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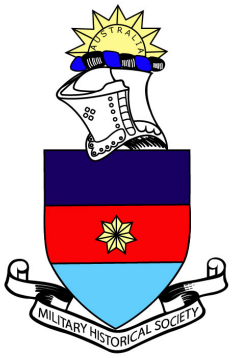

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Military Historical Society of Australia
PO Box 5030, Garran, ACT 2605.
email: webmaster@mhsa.org.au

THE SECRET WAR 1914-1918
PART TWO – NAVAL ENCOUNTERS

Tom Johnstone[1]

Historically, naval warfare as waged by England, later the United Kingdom, impinged greatly upon economic warfare and international diplomacy. The British naval blockade, and Russia's refusal to implement Napoleon's retaliatory Continental System was the main reason for the French invasion of Russia in 1812; with all its fateful consequences for Napoleon's Empire. That same year the harassment of American blockade runners to French controlled ports, and a failure of diplomacy, caused a young and vigorous United States to declare war on its old parent. The causes of that war were well remembered during 1915-1917.

Naval Intelligence and Code Breaking

Admiral Sir Reginald Hall, the Director of the Intelligence Division of the Admiralty War Staff in 1914-1918 was at the heart of British strategic electronic warfare. He created a code-breaking cell at the Admiralty; known as Room 40, which by the end of the war employed almost a thousand staff in shore based naval intercept and cryptanalysis organisation.[2] So important and secret were the activities of Room 40 that it influenced the outcome of the First World War.

Early in the war the Admiralty oversaw the destruction of the German trans-Atlantic cables which curtailed German trans-Atlantic communication routes to four; the Swedish Foreign Office, Stockholm; Amsterdam and thence to Madrid for onward transmission to New York; and the US Embassy Berlin (via London). The first and third latter was supposed to be used only to facility peace negotiations, but were routinely abused by the Germans. All had been penetrated by British Intelligence. The fourth route was the direct radio telegraphy link between Germany and the United States. Naturally it was constantly monitored by the British. To facilitate their code-breaking the physical security of the German consulate in New York had been surreptitiously breached through the use of Czech nationalist in the pay of British intelligence, and their highly classified diplomatic cipher copied.[3]

In addition to high-jacking the German diplomatic code, the British Admiralty obtained their naval code and cipher books as well. Shortly after the outbreak of war the German cruiser *Magdeburg* was sunk off Kronstadt, the Russian naval base in the Baltic. The cruiser's captain, failed to destroy his code books, they fell into Russian hands and were despatched immediately by fast cruiser to Admiralty London.[4] With the ability both to encipher and decipher German naval traffic, the British conceived a *ruse de guerre* aimed at the destruction of the German Pacific squadron. However, before it could be sprung, that squadron had inflicted a major defeat on the British.

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1 Tom Johnstone is a retired Royal Signals officer who also served in the Royal Air Force and on secondment with the King's African Rifles.

2 Admiral Sir William James. *The Eyes of the Navy. A Biographical Study of Admiral Sir Reginald* Hall, Methuen, London, 1956.

3 Captain Franz von Rintelen. *The Dark Invader*, Peter Davies, London, 1933, p. 203. Rintelen, a Richard Hannay figure, became a firm friend of Admiral Hall following his interception and detention while travelling on a Dutch ship from the United States to the Netherlands at the end of 1915. His account of espionage and sabotage in the United States during five months of 1915 is at times over the top. Nevertheless, his close relationship after the war with Admiral Hall who wrote the foreword to *The Dark Invader* gives credence to Rintelen's account.

4 ibid, p. 205.

A Naval Ambush

On the outbreak of war, British and German Admiralty's were aware of each others fleet deployment. While the main battle fleets faced each other across the North Sea, each nation had squadrons of varying strength in the Mediterranean and the Pacific. In the Mediterranean, the German battle cruiser *Goeben* and the light cruiser *Breslau* escaped the British and French fleets, and sought sanctuary off Constantinople in the Sea of Marmara. In Berlin the only news the Admiralty had had of the chase and escape of their ships, was the interception of radio exchanges between pursuing warships. The British countered the possibility of *Goeben* and *Breslau's* emergence from the Dardanelle's by dispatching two battle cruisers, HMS's *Invincible* and *Inflexible* to the Aegean, where they remained for several months watching; and being watched. At the same time, under command of Admiral Count von Spee, the strong German Far-East squadron consisting of two heavy cruisers *Scharnhorst* and *Gneisnenau* plus the light cruisers *Leipzig, Dresden, Nürnberg* and *Emden* moved from Tsingtao. Then having detached *SMS Emden* to wreck havoc as a commerce raider in the East Indies, von Spee's squadron steamed southeast, under radio silence. Off Coronel, Chile, Spee's ships destroyed a British squadron under Admiral Cradock on 1 November 1914. Only *Canopus,* an antiquated pre-*Dreadnought* battleship too slow to remain in Cradock's line, escaped. Afterwards the German squadron entered Valparaiso where its crews were feted by the German colony. News of von Spee's victory and arrival was not long in reaching the naval staff in London, where a naval ambush of long preparation was put into motion.

Full scale dummy replicas of *Inflexible* and *Invincible* were constructed in England and towed under great secrecy to the Aegean. Having exchanged places with their namesakes on a dark night, the two battle-cruisers navigated the straits of Gibraltar in darkness, and raced to the Falklands. Meanwhile, on the other side of the globe, HMAS *Australia,* sister ship to *Inflexible* and *Invincible*, had completed her mission to oversee the occupation of the German colony at Rabaul, when orders were received which sent her steaming at best possible speed to the southeast Pacific.

Concurrently, an operational message to von Spee had been prepared, purporting to emanate from Admiralty Berlin, ordering him to proceed with all speed to the Falkland Islands and destroy the wireless station at Port Stanley. It was encrypted in the German naval cipher; and dispatched by courier via The Netherlands to a British agent in Berlin. His instructions were to dispatch the message on receipt of further orders. The agent already knew the procedure used by Admiralty Berlin for the dispatch of such messages by commercial cablegram, and how it was stamped by the Admiralty and censor's office. He had also acquired the necessary stamps and forms. Only the destination cable office was required; and this was supplied by news of von Spee's entry into Valparaiso.

On receipt of the message, Count Spee discussed the orders it contained with the German Minister to Chile, then summoned his senior officers to a conference. Despite the misgivings of some commanders, the squadron sailed south. A bare twenty-four hours separated the arrival of the British and German squadrons at the Falklands. The British ships were coaling when lookouts spotted the smoke of approaching ships; coaling was discontinued and the two ships began raising steam. In the morning light of 8th December 1914, when the approaching German ships identified the distinctive tripod masts of British dreadnoughts, many in von Spee's squadron must have known they were doomed. In the engagement that followed, and for which battle cruisers had been specifically designed, only the fastest German light cruiser, *SMS Nürnberg,* escaped. Had the captain of *Nürnberg* decided to sail into the Pacific instead of around Cape of Good Hope to German East Africa, his ship would have come under the guns of *Australia* off Cape Horn. Instead of a repetition of the *Sydney/Emden* engagement at Cocos

Keeling, the RAN flagship had to be content with sinking Spee's supply ship *Eleanore Woermann* with a single shell. The battle of the Falkland Islands is the earliest example of new age naval warfare. Although separated by thousands of miles and fought on land and sea, the battles of Tannenberg and Falkland Islands signalled that electronic warfare had made its début on the battlefield.

When the senior surviving officer, Commander Pochhammer, made his post-battle report the Kaiser penned a personal note to his copy: "It remains a mystery what made Spee attack the Falkland Islands."[5]

The Phantom Fleet and Jutland

When radio telegraphy became widely used in ships, naval signals specialists made the important discovery that Morse sending was distinctly personal; and a telegraphists 'fist' was as identifiable as his fingerprint. Once his ship was identified, by the use of directing finding, that ship's movements and location could be plotted. The potential use of this in war, for both intelligence and deception, was quickly seen; and a signals intelligence cell was created on most warships. In 1915 the Royal Navy's Grand Fleet transferred a number of ships telegraphists into a flotilla of small vessels, trawlers, fitted with radio transmitters. It was to become known as the 'phantom fleet'.[6] The intention was, in conjunction with radio silence, to deceive the Germans as to the true location of major units of the Grand Fleet.

On the outbreak of war, the Battle Fleet under Admiral Sir John Jellicoe moved to Scapa Flow and Vice-Admiral Sir David Beatty's Battle Cruiser Fleet to Rosyth. From these bases, the British Grand Fleet instituted a naval economic blockade of Germany. But so confident was the Army dominated German High Command of victory before Christmas 1914, the effects of naval blockade on Germany were discounted. Seen by Berlin the strategic role of their High Seas Fleet, "second largest in the world and second to none in fighting quality and efficiency" was coastal defence. Confined to port by the orders of Kaiser Wilhelm II, the spirited young navy grew restless. When Admiral Reinhardt Scheer, who had commanded German battle cruisers which had bombarded English coastal towns in 1915, became commander of the High Seas Fleet in 1916, he was confident of achieving "a situation of temporary and local superiority which would give him victory;" he won approval for a major sortie into the North Sea; to lure a portion of the Grand Fleet into action with the entire High Seas Fleet. At the end of May 1916 Scheer's intelligence postulated this situation could be achieved with the Battle Fleet anchored in Scapa Flow, and the Battle Cruiser Fleet drawn south by a second naval bombardment of English east coast towns. At 1540 hours on 30 May 1916 the coded message "Carry out Top Secret Instruction 2490 on 31st May" was flashed to the High Seas Fleet. It was intercepted and decoded by the Admiralty London before 1700 hours. Although the secret instructions were not known, the widespread distribution of the message indicated a major enemy operation.[7] The intelligence was flashed to Admirals' Jellicoe and Beatty. Both fleets put to sea, but while Beatty's ships told the world, Jellicoe's ships were under radio silence; while the 'phantom fleet' continued inter-communicating far to the north. Scouts of Beatty's Battle Cruiser Fleet duly engaged German battle cruisers at 2.28 pm on 31 May; and after a major clash with heavy losses,

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5 ibid, pp. 114-222. The *Nürnberg* reached German East Africa where she was trapped and sunk by a British squadron. However, her personnel, guns, equipment and stores had previously been landed and provided a major reinforcement for General Paul von Lettow-Vorbeck. An irregular soldier of genius, Lettow, with never more than 20,000 men, tied down over 100,000 Allied troops. Campaigning across East Africa the size of Europe, he held out until after the Armistice. Orders had to be despatched from Berlin to oblige him to surrender.

6 Captain Ferdinand Tuohy. *The Secret Corps*, John Murray, London, 1920, p. 152.

7 Captain Donald MacIntyre. *Jutland*, Pan Books Ltd, London 1966, pp. 30, 83 & 96.

Beatty withdrew his squadrons northwards, leading the German Fleet directly towards Jellicoe's onrushing Battle Fleet in cruising formation - columns of four battleships disposed abreast.

