor Horner in this book.

**Russell Linwood**

*Strong to Serve: An Australian Spitfire Pilot's War Over Europe*
Joseph Mack
Big Sky Publishing, Newport, 2022
Paperback, $32.99




The title of *Strong to Serve* is self-explanatory. It was inspired by Joseph Mack meeting the hero, Fred Riley who was still alive and over 100 years old when the book was published.

The narrative follows a similar pattern of many young men, this one from One Tree Hill in South Australia, who followed

their penchant for flying and volunteered for training with the Empire Air Training Scheme, and eventually flying Spitfires in the RAF.

There is some attention paid to the English custom of some pilots being immediately commissioned as officers and lived in Siegfried Sassoon's mansion while their fellow pilots, same skill, same training were merely NCOs and lived in a tent and were excluded from post-operative drinkies in the officer's mess.

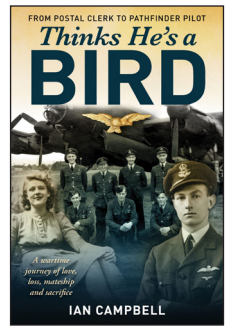
We follow Fred through his operations, escorting bombers going to Germany, shooting down a V1 rocket, being disruptive to the Luftwaffe to protect the D-Day landings and the need for the RAF dwindling as the theatre of war moved closer to Berlin.

Fred was shot down, he thinks, by American fire over France and ended up in an American hospital. He eventually returned to Australia by showing initiative being stroppy and devious, got married, had children, and lived happily ever after. This book has all the excitement of an auditor's report. I feel confident that Joseph Mack has paid strict attention to everybody's rank and what squadron they were in. The telling of the tale of how V1 rockets were bought down by Spitfire pilots uses the sort of stiff official language that one hears when the police chief fronts the TV cameras. All excitement and immediacy are removed.

Anybody who has had the privilege of holding a relative's RAF Log Book in their hand and read the bare bones of information that's written in them should appreciate there is a mountain of fear, excitement, angst, hours of boredom and bone-chilling cold not recorded in words. It is an author's job to put some flesh on the bare bones.

**Gail Gunn**

*Thinks He's a Bird*
Ian Campbell
Big Sky Publishing, Newport, 2022
Paperback, $32.99




This is an interesting history of one Keith Watson, growing up in Queensland, 'just an ordinary bloke' who found himself for a time doing extraordinary deeds in a time when extraordinary deeds were the norm.

He got the flying bug in the 1930s and this took him to the RAAF's Initial Training Scheme at Sandgate in Queensland. Other recruits were eliminated along the way, but Keith was chosen for the Empire Training Scheme in Canada. Apart from learning the finer arts of combat flying, it was there he met an 18-year-old girl who endured as the other love of his life, the first love was flying.

More recruits dropped out, but Keith showed skill, determination and

willingness to study hard and get to England as a pilot.

Keith wrote home to his parents like a good Methodist boy. The letters are surprisingly candid and show an emotional depth. Though I don't know if his mother appreciated the details of the danger he was in being spelt out so well. She must have had many sleepless nights worrying about him. He also kept a diary. The letters and the diary are the basis of this book.

Inevitably he left Canada and graduated to further training in England. He ended the war as a Pathfinder, captain of a Lancaster.

As Keith was a thorough recorder of history, we have some wonderful observations of life in the UK on the home front, pilot training, what it felt like to fly an operation over Germany and what it felt like to land a Lancaster with holes in it. He is very honest about fear, the necessity of having a crew that form a band of brothers, the availability of Benzadrine for the crew and its effects. He was never shot down, never wounded. His friends died around him one by one.

Flying operations over Germany ceased once the army crossed the Rhine so they were all on leave being tourists until it was time to fly to Germany to bring back POWs.

All this time the romance with Norah in Canada persevered by letter. No phone calls, no emails, no selfies. We know right from the start that he marries Norah, so I don't need a spoiler alert here, but I constantly worried that the 20-year-old Queenslander who met Norah in Canada was not the same person two years later after the experiences he had, the danger he was in on operations, the stress that turned youth into old men.

As I said, there are wonderful details in this book. However, I felt there was too much detail. Sometimes it became tedious with detail, to the point I didn't care whether his ailerons were up or down. Perhaps all you Air Force chaps, wallowing in detail, will object strenuously to this opinion.

Keith ended life running the post office in Biloela. We used to go there for holidays on a farm. Did we walk past him in the street? He did extraordinary things for two years then went back to being just an ordinary bloke. Extraordinary!

**Michael English**

Queensland MHSA

Invites you to join us for our

# AUSTRALIAN MILITARY HISTORY SPECTACULAR

MHSA QLD

14 - 16 OCTOBER 2022

*"Honouring Our Veterans"*

This spectacular event is to Honour, Respect and Admire our Veterans

You will experience:

- Previously little told stories by our veterans of their operational difficulties and achievements from Iraq, Timor, Afghanistan and many other global hotspots
- The reality of operations and peacekeeping since Vietnam
- Sailors and Captains, Privates and Generals, Airmen and Air Marshalls
- Military bands and guns performing military rituals
- Demonstrations of dogs that attack and dogs that save lives
- People and their vehicles, equipments and technologies in a modern ADF
- Social events to mix informally with veterans and hear personal stories

CALOUNDRA RSL, 19 WEST TCE, CALOUNDRA 4551

14-16 October 2022

Visit Our Website to register your interest and follow our program.

https://militaryspectacular.events

# MHSA BRANCH OFFICE BEARERS

## AUSTRALIAN CAPITAL TERRITORY

| | | |
|---|---|---|
| President | Ian Stagoll<br>165 Belconnen Way<br>Hawker ACT 2614<br>ian.stagoll@gmail.com<br>02 6254 0199 | 2.00pm, last Thursday<br>of the month, Jan to Nov<br>Canberra Southern<br>Cross Club, Jamison |
| Secretary/Treasurer | James Smith<br>canberrabomber@gmail.com<br>0414 946 909 | |

## QUEENSLAND

| | | |
|---|---|---|
| President | Neil Dearberg | 2nd Saturday Jan, Mar |
| Vice President | Russell Paten | May, Jul, Sep and Nov |
| Secretary/Treasurer | Ian Curtis<br>PO Box 243<br>Maleny QLD 4552 | various locations<br>South East Queensland |

## SOUTH AUSTRALIA

| | | |
|---|---|---|
| President | Elizabeth Hobbs | 7.30pm, 2nd Friday of each<br>month, except Good Friday<br>National Servicemen's Association<br>41 Surrey Road, Keswick |
| Secretary | Paul Skrebels<br>PO Box 247,<br>Marden SA 5070<br>paulnray@bigpond.com | |
| Treasurer | John Spencer | |

## VICTORIA

| | | |
|---|---|---|
| President | Leigh Ryan | 8pm, 4th Thursday of each month<br>except December<br>Oakleigh RSL<br>Drummond Street,<br>Oakleigh |
| Secretary | George Ward<br>PO Box 854, Croydon Vic 3136<br>geofw46@outlook.com | |
| Treasurer | Bill Black | |

## WESTERN AUSTRALIA

| | | |
|---|---|---|
| President | Steven Danaher | 3rd Wednesday of every month,<br>Officers' Mess, Army<br>Museum of WA,<br>Artillery Barracks,<br>Burt St, Fremantle |
| Secretary | Richard Farrar<br>2a Zamia St,<br>Mt Claremont WA 6010<br>wasec@mhsa.org.au | |
| Treasurer | Dick Kagi | |