A naval friend of Admiral Hall wrote after the war that the weakness of Room 40 at this time was that it was a decrypting office not an intelligence centre.[8] Much of the information passed to naval operations was not properly analysed, or discounted by the senior duty officer. Room 40 did not become an intelligence centre proper until 1917. Yet, notwithstanding inaccurate, incomplete, and non-intelligible information transmitted to Jellicoe by the Admiralty, Beatty, and other subordinate commanders; which Jellicoe could not question due to radio silence, the Battle Fleet and the German High Seas fleet were on converging courses. At 6.15 pm to Scheer's utter astonishment, he beheld to his front Jellicoe's battleships deploying from cruising formation into line of battle, and crossing the 'T' of *his* line. Worse, almost the entire Grand Fleet was between him and his home ports. Instead of ambushing the British Battle Cruiser Fleet, Scheer was himself ambushed. Pounded by heavy and accurate gunfire, Scheer ordered "Battle Turn-Away". Only immediate execution of "superb tactics and perfect fighting discipline" saved the High Seas Fleet from total destruction.[9] Darkness brought command indecision and confusion; nevertheless, in the following twelve hours Scheer had to repeat the 'battle turn away' before his ships reached the safety of their home ports. At Jutland the British losses were the greater; but the High Seas Fleet never put to sea again. Its morale was sapped by inactivity, and when eventually the order to put to sea was given in October 1918 the junior personnel of the High Seas Fleet mutinied en masse.

The Zimmermann Note and its Consequences

On 16 January 1917 Arthur Zimmermann, German secretary of state for foreign affairs cabled a note to German minister in Mexico, von Eckhardt via the German minister to the United States, von Bernstorff. It was encrypted in a diplomatic cipher that had not been changed in years, and transmitted to Washington by several routes; the Swedish Foreign Ministry, Stockholm; the American Embassy, Berlin; and also radioed direct to New York.

> For your Excellency's personal information and to be handed on to the Imperial Minister in Mexico.
>
> We shall commence unrestricted U-boat warfare on February the 1st. Nevertheless we hope to keep the United States neutral. If we should not succeed in this, we shall propose to Mexico an alliance on the following terms: We shall wage war and conclude peace in common. We shall provide general financial support, and stipulate that Mexico shall receive back the territory of New Mexico and Arizona which she lost in 1848. The details will be left to you to carry out. Your are instructed to sound Carranza (President of Mexico) in the strictest confidence, and as soon as war against the United States is certain you will give him a hint to enter into negotiations with Japan on his own initiative, requesting her to join in and offering to act as intermediary between Japan and Germany. Draw Carranza's attention to the fact that the carrying out of unrestricted U-boat warfare will make it possible to bring England to her knees and compel her to sue for peace within a few months. Confirm receipt. Zimmermann."[10]

The message was intercepted and decoded in London; but the British government and its officials were in a quandary. Diplomatically, the message was so grotesque that it could be a hoax; designed to embarrass the British and prove they had broken the German diplomatic cipher. However, the British knew that if it was genuine it could possibly bring the United States into the war on the Allied side. Hall, however, had insisted that whatever happened, when releasing the note ways and means had to be found, to conceal from Berlin the British ability to

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8 James p. 119.
9 MacIntyre p. 132.
10 Rinteln p. 226.

read Germany's most secret diplomatic traffic. Not until 24 February did Foreign Secretary Arthur Balfour hand U.S. Ambassador Walter Page a plain text copy of the note. Then the British had to convince the incredulous Americans the message was genuine. The American Ambassador telegraphed State, and, giving them the message identification, suggested "you can probably obtain a copy of the text, as transmitted by Bernstorff, from the telegraph office in Washington".[11] State Department were unable to break the German crypt and suspecting a British diplomatic ploy, demanded the code books to decrypt the message themselves to confirm its authenticity. When the British refused to hand over the code books, State Department cabled their copy of the original cryptogram to their ambassador in London. For once Admiral Hall lowered the guard surrounding Room 40; his senior cryptanalyst brought the relevant code books to the US Embassy (American soil), and, in the presence of Mr Page decrypted the message.[12] The second part of the conundrum was played out by the Americans informing the press they had obtained the decrypted plain text in Mexico City. This caused hiatus within the German Diplomatic service

Conclusion

Naturally, on its release the Note caused outrage in the United States. But as foreseen, anti-war activists and pro-German groups claimed it was a British (perfidious Albion) plot to involve the United States in a European War. President Wilson might still have found ways to keep the United States neutral. However, all debate ceased when Zimmermann, with astonishing naivety, publicly announced at a press conference that the telegram was genuine.[13] Congress declared war on Germany on 6 April 1917. Financial credit, delayed by Wilson as his trump card to force the Allies to a peace conference was immediately extended. However, Mexican cross border raids and retaliatory United States incursions into Mexico, tied down a considerable part of the regular army of the United States throughout 1917. Not until April 1918 did American troops arrive in France in any great numbers. Meanwhile, Germany defeated Russia and moved over a million men to the Western Front; and in their 1918 spring offensive came very close to defeating the Allies. Unrestricted U-boat warfare brought as much hardship to the civil population in Britain as the naval blockade caused in Germany. What saved Britain was the reinstitution of the convoy system last used in the Napoleonic wars.

Admiral Hall and the staff of Room 40, by intercepting, decrypting and releasing the Zimmerman note probably saved the Allies from the necessity of a stalemated negotiated peace treaty. That would possibly have left Germany in possession of much Polish, Russian, French and Belgian territory, prolonged German Imperial militarism and altered the course of history.

After the war, the aerial strategic bomber was seen by some military thinkers and politicians as the future of war. The Royal Air Force took over responsibility for Imperial Policing in Palestine, Iraq and the Northwest Frontier of India. Behind the scenes in the RAF, research began for an electromagnetic 'death ray', which eventually resulted in the development of radar. In World War II Radar, an important passive element of electronic warfare, was a major factor in winning the Battle of Britain. However, it was only one aspect of the secret war; during the years 1940-1943, communications intelligence and electronic intelligence repeatedly saved the Allies from defeat. Australia's main benefit from EW was the destruction of Japanese aircraft carriers in 1942. The story of that secret war has been told and retold. However, the full story of the secret war of 1914-18 has never been told because Admiral Hall's papers were placed under a publishing ban.

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11 ibid, p. 229.
12 Barbara Tuchman. *The Zimmermann Telegram*, The Phoenix Press, London, 2001, pp. 164.
13 ibid, pp. 177 & 183.

Throughout the second half of the Twentieth Century, electronic warfare waged unceasingly between the ideological-based East and West. A new dimension was added when global orbiting satellites were launched for military communications, electronic eavesdropping, photographic reconnaissance, and surveillance. During that period the gigantic costs for the research and development of computer and space technology, primarily for military use, was mainly borne by defence spending. In the end the cost of the Cold War was too much for the Communist East to bear and its economy collapsed. The Cold War between NATO and Warsaw Pact countries, was for Europe the most bloodless war in its long history. War was quite different in the rest of the world. The West intervened in selected places, notably Korea, Indochina, Algeria, Malaysia, Vietnam, and the Persian Gulf, which immediately drew the attention of the international media and the United Nations. Elsewhere the four horsemen of the apocalypse rode unchecked in ideological surrogate wars and its accompanying misery; especially in Africa.

A major spin-off for the world from the technology developed primarily for the Cold War, has been the personal computer, enhanced global communications, the Internet; and globalisation of many aspects of human endeavour. The downside of this is that international terrorism, drug and people smuggling, and international crime in general, have also been enhanced. Defeating these, particularly international terrorism, is the challenge for the secret warriors of the Twenty-First century.

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THE INFANTRYMAN'S NAVIGATION AID

Clem Sargent

The Sydney water-colourist, Sophia Campbell, in her painting of the Sydney George Street Barracks, c1817/18, depicted one of the squads on the parade ground being drilled in marching by an NCO who is measuring the step with a pace stick. It has been suggested that this must be one of the earliest depictions of the use of the pace stick.

Another, almost contemporary, view of the use of the pace stick has recently come to light. In the late 1820's an officer of the 80th Regiment, which was in Malta at the time, had been oversighting a squad of recruits at drill, and overheard some RN Jack Tars who had also been observing the drill squad, discussing the role of the sergeant following the squad with a pace stick. They could not understand it at all until another sailor joined their party and was appealed to for advice. His reply was 'Why don't you see *that* (meaning the pace stick) is what they steers the chaps with! It's all the same as the rudder of our ship to them ere lobsters'.

One wonders why all the fuss is now made of Global Positioning Systems and satellites and, for that matter, map co-ordinates.

References:

Clem Sargent, *The Colonial Garrison 1817-1824; The Northamptonshire Regiment In The Colony Of New South Wales,* 1996, Canberra, TCS Publications, pp. 24, 99-100.

Thomas Bunbury, *Reminiscences Of A Veteran,* 1861, London, Charles J Skeet, Vol 2, p. 159.

DEAR EVERYBODY AT HOME:
A TASMANIAN'S LETTERS FROMTHE GREAT WAR

John Wadsley[1]

France 2-9-16

Dear Everybody at Home,

If you receive this I will by then have passed to the Great Beyond. We are just preparing to go in on a fairly large stunt which may be the end of a good many of us and I may be one of the number. Up to the present altho' I've been in the Firing Line and about there a good deal, have not yet participated in the actual advance and now the time comes.

Well, I leave myself in the hands of the Almighty and trust him absolutely. You may depend on it, I've done my job and you'll have no need to be ashamed of me. I would have liked to have got back again but 'twas not meant that I should. Never mind girls, there'll be someone else to take my place.

Am leaving this with a pal of mine who is on the reserve of officers and not going in; he will post it for me if I do not come back. Well Dad goodbye! Goodbye girls! Let the remainder of the family know I think of you all and hope to meet you all again later on. 'Tis rotten having to write this but c'est la guerre! One thing we know Fritz has a much worse time than we do, I guess there'll be great rejoicing when it is all over. We are all thoroughly sick of it. Well goodbye again to you all, from your son and bro, Len.

This was the last letter of Lennard Lewis Wadsley, 26 years old, Lieutenant, 52nd Battalion, 4th Division, AIF, killed 3 September 1916. Len was killed in the carnage on the Somme Battlefield, at a place called Mouquet Farm near Pozieres. The War Historian C E W Bean wrote that the Pozieres Ridge was "more densely sown with Australian sacrifice than any other place on earth". 19 attacks were launched by the Australian Divisions through the mud and devastation against strongly defended objectives. In all some 23,000 dead and wounded in just seven weeks.

What was it like for a young Tasmanian orchardist to go on his longest, and ultimately his last, journey? Len's letters, written to his family in the small farming community of Cygnet, give us an insight into that time, when family meant everything and war was an adventure.

The Wadsley's had an orchard, "Pendennis", up the Golden Valley Road. The family had moved to Cygnet after the crash of the Van Dieman's Land Bank in 1891. Their original orcharding property, at Florence Heights above Moonah, had suffered so much through the bank's collapse, as did many other Tasmanian businesses and families, that they were forced to find other opportunities.

Len was obviously close to his family. His letters reflect a feeling of oneness with their lives, even though he was in Egypt and France. He was the youngest of eight children, living on the farm with his widowed father, Wright and his sisters Dora, Gwlad and Annie. His brothers James, Ted and Arthur were working in Hobart and Launceston and Mary had married.

He missed the fruit picking season and daily tasks of the farm terribly, yet he showed a cheerfulness in facing the dangers ahead; he was, perhaps, an example of the self-assured colonials eager to prove themselves in the world.

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[1] The article is based on over 70 letters and diary of Lieutenant Lennard Lewis Wadsley. It was originally published in the *Leatherwood Journal*, No. 12), August 1994.

Len enlisted on 18 November 1914. He had been in the Militia for eight years and so he was automatically considered for officer rank. During 1915, as a Second Lieutenant in 1st Depot Battalion at Claremont Camp, he trained recruits.

It was an uncertain time, but Len tried to put the family at ease:

> I can tell you that it won't be long before I get away, I had no idea I was so well up the list ... but this is just to prepare you for a sudden break. Now, Dad don't be downhearted. It's up to me to go if I can do any good and I have every confidence in coming through alright.

In November Len commanded reinforcements to the 15th Battalion transferred to Broadmeadows Camp near Melbourne. For many it was their first sea voyage.

> It was rather rough when we got into the Strait next morning, but had a cup of tea and went on deck to see how the men were faring. Poor beggars, they were ill, about 2/3 of them were down.
>
> The attractions of Melbourne lured many of the new soldiers. "Leave here seems to be the trouble, was speaking to one officer and he told me out of 300 men he could only get hold of six as the remainder were absent without leave.

Len had his fair share of fun too:

> went to "High Jinks", it was alright, we could see the girls that were on board [the boat from Tasmania]. They were almost unrecognisable because of paint etc, but it was good, there's no error about it. I think I'll go again before the season closes."

He was in high spirits:

> There are plenty of apples over here ... but they are not a patch on Tassy's, no flavour hardly. Cherries, strawberries and other fruits are plentiful but none of them come up to those at Pendennis. ... Heaps of love to all, don't worry about me. Am feeling bonza will be alright here, remember me to all enquiring friends. Love to all, Len.

Finally on 29 December 1915 they embarked from Williamstown. *"Everything has gone off splendidly. There are 1600 on board ... a fine lot of men"*. With the evacuation of Gallipoli only nine days before, the future of the Australian Imperial Force in the war was somewhat uncertain. For Len and his companions the stay in Egypt was to become a frustrating interlude while strategists decided their fate.

> At Sea, 20/1/1916
>
> Dear Everybody at Home,
>
> Here we are still slogging along, and if we don't get a wriggle on guess we'll arrive when the war is over, and will just turn round and come back ... dropped anchor just after dark alongside another trooper going back to Australia with wounded.
>
> At once the native craft swarmed around and the guard had their work cut out to keep off the curio sellers ... there were coolies galore also the usual native boatmen who will dive for sixpence and come up grinning and show it to you and put it in their mouths, some of them had their mouths full in no time ... ".

They arrived in Egypt in early February and so began a period of training in the dust, sand and heat, seeing the sights of Cairo and coping with the locals;

> the natives thrive on filth and I always feel when near natives or near their quarters I'd like to have a good bath and change of clothing, they seem so lousy. The camp here is not too brilliant as regards freedom from insects, feel pleased I brought my sulphur bags now, they are most useful.

What a change for the boy from the cool climes of the Huon Valley! Len was also missing some important family events.

20/2/16

Dear Madge

What's this I hear? During the past week I've been lucky enough to receive a budget from home and in every letter or card there was the same thing mentioned ... Well, I don't know whether to congratulate you or not because if you knew Ted as I do, all you would want would be sympathy ...

I hope and am sure you'll be quite happy, in fact it gives me much pleasure in placing my hands on your heads and solemnly pronouncing the Benediction 'Bless You! my children' ... How did you find Pendennis ... I wish I'd been home to give you a right royal welcome and to rub your face with raspberries and thus inaugurate you as one of the family."

The AIF was growing and while Len was in Egypt, a new Division, the 4th, was formed. Officers and men for the new battalions were drawn from veteran units that had served at Gallipoli and the fresh troops from Australia, thus blending experience with exuberance.

13/3/16

I received a note from Hunt ... he had a job for me if I was tired of Training Battalion duties, so I went to see him. He is to get a company in the 52nd Battalion in the new organisation and had been given carte blanche to select his subalterns by the Second in Command, Major D.A. Lane of Tas and he at once offered me a job ... I'll like the change as I have lost all my own boys ... of course the faithful James will still be in attendance as the Batman is regarded as the personal property of an officer.

On 22 April Len was promoted to full Lieutenant:

I'm greatly pleased and now have to prepare for my third [star] , which as things are now I won't be able, unfortunately, to get unless there are a few casualties which I don't want by any manner of means.

Finally, the 52nd had a short stint in the trenches defending the Suez Canal:

can tell you if Johnny Turk does come he'll get a warm reception ... all the men are quite excited at a probable chance of a scrap. All of them have been in camp for months and are quite eager for something to break the monotony.

They were to be disappointed. In June the Battalion began its journey to the Front Line in northern France. Len's letters show a keenness and anticipation for what lies ahead. The sea voyage to Marseilles left the desert and flies behind, while the train journey to the staging areas behind the Front brought pangs of homesickness as the troops passed through green and pleasant lands.

it is beautiful and no wonder the French fight so for their country. All the way there is nothing but gardens and vineyards, the avenues are great and the people most hospitable.

At first the Battalion was billeted at Fletre and Sailly near the Belgium border. They moved into the Front Line in an area called "The Nursery" where new units could become accustomed to trench life.

The shells hurtle overhead and whistle through the air and crash up against old Fritz's parapet ... you could see Fritz's trench going up to the skies, boards, posts, sand bags and dirt ... one of the officers here says he'd be quite satisfied to read about it in a book, so would I. Yet there's something fascinating about it; 'tis great sport, yet awful.

In late July, after being pulled out of the Front Line and returned to billets for further training and preparations, the 13th Brigade, of which the 52nd was one of its four battalions, moved towards the Somme battlefield.

> We are A1 again and working as per usual getting ready for the next spasm, when and where it will be we know not, but suppose it will be some where in the 'great push'
>
> France 30/7/16. ... We are camped in an old orchard, the huts for the men are quite shaded from the sun, but ours are in the open and extremely hot ... I can imagine a Sunday like tonight at home, we (the girls and I) would be going to Church and Dad would be piloting Tot and Herb up the hill. The drive to church down to the Port would be at the usual pace and we would just arrive in time ...
>
> Do I sound very homesick because I don't feel so. 'Twas just a reminiscence so jotted it down. The country here is very similar to Tassy and the evenings are just the same ... My Platoon is still going strong and I get on with them better than ever since we had a spasm in the Trenches; they reckon I'm game. I wonder?"

On the night of 14 August units of the 13th Brigade attacked Mouquet Farm along with the 4th Brigade. However, the 52nd was used as a reserve and did not take part in the attack. There were a great many Tasmanians within the various battalions involved and Len was able to meet up with some of his old friends from his original unit, the 15th Battalion. This action did not prove successful and Mouquet Farm remained in German hands. Even now this area had developed an ominous reputation as the Germans realised that the defence of Mouquet Farm determined the rest of their line at Pozieres. The farm was in name only; its buildings had now been obliterated by the intense shelling. However, the Germans had dug deep under the ruins and reinforced their positions with concrete fortifications. This position would not be won easily.

Len's unit was pulled out of the line with the rest of the Brigade to rest and reinforce. But preparations were in hand to send them back in. The attrition rate was so horrendous that battalions could only hold the line for a few days before their casualties became overwhelming. On 1 September orders were received that another attack was to be made on Mouquet Farm. The 52nd Battalion was billeted at La Boiselle, just behind the lines and began preparations for the next "stunt". 100 rounds, 2 bombs [grenades] and 2 sandbags per man were issued; reconnaissance of no-mans land was completed and troops prepared themselves for what was to come. It was to be a bloody encounter. Sergeant Roy Pollard from Len's Platoon in 'C' Company wrote to the family on 30 November 1916 on his way home after being wounded:

> a few minutes before the charge commenced, he [Len] told me that he felt as if he would not come out of it; I admired him then more than ever I did before, because, he, believing it to be so, led us on with exceptional dash and carrying out his duty as well as any officer has ever done on the Battlefield.

The War Diary of the 52nd Battalion provides graphic details of that furious charge:

> the Companies commenced their assault about 5.14 am leaving their 'Jumping Off' point very nearly at the same moment. The assault was delivered with much spirit and dash, and in some cases a short, but fierce and bloody hand to hand conflict ensued, Bayonets and rifle butts coming into free play. Each Company seized its objective and 'C' Company [Len's unit] evidently pushed forward under our own barrage. The Company Commander (Capt Ekin-Smyth) drew them back towards their objective but was unfortunately about this time mortally wounded. The Company again pushed forward and as an organised Unit ceased to exist.

From letters written to the family after the event, it appears Len Wadsley was wounded and placed in a shell crater. Another soldier was brought to the same place, and Len directed that this man, who was severely wounded, be taken to the rear first. When the stretcher party returned, they could find nothing of Len. It is most likely that the fury of artillery fire had buried him in the morass of mud. His body was never found. The 52nd Battalion lost twelve officers and 438 men in that brutal encounter. The 13th Brigade lost, in total, 41 officers and 1,305 men killed or wounded. It was a high price to pay, but the troops had won, and held against numerous counter attacks, an important objective. For Len his time was over. But through his letters we can sense the spirit of this young Tasmanian who ventured across the sea to do his duty, never to return.

THE MISSING MAN
THE SAPPER WHO NEVER WAS

K M Lyon

Brigadier Lawrence Fitzgerald OBE in his work on the activities of the Australian Survey Corps in WWII, *Lebanon to Labuan,* identified the five members of 1 Aust Corps who formed the Survey Directorate on Corps HQ and accompanied the HQ to Greece in February 1941. They were Captain Allan Kurrle, later Lieutenant Colonel, Sgt Robert Hammett, in post-war years a Major, Sappers Appleton, Bartleet and Clay-Louer. In the evacuation which followed, Kurrle, Hammett and Bartleet returned safely to Palestine, Appleton was lost at sea but Fitzgerald made no mention of the fate of Clay-Louer and, not only his fate, but his identity have remained a mystery until recently, when some sustained research revealed his story.[1]

In 1989 a search of the War Diaries of Survey Directorate, 1Aust Corps and 2/1 Corps Field Survey Company, the only Australian Survey unit in the Middle East, revealed nothing on Clay-Louer. For the Directorate there were only entries for 1 to 30 June 1940. There were 14 boxes of diary entries for 2/1 Coy but again there was no mention of Clay-Louer. Who was he? An enquiry to the 2/1 Coy Association also produced no information of the mystery man. Members recalled Barleet, and Appleton's loss at sea, the histories of Kurrle and Hammett were well known, but there were no recollections of Clay-Louer. A request through the Directorate of Military Survey to the Soldier Career Management Agency elicited no further information; The AWM web site WW2 Nominal Roll was tried without success.

At last the penny dropped; could the name have been misspelt by Fitzgerald? The spelling Clay-Lauer was tried and all was revealed. In his Record of Service on the AWM web site he was shown as NX8994, Wilfred Clay-Lauer, born at Newcastle, 1 February 1902, enlisted at Paddington 8 December 1939, Unit – 2/1 Field Regiment, RAA, had been a POW, discharged 24 April 1945. Then from his National Archives of Australia file it was found that he was 37 years of age on enlistment, a surveyor and civil engineer; married, he lived at Bringelly Road, Prestons. He had served in the Militia – 1 Battery AFA from 1920 to 1924, re-enlisting in 1933 in 17 Battalion. He only served briefly there before transferring to 1 Arty Svy Coy where he was promoted to Sergeant. On his enlistment in the AIF on 8 December 1939, he was allocated to 2/1 Fd Regt as a Specialist Surveyor TG I. He embarked for the Middle East on 10 Jan 1940 and disembarked at Kantara 13 February 1940.

Clay-Lauer's military career can then be followed from the entries in the Service and Casualty Forms (AF B103-1) in his Archives File. The entries are shown here in chronological order:

July 1940 – transferred to 'Y' AA Regt, Deir Suneid.

14 August 1940 – transferred to 2/1 Fd Regt, Aust Arty.

19 January 1941 – promoted A/Bdr.

24 February 1941 – transferred HQ 1 Aust Corps. (It seems probable that he was transferred, in view of his civil occupation, to the Directorate of Survey in the HQ in preparation for the move of the HQ to Greece, but see below)

24 March 1941 – embarked Alexandria for Greece.

3 April 1941 – admitted to 26 British Hospital. (It seems that he was already suffering from the complaint which he was to suffer for the remainder of his life. It may have manifested itself earlier and was a factor in his transfer from a field unit to a less strenuous one on the HQ.)

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1 Lawrence Fitzgerald OBE, *Lebanon To Labuan,* 1980, J G Holmes, Melbourne, p. 14. Fitzgerald was Major, OC 2/1 Fd Svy Coy in the ME and Director of Military Survey, Australian Army 1942-1960.

'April. There remained in Greece one organised Australian unit, a detachment of the 2/5 General Hospital commanded by Major Brooke Moore and including six other officers and 150 other ranks. It was charged with the care of 112 patients, all too ill to be moved, and other casualties who might arrive. On the morning of 27th April the Germans came and placed a guard over the hospital area which was at Kephissia, near Athens, but the Australians were allowed to continue their work unhindered. On 1st May the Germans took the hospital's portable x-ray machine to replace one of their own, which had broken down, and next day took some of the hospital's reserve of rations.

On 7 May , on German orders the hospital began to move to Kokkinnia, a suburb of Athens. On the 13th 50 patients arrived from the detachment of the 26 British Hospital which had remained at Kephissia, and in the next few days 140 more, accompanied by rations and equipment. The British hospital was there upon disbanded by the Germans'[2]

4 June 1941 – reported missing in Greece and transferred to X List.

19 July 1941 – confirmed by Red Cross as POW, in Kokinia.

17 November 1941 – POW No 22965 Stalag VIIIB

7 November 1942 – interned Oflag 3C POW No 2702.[3]

10 April 1943 – interned Stalag 383 new POW No 22965.

18 June 1943 – left Stalag for RES Lazaret Resemberg. (In his claim for pension Clay-Lauer states that as a result of representations by the International Red Cross he was placed in a plaster bed in which he spent nearly two years, leaving his spine rigid up to the neck suffering with spondylitis and sacroiliac arthritis, able only to eat very light milk foods made up from Red cross parcels. This statement is confusing in the light of his previous and later movements)

27 October 1943 – embarked Barcelona.

3 November 1943 – disembarked Alexandria. Evacuated to 1NZGH 93/11/43 Tubercular Spine) Repat POW can not be employed active Mil Service)

24 November 1943 – embarked *HS Oranjie* for Australia.

12 December 1943 – disembarked Melbourne.

14 December 1943 - 113 AGH (Concord)

18 March 1944 – discharged 113 AGH to 104 AGH (NYD Spine)

" " " - 104 AGH (Marie Strumpell Disease)

6 February 1945 – RR&GDD transferred in ex 103 AGH for discharge.

24 April 1945 – discharged.

On 5 April 1945 he had his name changed in military records to CLAY-LAUR, claiming that it had been spelt incorrectly on enlistment. Nevertheless he received his Discharge Certificate, Returned from Active Service Badge and Will all addressed to Bdr Clay-Lauer. It at least confirmed his rank as a Bombardier not a Private or Sapper.[4]

From the records it appears that Clay-Laur spent about a month and six days with the Survey Directorate of HQ 1 Aust Corps and the remainder of his service in hospital or as a POW. Although he was on Survey Directorate in Greece he remained a member of the Royal Australian Artillery; he was never a member a member of the Australian Survey Corps.

His was not a happy period of service and the spinal disease he suffered left him severely handicapped when he returned to his employment with the Metropolitan Water and Sewerage Board, Sydney, as a surveyor. Clay-Laur died on 15 May 1973.

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2 Gavin Long, *Australia In The War Of 1939-1945, Series I, Army,* Vol II, 1953, , Canberra, p.182.

3 Imperial War Museum Department of Printed Books, *POW. Armies and Other Land Forces 1934-1945,* London, 1990, identifies this as a Stalag.

4 Details Clay-Laur's military career have been taken from National Archives of Australia files: B503 N6002 and B833 NX8994.

"LEAVE WITHOUT PAY" THE STORY OF THE AWA TELEGRAPHISTS IN THE SECOND WORLD WAR

Graham Wilson

At the end of 1941, with the outbreak of the war in the Pacific, one of the pressing needs for the Australian forces was long distance communications, especially in the Far North. Prior to the war, wireless telegraphy support at Port Darwin, Port Moresby and Thursday Island had been provided to defence by a civil firm, Amalgamated Wireless (Australasia) Pty Ltd, or AWA. AWA had been formed in 1913 by a merger of the Australian Wireless Company, Telefunken and Radio Marconi Australia. The merger had been forced by a protracted series of legal disputes between the three firms, which had the dual effect of degrading Australia's wireless communications and causing large financial losses for the three protagonists.

On behalf of the Australian government, AWA took over the Coastal Radio Service (CRS), which had stations around Australia and in the Territory of Papua. The Department of the Navy took over the 19 existing stations at the outbreak of World War One and operated them using AWA staff. Control of the CRS passed to the Postmaster General's Department in 1920, with AWA still providing the telegraphists. AWA offered a scheme to the government in 1922 whereby it would build and operate, on behalf of the Commonwealth, a network of stations capable of maintaining direct, unrelayed wireless communication with the UK, Canada and South Africa. The scheme was accepted and AWA became the monopoly controller of wireless communication in Australia as it still controlled the CRS and the Island Radio Network.

By the outbreak of the Second World War, besides the CRS and the Beam Wireless Service (overseas commercial/government wireless and radio communications), AWA's major activity was the Island Radio Service. Between 1913 and 1939 AWA had established three networks in Fiji, the Territory of Papua and the Mandated Territory of New Guinea. The A.W.A. radio station at Suva in Fiji handled overseas traffic to Great Britain and Europe, via the Australian Beam Service, and also maintained communications with stations in Samoa, Tonga, the Gilbert and Ellice Islands, New Caledonia, the New Hebrides and Hawaii. Suva Radio also maintained internal communications in Fiji via links with three other AWA controlled stations in Fiji at Labasa, Savu Savu and Taviuni.

In the Territory of Papua, AWA's main station was located at Port Moresby. This station maintained communications with Samarai, in Papua, plus Thursday Island, and the Australian stations at Cooktown and Townsville. In addition, AWA maintained and managed the links for a private station at Popo, on the Anglo-Persian Oilfields.

Finally, AWA maintained an extensive network in the Mandated Territory of New Guinea. The chief station was located at Bita Paka, near Rabaul, on the island of New Britain. This station maintained direct radio communication with the AWA Radio Centre, Sydney. In addition, the station maintained constant communication with AWA owned stations at Aitape and Madang, on mainland New Guinea; Manus Island in the Admiralty Islands; Kavieng on New Ireland; Kieta on Bougainville; Marienberg Radio on the New Guinea Oilfields, and Bulolo and Salamoa on the New Guinea Goldfields. The Rabaul Station also communicated with the Gilbert and Ellice Islands, the Solomon Islands, and the Santa Cruz Islands.

This was the situation at the outbreak of the Pacific War in December 1941. Although the Fiji based network remained intact and unmolested, and continued to provide a vital communications service throughout the Pacific, it was a different story in Papua and New Guinea. As the Japanese thrust south into the Mandated Territory, AWA began to lose its stations. In some cases, staff managed to destroy equipment before it could fall into enemy hands. In others, however, lack of coordination and direction from above saw vital facilities fall into enemy hands. By the middle of 1942, AWA had lost all of its stations in New Guinea and the private station at Poro had been closed. Thus AWA was only maintaining its stations at Port Moresby, Samarai and Thursday Island.

We turn now to the status of the AWA staff remaining in Papua. Papua was under military government and the Army wanted all civilians out of the territory. On the other hand, it also wanted to maintain solid communications with Australia and within the territory. For this it needed, in the short term anyway it seemed, to keep the AWA staff on. Faced with this dilemma, the Army solved it in typical fashion by enlisting the AWA operators into the AMF and then immediately sending them on leave without pay so that they could continue with their civilian tasks! This occurred on 9 July 1942. Shortly thereafter, the RAN approached the Army and pointed out that as the navy would be AWA's main "customer" in the forthcoming campaign, then it was improper to have the operators serving in the Army. Thus, the doubtless by now somewhat bemused AWA operators in Port Moresby found themselves discharged from the Army and enlisted into the RANVR (Unmobilised Pool) and again immediately sent on leave without pay!

Obviously on something of a roll, the navy carried out the same action with AWA staff on Thursday Island on 7 August 1942 and then did the same with the staff in Darwin on 26 November. It was on this latter day that the navy finally decided to advise AWA in Sydney what the navy had been doing with its staff in the north! The Secretary of the Department of the Navy advised the Chairman of AWA what the navy had done and advised that "the enrolment of these men in RANVR will afford them some protection in the event of their becoming prisoners of war." It was nice of them to give a reason. The Secretary also advised the Chairman that Navy would continue to pay AWA the set charges for W/T services. Finally, AWA was advised that "the enrolled men are to be considered as on leave without pay and it is desired that your company will continue payment of wages to these men as heretofore." To its credit, AWA accepted this *fait accompli* without any fuss and continued to make good the men's wages.

Also, on 26 November, the navy decided to tell the navy what had been done! In a signal to Port Moresby, Thursday Island and Darwin, the relevant Naval Officer's in Charge (NOIC) were informed that AWA telegraphists operating W/T stations in their areas were to be attested and enrolled nominally in RANVR. Since all AWA telegraphists had already been enrolled at this time, the Secretary's signal to the NOICs was obviously a "tidying up of loose ends" exercise. The OIC of each W/T Station was to be appointed to the honorary rank of Warrant Telegraphist, RANVR, and the staffs were to be rated and enrolled as CPO Telegraphists as an honorary rate. The appointments and enrolments were to merely nominal, ie, personnel would not be mobilised but would remain in the unmobilised pool after being examined medically, attested and issued with a partial tropical uniform. They would continue to be paid by AWA. The fact that they were in uniform and were members of the RANVR was intended to afford some degree of protection in the event of their becoming prisoners of war. The results of medical examinations were to be recorded on Form RANR60. Words – 'on mobilisation' were to be deleted from the form and duplicates sent to Navy Office. Appointment of Warrant Telegraphist to be done on Form RAN8a. Enrolment of CPO Telegraphist to be done on RANR6. Attestation would be for 2 years

or duration of War and 6 months thereafter whichever longer. Naval Tropical Uniform issued consisted of:

a. 1 peaked cap, badge and 2 Khaki covers;
b. 1 helmet and cover; 2 Khaki shirts;
c. 2 Khaki shorts; and
d. 1 pair shoulder straps for WOs.

On 16 February 1942, the Secretary advised NOIC Port Moresby of the official numbers issued to the RANVR AWA telegraphists in his area. NOIC Thursday Island had to wait until 10 April 1943 to receive the same information for the AWA telegraphist in his area. NOIC TI was obviously somewhat concerned about the fairly irregular method of recruiting and administering AWA staff and queried Navy Office on what was to be done in the event of transfers of AWA staff between Port Moresby, Thursday Island and Darwin. In reply, he was informed that if transfers occurred between Moresby, Thursday Island and Darwin then RANVR documents were to be also transferred. However, if AWA staff were transferred south, out of the forward area, then the relevant documents were to be sent Navy Office as if the staff member had retired from the RANVR Very tidy!

The NOICs obviously continued to find the irregular status of the AWA personnel somewhat vexing. On 5 October 1943, NOIC Port Moresby signalled Navy Office with a recommendation that the telegraphists be mobilised. In its response on 13 October, Navy Office informed NOIC that Board Instructions of 26 November 1942 were to be strictly adhered to and that "not to be mobilised" was mandatory. That same day, in response to an earlier query, NOIC TI was advised that AWA telegraphists were to be treated as naval personnel for the purposes of vaccinations and inoculations.

The next problem that arose for the NOICs was the status of AWA telegraphists as "returned men" on transfer out of the operational area. Although nominally enrolled into the RANVR, the telegraphists remained employees of AWA and the firm was quite at liberty to transfer men as it pleased. The problem of the status of telegraphists posted south was raised with Navy Office in October 1943. But it was not until 25 November that a response was received advising NOICs that AWA telegraphists returning south would be issued with Service Certificates RANR2s with the date of discharge given as the date they left for the south.

While all of this administrative toing and froing had been going on in the background, the AWA telegraphists had, of course, continued with their job of maintaining communications.

6 Apr 1945 A/DNC recommended that steps be taken to have AWA telegraphists revert to their pre 1942 status at Moresby, Thursday Island and Darwin. He emphasised these men had not been paid by the Navy nor mobilised nor subject to Naval Discipline. As the areas were still Army commands recommended their concurrence be obtained. On 22.09.45 Army stated they had no objection (622/202/4223).

20 Oct 1945 Secretary advised NOICs:

1. Personnel operating AWA Radio Stations at Port Moresby. Thursday Island and Darwin shall resume their pre 1942 status as civilians carrying out official business on behalf of their company.
2. Such personnel are to be discharged from the RANVR as from 1st October 1945. Certificates of Service RANR2 will be prepared at Navy Office and used for this purpose.
3. Medical examination of each member is to be carried out on Form AM146z. If any member claims a disability due to or aggravated by service whilst a member of the RANVR a second Medical Officer of Navy, Army or Air Force, as available, should assist in the examination and compilation of the Form.
4. I am to state that Medical History Documents of personnel concerned are to be forwarded to the Director of Naval Medical Services (622/202/4223)

CAPTAIN UMRAO SINGH VC
LAST INDIAN VICTORIA CROSS RECIPIENT

Anthony Staunton

Subedar Major and honorary Captain Umrao Singh, the last surviving Indian Victoria Cross recipient died at the Army Research and Referral hospital in New Delhi on 21 November 2005 after a prolonged illness. Singh, 85, of Jhajjar in Rohtak, Haryana, was awarded the Victoria Cross, the highest award for bravery under imperial India for beating off four Japanese attacks on his advanced battery position at Kaladhan valley in Burma on the night of 15-16 December 1944. He struck down three Japanese soldiers before being knocked out. Six hours later, a counter attack found Singh at the site of his gun, so severely wounded that he was hardly recognisable. Around him lay ten dead Japanese soldiers.

Singh's funeral took place at his home village of Palra, Haryana State, on 22 November with full Army honours. Brigadier Ian Rees, the British Defence Adviser in New Delhi represented the United Kingdom.

Forty Indians and Gurkhas were awarded the Victoria Cross. Umrao Singh was the last living survivor of the 28 native soldiers from India and Pakistan. However three of the twelve Indian Army Gurkhas, Tulbahadur Pun, Bhanbhagta Gurung, Lachhiman Gurung are still with us. Counting the 63 awards to the Honourable East India Company separately the Indian Army was awarded 85 Victoria Crosses as follows.

1854-1904 - 33 (all British officers)

1914-1919 - 18 (incl 7 British officers)

1919-1935 - 4 (incl 3 British officers)

1940-1945 - 30 (incl 3 British officers)

Prior to 1911 Indian Army soldiers received the Indian Order of Merit First Class. This award was older than the Victoria Cross and had equal standing. However in the half century following the institution of the Victoria Cross the status of the Victoria Cross grew out of all proportion and in 1911 after some lobbying the Victoria Cross was extended to the Indian Army soldiers. The Indian Order of Merit was amended to reflect this change.

In these politically correct days it is sometimes said that the Victoria Cross was denied to Indian Army soldiers because they were not European. It should be noted that William Hall, a black from Nova Scotia serving in the Royal Navy in the Indian Mutiny and two West India Regiment soldiers in the second half of the 19th century were awarded the Victoria Cross.

With the passing of Umrao Singh there are just twelve living Victoria Cross recipients. Eight are Second World War recipients including Australia's Ted Kenna. The four post war recipients are from Korea in 1951, Sarawak in 1965, Vietnam (Australia's Keith Payne) in 1969 and Iraq in 2004.

See:http://en.wikipedia.org/wiki/List_of_living_Victoria_Cross_recipients for a list of living Victoria Cross recipients.

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GEOGRAPHICAL AND TECHNICAL INTELLIGENCE IN THE SOUTHWEST PACIFIC 1942-1945

Keith Richmond

When General Douglas MacArthur took command of the Southwest Pacific Area in mid-April 1942, he faced considerable obstacles. Apart from an apparently insurmountable lack of men and materiel, there was a paucity of useable intelligence. MacArthur's Chief of Intelligence, Colonel (later Major General) Charles Willoughby, was charged with establishing organisations to satisfy this urgent need.[1]

This paper seeks to outline the contribution of two of these agencies, working in geographical and technical intelligence.

We are aware of the public successes of the Allied Intelligence Bureau and some of its constituent parts including the coastwatchers. Willoughby also set about creating what was seen as the most successful support agency in the Allied Translator and Interpreter Section (ATIS), responsible for translation of captured documents and the interrogation of prisoners. He claimed the second most important body was the Allied Geographical Section (AGS). Designed to collate available geographic and hydrographic material into reports for tactical operational use, it stuttered into life in June 1942.[2]

In contrast with the speed with which the AGS was begun, technical intelligence was a harder problem to organise. While troops and commanders urgently needed any information on Japanese equipment, a coordinated approach to the issue had not been undertaken previously and it took some time before a wider approach was implemented.

Different elements of the armed forces were examining any captured Japanese item, and certainly small arms, chemical warfare equipment and ammunition were handed in for examination during 1942.[3] Perhaps the best example comes from the Chemical Warfare Section of the US Army that was given two Japanese flamethrowers at Bataan in February 1942. These were sent to the Edgewood Arsenal in the US. Scrutiny revealed the cartridge ignition system on the enemy

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1 References to the intelligence war in the Southwest Pacific Area (SWPA) often include a short summation of the main agencies. See for example, Desmond Ball, 'Allied Intelligence Cooperation Involving Australia During World War II', *Australian Outlook*, Vol 32, No 3, December 1978, pp 299-309, at page 30; Allison Gilmore, *You Can't Fight Tanks With Bayonets: Psychological Warfare Against the Japanese Army in the Southwest Pacific*, University of Nebraska Press, Lincoln NEB, 1998, page 18; David Horner, *High Command: Australia's Struggle for an Independent War Strategy, 1939-1945*, Allen and Unwin, Sydney, 1982, Chapter 10; Allison Ind, *Spy Ring Pacific: The Story of the Allied Intelligence Bureau in South East Asia*, Weidenfeld and Nicholson, London, 1958, pages 9-13; and Alan Powell, *War by Stealth: Australians and the Allied Intelligence Bureau 1942-1945*, Melbourne University Press, Melbourne, 1996, Chapter 1.

Note that this paper seeks only to discuss the activities of a small part of intelligence activities in the SWPA. Information has been drawn from History of the Intelligence Activities under General Douglas MacArthur, 1942-1950, The Intelligence Series G-2 USAFFE-SWPA-AFPAC-FEC-SCAP, Wilmington DEL, Scholarly Resources, 1950 (microfilm) – hereafter The Intelligence Series. Material is from Volume 1, A Brief History of the G-2 Section, Volume 6, Operations of the Allied Geographical Section, and Volume 7, Operations of the Technical Intelligence Unit in the SWPA.

2 The AGS is not well known today as seen in a contemporary reference – see www.naa.gov.au/Publications/research_guides/guides/vic/pages/chapter2/m.htm, Collections in Melbourne, discussing Earth Science where it says of the AGS, "Little is known of this agency".

3 The Intelligence Series, Volume 1, page 82

flamethrowers was superior to the standard US issue, so all subsequent US equipment was modified.[4] Indeed, this tradition of individual elements conducting their own intelligence assessments was to continue throughout, despite the presence of a central agency.[5]

Allied Geographical Section

In March 1942, Captain FE Williams, AIF, was instructed to begin work on the collation of geographical information on New Guinea and Timor, and to create a Table of Subject Headings to be used in the future preparation of reports. By mid-June under his direction, a small and over-taxed staff produced works on Timor, Gasmata, Rabaul, and New Ireland. However, the rushed standard of the work forced a re-assessment of priorities and Willoughby issued the first of three directives on 17 June seeking to structure the agency more efficiently. The first directive outlined the formation of AGS as an inter-allied, inter-service agency, a "combined, Geographical Intelligence Section responsible to GHQ".[6] On 19 July another directive was issued, indicating that AGS was to be under the control of the Assistant Chief of Staff, G-2, GHQ, SWPA (ie Willoughby), as well as better defining the organisation and its relationship with other bodies. The appointment was announced of Lt Col F Mander-Jones, AIF, in command; Major WV Jardine-Blake took over on 1 August 1942 and remained in that position throughout the war. By 6 October 1942, the final directive appeared, requiring all geographic information to be routed through AGS.

Initially AGS was housed in Victoria Barracks, Melbourne, but by early September 1943 it had moved close to GHQ and took over a floor at 115 Queen Street Brisbane. Demands for greater output saw the unit expand so that it covered two floors, and in September 1944 it moved to the outskirts of the city at Victoria Park. In June 1945 the headquarters unit moved to Manila (although a detachment remained behind and moved back to Queen Street). Small detachments of AGS were eventually located at Melbourne, Sydney, Port Moresby, Hollandia, Biak, and Tolosa on Leyte.

Information for AGS publications came from a variety of sources. When the AGS began, the Japanese were at their zenith and resources available to the Allies were restricted. On the positive side there were good standing libraries in Australia, such as State Public Libraries and in Government Departments. These were plundered for maps, documents, photographs and manpower.[7] Informants including missionaries, planters and seafarers were questioned for on-the-ground details to supplement existing information; eventually a dossier of 10,000 names was compiled. Information was sought from the armed services with mixed results. There was a poor response from those in charge of intelligence operatives who were patrolling in little mapped territory such as New Guinea, although the individual operatives were often more forthcoming. Field units distinguished themselves by the lack of input they provided, and it was claimed that intelligence reports on target areas conducted over the previous twenty years by Naval and Military Headquarters in Australia were never found![8] Considerable information was obtained from overseas, especially the UK, the USA (despite the 20 competing organisations there fulfilling essentially the same task), India, and after VE Day, the Netherlands. To the chagrin of

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4 Leo Brophy et al, *The Chemical Warfare Service: From Laboratory to Field*, US Army in World War II, Department of the Army, Washington DC, 1959, page 47

5 John Finnegan, *Military Intelligence*, Army Lineage Series, Centre of Military History, US Army, Washington DC, 1998, page 91.

6 The Intelligence Series, Volume 6, page 2

7 As an example of the material that was extracted, see AWM 93 50/12/65 that lists the materials loaned by the Australian War Memorial in June 1943. It included maps, files, and a three page inventory of photographs.

8 The Intelligence Series, Volume 6, page 15

AGS, they could only ever arrange a permanent liaison officer in Washington as the other countries were less willing or able to assist.

The output of AGS can be divided into distinct publication areas. The most important production was the Terrain Study, with 110 titles being published. Terrain Studies were intended to provide a comprehensive assessment of a particular geographic area, such as Wewak, but from a military perspective. Publications varied in size from a few pages up to over 150 pages plus dozens of maps and photographs. Subject headings included terrain, vegetation, military importance, ports, rivers and swamps, towns and villages, signal communications, seaplane bases, population, administration, medical problems and climate. Maps were designed to assist military activity: they showed items of military significance (possible areas for future airstrips, swampy areas that appeared to be unsuitable for tracked equipment, possible sites for bivouacs) and illustrated enemy activity (such as barracks, roads used for transport of supplies, landing areas for aircraft, tracks used by natives). Comments from informants were interspersed, so that one was told that, say, obscure tracks had been used quite recently by a miner.[9]

Derived from the major Terrain Studies were the Terrain Handbooks, about a third the physical size of the Studies, and designed to be taken into battle by officers commanding troops. As they were meant for fitting in a pocket they contained only part of the material in the larger works; 62 of these were published. The intent was to publish these closer to the actual operation, so sometimes the Handbooks included more up to date information than the parent Terrain Study. To use the comment of the official historian, they "became the Baedekers of the assault echelons".[10]

Special Reports were occasional publications designed to provide extra information, such as after a Terrain Study had been published, or for the use of occupational troops; 101 were published. Spot Reports on specific topics were usually issued with a Top Secret classification for use by planning staff, and 30 were produced.

Special Publications covered a wide net. First were the vegetation studies of eastern New Guinea and the Philippine Islands that were of interest to the troops and of value also to technical units such as photo interpreters. Second, a Timber Resource Study was conducted of the Philippines, and a set of identification cards for timber were prepared in conjunction with the Council for Scientific and Industrial Research. Third, technical reports looked at specifics such as railways in Japan and Java or roads in the Philippines. Fourth, a set of short guides was prepared for the soldier likely to be confronting New Guinea for the first time. Three were published: 'You and the Native', 'The Native Carrier', and 'Getting About in New Guinea'. They were written so that soldiers would understand them ("There's only one thing to be more careful about than village pigs and that is village women"[11]); 250,000 copies were distributed. Fifth, guides were written on particular countries, including Borneo and Java. Sixth, a four volume annotated bibliography of countries in the Southwest Pacific, the Philippines and Japan was prepared. Seventh, eight Sailing Reports were produced (substituting for Admiralty charts and similar where these were

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9 See Terrain Study # 76, Wewak, in The Intelligence Series, Volume 6, pages 32, 54. Also see AWM 54 831/3/98, Reconnaissance Reports on New Guinea, which contained a letter under General Herring's signature saying that the AGS was incorrect in claiming that the entrance to Salus Lake "has never been forded" as members of his staff knew this not to be the case.

It is worth noting that the Japanese prepared terrain studies similar with the AGS, and not surprisingly, used almost the same headings – see AWM Enemy Publications No 313, Intelligence Report File of the Kami Organisation (Special Service Organisation), 25 January 1945, section 1, Data on the Natives in the Hollandia Area and section 7, Military Geography of Area North of Ampasu.

10 The Intelligence Series, Volume 6, page 22

11 ibid, Volume 7, 'You and the Native', page 7

not available), offering a detailed analysis of the waters in the area, the likely obstructions, navigation aids, and vegetation in surrounding land areas.[12] Finally, considerable quantities of ad hoc reports were assembled on issues of interest to the South East Asia Command (79 on Malaya, 105 on Sumatra, 28 on Siam, four on Burma, and seven on Indo-China).

Preparation of the various reports followed a path that is familiar today with anyone who has worked in a bureaucracy. When advice was received of the need for a new report on either a new military objective or a background publication on say vegetation, responsibility was given to one person as coordinator. That person discussed the task with staff members and then jobs were allocated to the different sub sections. Then the section devoted to informants selected and interviewed appropriate people, researchers sifted the libraries or institutions for information, while the photographic and cartographic sections collated all available material or if possible, arranged for new items to be prepared. In the early days the intelligence staff prepared the entire report but this soon proved unwieldy and a system was introduced whereby most information was prepared by specialists on a raft of issues including medical, transport, hydrography, and meteorology. When the document was drafted it went to the editorial section whose task was to make the mass of information readable and accurate; a special check was made on items such as map coordinates and distances. Finally, the entire report was cleared through the Director or Assistant Director. The normal time for preparation of major reports was about three weeks although of course this varied enormously. Reports were issued at the rate of about one every four days over the life of AGS.

Staffing the AGS was always difficult given the lack of qualified manpower. The intent was to recruit those with military experience especially intelligence training, coupled with a strong academic background in an appropriate discipline such as engineering, anthropology, meteorology or geology, in addition to service in an overseas country likely to be studied by AGS. Not surprisingly, the number of fully qualified recruits was low, and compromises had to be made. The Australian Women's Army Service took administrative roles while AGS remained in Australia, freeing up some men for other positions. The bulk of the staff was Australians, and the US contingent did not assume anything near equal status until after the New Guinea campaign was over. This meant that finding staff from the restricted Australian pool was very difficult. Also, despite the supposed inter-service nature of the unit, the Dutch were distinctly reluctant to participate. Specialists including engineers, railway experts, medical staff members, the RAN and the RAAF made valuable contributions. Average numbers of Allied staff varied with the years – in 1943 there were only 3 Americans and 34 Australians but by 1945, there were over 50 Americans and 100 Australians.

Technical Intelligence and the 5250th Company[13]

Technical intelligence units evaluated enemy materiel to determine what counter measures were required as well as ascertaining the state of development of enemy production. The units also prepared literature and information for troops to assist them in countering the enemy weapons, and they retained any captured materiel so that further study might be done on the objects. This required technical intelligence personnel to locate, identify, then remove the materiel from where it was (often in or near the front lines) and then evaluate the item before sending it back to a rear depot for further tests.

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12 See AWM 57 14/9, 'Sailing Directions Netherlands Borneo'

13 There are few treatments of the 5250th Company, and they largely repeat the information in the Intelligence Series – see Maurice Schiffman, 'Technical Intelligence in the Pacific in World War II', *Military Review*, Vol XXXI, No 10, January 1952, pages 42-48, and William Howard, 'Technical Intelligence in the Pacific', www.wlhoward.com/id575.htm

A joint technical intelligence approach did not occur until late in 1942. Until this stage, captured materiel was taken by supply service personnel to the special staff officers in the theatre of operations. These officers made a preliminary analysis, prepared instruction booklets for troop instruction, and then (under the direction of Australian Land Headquarters) distributed half of the materiel to the Australians and the other half to the appropriate US technical service for more detailed analysis. Reports arising from the US teams went to the Assistant Chief of Staff, to the War Department and to combat and service troops. Under the conditions of battle, however, there were very real limitations with the scheme and in December 1942 a team arrived from the USA to inaugurate the joint operation.

The first team included fifteen members of the Ordnance Corps. Following extensive training at the Aberdeen Proving Grounds at Maryland as well as in Washington DC, they arrived in Brisbane on 30 December 1942, representing the specialties of "ammunition, small arms, artillery, fire control and equipment, and tracked and wheeled vehicles".[14] The team was divided into a headquarters group, a field team and an analysis team although it was common for members of each group to alternate tasks with the others. Field teams located, collected and identified enemy materiel, prepared a preliminary report on the item and then shipped it back to Brisbane. The analysis team conducted more detailed examination then prepared considered reports and shipped the equipment either to troops in the theatre for training purposes or shipped it back to the USA for analysis and training purposes. From January until July 1943 the analysis section produced 26 reports.

Initially chemical warfare teams sent items (eg flamethrowers, smoke candles, pyrotechnics, gas masks) back either to the US 42nd Chemical Laboratory or to the Maribyrnong Victorian Munitions Supply Laboratory for expert analysis. But the process was not considered satisfactory and in February 1943 a Chemical Warfare unit was recruited from local personnel. As with all technical intelligence operations, it was located in the US Army Forces in the Far East HQ set up at that time.

A directive of May 1943 determined that a salvage depot of enemy materiel would be established at Brisbane, close to the Australian salvage depot. The new depot was to be used for the receipt and shipping of items, despite the technical services at this stage still being independent. This latter decision marked the beginnings of a joint operation. Also, a Joint Allied Captured Enemy Equipment Board was established, to take over from Australian Land Headquarters in making the final say on disposition of items. The Board consisted of two members from the US forces, two from Australian forces and one from Allied naval forces.

A Chemical Warfare team went to Port Moresby from June to September 1943 to establish liaison with the relevant forces there and to ensure enemy materiel flowed through channels back to Brisbane: the groups contacted were US Army Ordnance, the Fifth Air Force, Naval Intelligence, the RAAF, and Headquarters of New Guinea Forces. The fact that this mission went to New Guinea indicates the inherent problems in achieving some level of coordinated technical intelligence in the theatre. In February 1944, another team, this time of officers from the technical services, travelled to forward areas to try and persuade troops there to retrieve and send back captured items.

From early 1943 onward, field teams from the technical intelligence units operated in the battlefields. While the intention may have been to find equipment quickly, there was a considerable amount of information to be obtained by trawling through the old battlefields too, so a lot of time was spent re-examining these areas after the troops had moved on. The Ordnance

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[14] The Intelligence Series, Volume 7, page 2

Technical Intelligence Section that arrived in late December had a team at Buna-Gona by 18 January 1943 and stayed two weeks. Nassau Bay in July 1943 was next call for the Ordnance team and this time they were only a few days behind the initial assault. A Chemical Warfare team also participated at the same location, as well as spending two weeks looking at the old Buna-Gona area. The next battle was at Lae-Salamaua and again the Ordnance team was present, while the Chemical Warfare teams went to Salamaua, and then on to Lae when it surrendered. Both areas gave up large quantities of useful items such as documents, ammunition and equipment, with the Ordnance team sending 60 tons of weapons and 90 tons of ammunition back to Brisbane. Similarly at the battle for Finschhafen in September 1943 the Chemical Warfare team was active.

While some administrative changes were made during 1943 to make the provision of technical intelligence more efficient, it was not until a directive of 22 December 1943 that a more coordinated approach eventuated. This required that the technical services – Ordnance, Chemical Warfare, Quartermaster, Medical, Engineering and Signals – would be included, although Transportation was omitted. As a result, the 5250th Technical Intelligence Composite Company Separate (Provisional) was formed, to operate under the supervision of the Assistant Chief of Staff, G-2, US Army, Services of Supply, while the various services were to operate under technical supervision of the respective Chiefs of Service.[15] Suitably qualified personnel were allocated to the new company by the Chiefs of Service. Major AC Johnston was the temporary commanding officer.

The intent from the end of 1943 was for a truly coordinated effort to be made in retrieving intelligence. However, as Schiffman politely suggested, "The 5250th Technical Intelligence Company had suffered growing pains",[16] and other than Ordnance and Chemical Warfare, the teams were not as yet ready to make the necessary commitment of men and resources. Thus, an attempt was made to have a joint force for the Saidor operation in December but it failed to eventuate, leaving the Ordnance team to work there as well as on a succession of engagements up the New Guinea coast including advising on booby traps at Goodenough Island. Also, the Admiralty Islands operation in February 1944 required a joint force, but the original teams from Ordnance and Chemical Warfare participated with a Counter Intelligence group. They brought back useful information on counter intelligence, chemical warfare, ordnance and naval explosives as well as medical and quartermaster items.

The Hollandia operation in May 1944 represented a minor turning point for technical intelligence and the 5250th. As Hollandia was one of the largest supply centres in the SWPA, it was assumed that more enemy materiel should be captured there. While it was still not possible to mount the joint operation desired, three teams were sent in – a free-lance outfit, two teams formed a combined detachment similar with that used in the Admiralties, and there was one composite team with representatives of all six technical services. Large amounts of materiel of use to the Medical, Ordnance, Signals, Quartermaster and Chemical Warfare units were discovered from the beaches onward, justifying the efforts that had been expended. Teams also went into the Wakde-Sarmi area and retrieved equipment.

Lines of communications for captured equipment back to Brisbane proved too slow. Therefore, laboratories for the six technical services along with a new salvage depot were established at

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15 The US Services of Supply was responsible for counter-intelligence operations in the US and also took over the responsibility for intelligence operations of the technical services – see John Finnegan, *Military Intelligence*, op cit, page 64

16 Schiffman, 'Technical Intelligence in the Pacific in World War II', op cit, page 46

Finschhafen in July 1944. Operations continued there until February/March 1945, after which they transferred to Manila. In November 1945 the depot moved to Tokyo.

The level of coordination in mid-1944 was still not as it should have been, given the units acted more or less independently, so a liaison officer was attached to Sixth Army from early July 1944 to act as Coordinator of Technical Intelligence.

For the Biak operation, more teams were evident and their timing was better. A signals team landed on D Day, 27 May, an Engineers team on 10 June and an Ordnance team arrived early in July. Eight other teams then arrived to re-assess the battlefields to determine whether there was anything left to salvage.

Showing that not everything was easy, Ordnance, Signals and Chemical Warfare landed on D Day for the Sansapor operation on 30 July, and found virtually nothing, so left soon after. At the Moratai operation in September, Chemical Warfare, Engineers and Ordnance landed with the fourth wave and also found little.

Earlier, in February 1944, it had been agreed that name plates or name plate data on enemy equipment were required in order to gauge the output of each company making the items of equipment, and so that bombing the most productive companies might be arranged. The project was not begun until the Philippine operations. It proved a most useful exercise and took up a great deal of time for the intelligence units. A special unit known as Japlat was organised to conduct this one task. Eventually 6336 plates or rubbings of details were forwarded for later use by the Air Force. Similarly, the age and condition of captured equipment as well as the material they were made from, gave an indication as to the general economic health of the Japanese economy.[17]

The Philippines operations were larger than anything to date. Preparations were also far more complicated. In terms of landing forces, the Sixth Army was to act as the striking force while the Eighth Army acted in a mopping up role. There was a technical intelligence liaison officer with Sixth Army, a field unit was attached to headquarters to serve as salvage depot, and a liaison officer placed with intelligence operatives to assist the guerrilla units. (On occasions, captured ordnance was distributed back to the troops, or equipment such as water purification devices first used by the troops and then handed over to the 5250th. Food as well as medical equipment and repaired ordnance materiel were given direct to the guerrillas.[18])

Despite the presence of all the technical services in field teams, it was found that there was insufficient new materiel to justify keeping teams from Medical and Quartermasters involved in the field: these two services were dropped from future field teams. For the Eighth Army, coming after the assault, the need was less and the teams were consequently smaller.

Success of subsequent operations in the Philippines varied depending on the locale. In the Southern Philippines, Engineer, Ordnance and Signal teams landed on 20 October with the second wave and this was felt to be so successful that all future teams tried to land at that time. However, their finds were few. In Northern Leyte, again there was less materiel than expected. Nonetheless, 65 tons of materiel was sent to the depot and new weapons were found in the Zamboanga Peninsula and at Panay-Negros. On Cebu reports of Japanese shells emitting a greenish gas led to the Chemical Warfare group conducting some rapid trials. The gas was found to be inoffensive so the team prepared widely distributed reports to that effect. On Mindanao five

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17 As an example of the work done, see AWM 54 320/4/36 Part 1 for its assessment of the clothing of Japanese soldiers and the changes that occurred as the war progressed.

18 The Intelligence Series, Volume 7, pages 24, 25, 30

tons of medical supplies were found as were two truck mounted water purification units. On Luzon there were signs of supply shortages although ordnance, chemical warfare, engineering and signals materiels were located.

The time of the Philippine operations coincided with a period of maturation of technical intelligence units. More materiel was able to be shipped back to Finschhafen and there was also considerable instruction given to troops on equipment likely to be found. Technical units began to publicise their findings more widely. Also, the new depot at Manila from early 1945 was responsible for the handling of many tons of captured equipment and an appreciation was gained there of the state of enemy technological (and economic) development, vital to the build-up for the invasion of Japan.

Manpower of the 5250th Company was never high – when they moved to Manila there were 90 officers and 185 enlisted men, although Schiffman says the total staffing was 470.[19] Their production output in terms of publications was impressive: 31 chemical warfare reports and a further 122 from the Office of the Chief Chemical Officer, 95 engineer reports, over 270 medical reports, over 170 ordnance reports, 43 quartermaster reports and 51 signals reports.

Geographic and Technical Intelligence

It is worth asking whether there are more than superficial similarities between the two groups discussed. Both were smallish (a few hundred personnel) intelligence units using inter-service personnel reporting to the Assistant Chief of Staff, and both were used as the subjects for General Willoughby's US Far East Command Intelligence Series of histories.

(a) Occupation Forces

Both groups were seen as effective during the war. When it was over and the problem of translating wartime experience to peace time occupation duties began, both groups were revived to serve again in a new capacity.

At the end of the war the AGS was dissolved. By June 1946, General Willoughby, faced with challenges in occupying Japan, requested ATIS to handle needed terrain studies; the Geographic Bureau was then formed as a substitute for AGS. The focus this time was the Korean/Manchurian/Siberian area and the process of establishing the database duplicated the experience of the AGS back in 1942 – all available maps were collected, research institutions combed for reports and information, and some 37 volumes of comments from informants compiled. The name changed to the Geographical Section in February 1947 but the small size remained – five US service staff, 21 civilians and ten Japanese. Reports were provided on everything from resources to likely Russian war plans, resulting in 96 special reports and eight terrain studies of specific areas.

When the US and other forces began the army of occupation, there was a demand for technical information from Japan and the 5250th Company based in Tokyo was given the responsibility. Any intellectual property that existed in Japan was to be made available to the occupation forces - each of the technical services was instructed to make an assessment of anything in their area of expertise. Thus began an exhaustive investigation of a country, where field trips were undertaken to investigate any item of interest such as dumps of munitions, bridging equipment, radar equipment, warehouses, commercial companies or institutions such as hospitals. Also, the 5250th acted as a clearing-house for technical queries. In one of the examples of their workload at this time, a comprehensive enquiry was undertaken to ascertain any likelihood of a new drug being

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[19] Schiffman, 'Technical Intelligence in the Pacific in World War II', op cit, page 42; William Howard, 'Technical Intelligence in the Pacific', op cit, page 2 has the same comment

available at the testing stage. This required an investigation into patents, commercial pharmaceutical companies, research chemists and medical personnel.

(b) Conflict

Operations would have been much easier for both agencies if the levels of conflict experienced had been less.

Conflict experienced by the AGS was largely confined to 'turf wars'. However, as noted above, there was a distinct lack of appreciation from some of the forces it was trying to help, including indifference from intelligence officers and disinterest from field units ("the absence of criticism, constructive or otherwise").[20] Perhaps the AGS history put its finger on one possible reason for this: it admitted the lack of qualified staff and pressure of work later in the war made it release less than totally professional final documents that would have been rejected in 1943.[21]

This conflict was epitomised by the actions of the Counter Intelligence Corps, who saw themselves as a competitor and produced twelve area studies, which the AGS history described as "stupid", "wasteful and inefficient".[22] Similarly, JANIS (Joint Army Navy Intelligence Studies) was seen as a part competitor in that JANIS material sometimes covered the same area as AGS studies although it was designed to offer strategic comment on future targets rather than tactical advice. Also, the US Army Engineers applied pressure to have the AGS under its control through 1942 and 1943, although in time the engineers worked alongside AGS. The RAAF was initially reluctant to assist, to the point where it established a counter unit that looked at geographic intelligence for air targets. A change of key RAAF personnel at the top meant that RAAF staff members were then able to participate in AGS activities from the end of 1943. On a theatre level, with the reluctance of the Dutch to help, the expertise of AGS was required for the SEAC region and accordingly AGS spent considerable time in reports on the Dutch East Indies and surrounding areas. (This was not appreciated by SWPA HQ and only Australian staff was allocated to these duties.) On the bright side, relations with mapping specialists such as the US Engineers, the RAAF Cartographic Section and the Australian Army Directorate of Survey were constructive.[23]

AGS also became a victim of its own success in that it had to expand into becoming a specialist in marine matters. For the assault on Japan, AGS was expected to handle land masses while the Joint Intelligence Centre for the Pacific Ocean Area handled the sea approaches and landing points. After complaints in 1942 from an Australian admiral about the state of hydrographic charts in the Solomons, AGS was instructed to take the responsibility for sailing charts in waters around New Guinea and the Solomons as well.[24]

For the technical intelligence teams of the 5250th Company, their problems were with the average soldier rather than conflict with other ordnance units (although on Wakde-Sarmi, the Counter Intelligence Corps had been there before the 5250th and "had already shipped out

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20 The Intelligence Series, Volume 6, page 15

21 ibid, Volume 6, page 26

22 ibid, Volume 6, page 6. The confusing array of groups is seen in a diagrammatic form (omitting technical intelligence) in Horner, *High Command*, op cit, page 241, as well as in Powell, *War By Stealth*, op cit, passim

23 While relationships may have been constructive, it is odd that in Chris Coulthard-Clark's *Australia's Military Map-Makers: The Royal Australian Survey Corps 1915-96*, Oxford University Press, South Melbourne, 2000, there is no reference to AGS

24 See, for example, AWM 54 831/3/65, Preliminary Report on Mullens Harbour, AWM 54 721/29/8, Method of Treatment of Landing Beaches, and AWM 57 14/9, Sailing Directions Netherlands Borneo (168 pages)

considerable Japanese ordnance equipment").[25] To the front line soldier, confronted with a dump of equipment or munitions, there was always the likelihood of finding souvenirs or food. As a result, it was common for the 5250th men to stumble across dumps that had been scattered to the winds. Alternatively, confronted by a new Japanese piece of ordnance, front-line troops usually wanted no more than to obliterate the obstacle and move on, hence the item was not given up for analysis. The history of the 5250th has frequent comments on the issue, such as:

> Modification of the regulation which facilitated legitimate souveniring was also publicised in an effort to encourage troops to turn in all captured items. Future experience showed that these efforts had little effect on the wilful looting and destruction of enemy dumps.[26]

The other problem experienced by the 5250th was that troops and officers were often indifferent to the requirements of the 5250th – as noted earlier, all the technical services had functioning intelligence units that wanted to get the same materiel that the 5250th did:

> They often had to win the cooperation of men who had never heard of Technical Intelligence and had no conception of its mission. They not only had to be combat men and technical analysts, but also first class salesmen who could talk their way through.[27]

As a result, the collection of enemy equipment from near the front lines encompassed more than simply staying away from sniper's bullets[28], and a lot of materiel was lost before the 5250th and other intelligence units learned to mount a guard and only pass on the equipment to trusted truck drivers or barge captains. Some of the equipment was very difficult to find and retrieve and the anger when some of it was stolen can be imagined.[29] Additionally, the sheer number of technical experts from the service companies (Howard said that in Europe there were over 4000 people undertaking technical intelligence work[30]) meant that the 5250th was likely swamped by all the others.

(c) Missed Opportunities

Possibly because the 5250th and AGS were elite Headquarters units and linked closely with MacArthur, Willoughby and other high ranking officers, one might have expected these agencies

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25 The Intelligence Series, Volume 7, page 17. To offer some idea of the plethora of technical intelligence activity, see AWM 54 423/13/28, Technical Intelligence Summaries (headquarters level); AWM 54 423/13/27, Australian Corps Engineers Intelligence Summaries (technical services); AWM 54 423/13/26, Engineer Technical Intelligence Bulletins (prepared by Office of the Chief Engineer); AWM 54 423/13/23 Part 3, Technical Reports (from Australian Army in Australia House in London); AWM 54 179/2/2, Extracts from Periodical Technical Summary No 2 (issued by the Military Directorate, India); and AWM 254 129, Fenton and Long Airfields, Intelligence and Technical Summaries (this reports items at unit level, such as the replacement of tyres on a truck carrying a searchlight, milling steel gears to replace fibre gears in a generator set, etc). Also see AWM 54 320/4/38 (water filters, tractors), AWM 54 320/4/36 Part 1(comforts and knife), AWM 54 320/4/37 (comparison of haversacks) and AWM 54 320/3/35 (changes made in the packaging of ammunition).

26 The Intelligence Series, Volume 7, page 12. Note that the TAIU had the same problem with aircraft – Archives A 9696 651, includes a report that says ""souvenir hunters had completely stripped it of everything removable"

27 The Intelligence Series, Volume 7, page 15. Apathy was not confined to those dealing with the 5250th and seemed widespread - see Archives A 9696 652 : a TAIU team report said that there was an "apparent lack of interest and coordination at A-2 PAF Hqrs in regard to making available particulars of knowledge of crashed Jap aircraft"

28 AWM 54 327/30/54 looks at the establishment of technical intelligence units and details their small arms – the men wanted to have pistols as well as rifles so they could leave their rifle and continue working, yet still have access to some weapon.

29 For some difficult retrievals see Archives A 9696 657 (aircraft in 19 feet of water), A 9696 651 (working under shell fire), and A 9696 652 (aircraft over a cliff requiring days of work to repair a former sledway for logs in order to retrieve engine parts)

30 William Howard, 'Technical Intelligence in the Pacific', op cit, page 1

to have achieved more. To take the AGS first, the lack of a liaison officer in Britain, where resources should have been high, is surprising – claims of the British pre-occupation with the European theatre seems to cloak the real reason for lack of assistance. It seems regrettable that the obvious areas of the services that were lacking or might have contributed further, were not called on. Thus for AGS while it utilised Navy and Air Force elements, it might have done more with the mapping capacities of its rivals particularly the Engineers and the photographic expertise of the RAAF.[31] Its inability to recruit Dutch staff, apart from one officer, meant that access to a vast storehouse of information was lost and in consequence, considerable energies had to go into mapping and examining areas previously controlled by the Dutch.

For the 5250th, it is odd that the technical intelligence was largely confined to the Army, despite the claimed integrated approach; perhaps GHQ SWPA being all-Army determined this.[32] Yet the Joint Allied Captured Enemy Equipment Board had a membership for one Allied naval person, signifying that naval materiel was expected, and we have seen that naval explosives were found in the Admiralties. Also, the liaison team that went from Brisbane to Port Moresby made contact with both naval and air force elements and urged them to facilitate the passage of captured materiel, so in mid-1943 it was clear that inter-service channels were expected. Further, air and naval equipment were collected by the 5250th and taken to their forward depots. Items of materiel forwarded to Finschhafen in an eight month period, showed three receipts for navy items and 234 receipts for air force items, and at Manila, there were some 35 shipments of air force materiels out of that base in a seven month period.[33]

The Air Forces had their own technical intelligence operations with the joint Technical Air Intelligence Unit (TAIU) formed in Australia in 1942 with RAAF, USAF and US navy members, and the later establishment of the TAIU in Anacostia near Washington DC. This group did some very impressive retrieval work, with the TAIU in Australia rebuilding a number of Japanese aircraft.[34] Similarly the Navy established its own technical intelligence units known as Mobile Explosive Investigation Units (MEIU).[35] It seems strange that with the level of materiels being retrieved from battle zones that there was not a greater effort given to achieving inter-service cooperation on a larger scale using the expertise of the TAIU, MEIU and the 5250th.[36]

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It is a characteristic of intelligence organisations that they attract those who want to do things differently, and dissension seems to be a fact of life.[37] The success of the ATIS operation and some of the AIB activities tends to hide the power struggles within the organisations supposedly

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31 For a review of the Engineers and the photographic work they did, see Blanche D Coll et al, *The Corps of Engineers: Troops and Equipment, US Army in World War II*, Department of the Army, Washington DC, 1958, pages 444-462. Also see Karl Dod, *The Corps of Engineers: The War Against Japan*, US Army in World War II, Department of the Army, Washington DC, 1987, pages 269-271

32 Schiffman, 'Technical Intelligence in the Pacific in World War II', op cit, page 47 discusses the high levels of liaison in the "daily visits" between the 5250th "and naval and air force intelligence sections, and with the chief of each technical service in the headquarters of Army Forces Pacific" –but this is at Tokyo after the war ended.

33 The Intelligence Series, Volume 7, pages 34 and 37

34 See www.airforcehistory.hq.af.mil/PopTopics/airtechintel.htm pages 2 and 3.
Also see www.j aircraft.com/research/jas jottings/end of the jaaf and jnaf.htm page 1 where it says TAIU was formed in 1943; and http://home.st.net.au/~dunn/usaaf/atiu.htm for the work done at Eagle Farm in Brisbane

35 Howard, 'Technical Intelligence in the Pacific', op cit, page 10

36 MacArthur authorised intelligence teams to "take complete charge of all enemy crashed or captured aircraft or personnel" yet permitted separate agencies –
www.airforcehistory.hq.af.mil/PopTopics/histechintel.htm, page 5

37 See Horner, *High Command*, op cit, page 239

battling to win a war. Marchio has suggested that joint intelligence was difficult to establish because of "bureaucratic inertia and a legacy that viewed intelligence as a service prerogative"[38] (this was seen nicely in the technical intelligence area) while for the AGS at least, the personalities of MacArthur, Sutherland and Willoughby meant that congenial joint operations were difficult to establish. Marchio again: "According to the after-action report, the reason was that the chief of staff failed to realise its importance and the G-2 lacked the power to accomplish it."[39]

The different approaches of the two units, in technical and geographic intelligence gathering, resulted in some significant outcomes. Both units, the AGS and the 5250th, deserve greater recognition for the work they did. One can only wonder what they might have achieved if they were organised differently, working in a cooperative environment.

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MHSA WEBSITE

Mark Moncrieff (Victorian Branch) and Peter Shaw (WA Branch) are currently developing the Society's website. It is well on the way to completion and Mark and Peter hope to have a well-defined prototype available for comment in the near future. Federal Council has agreed that it would be appropriate to include on the 'links' page details of military services/organisations/interests of Society members. Items can include, but are not limited to: research services; medal mounting; historical consultation; preservation; military book, collectibles, ephemera sellers; membership of military related society or organisation (confirm with that society/organisation committee if they want to be linked). Anything related to military matters, really. This is not a full blown advertising opportunity: we require brief contributions which detail the services provided or the aims of organisation and (if applicable), any discount or special offer to MHSA members. For example:

> Slouch Hat Publications. Slouch Hat Publications is a small publishing venture specialising in Australian Army Military History, which has, since 1989, built up a regular client list, as well as selling to libraries and the retail book trade. Slouch Hat Publications produce high quality books, mainly in hard cover. Their books are all written by Australian authors and printed in Australia. They also distribute other military books of interest to their readers.

and of course, phone, fax, mail, premises, email and website details. It does not matter if there is no website to link to, phone and mail contact details are fine.

Please provide direct to the Federal Secretary at PO Box 5030 Garran ACT 2605, alexfax@goldweb.com.au or fax through on 02 6258 7348 **by 15 January 2006.**

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38 James Marchio, 'Days of Future Past: Joint Intelligence in World War II', *JFQ*, Spring 1996, pp 116-123, at page 120

39 Marchio, ibid, page 120 and Finnegan, *Technical Intelligence*, op cit, page 96. Schiffman, 'Technical Intelligence in the Pacific in World War II', op cit, at page 47 says the source of the quote is "an Armed Forces Staff College Study, 'The Case for the Establishment of a Theatre Joint Intelligence Centre dated December 1948."

SOME NOTES ON THE CAPTURE AND TRIAL OF JOHN AMERY

David Vivian

The autobiography of Commander Leonard Burt, CVO CBE of Scotland Yard's Special Branch casts another interesting light on the career of John Amery as written about in Rohan Goyne's article "British Free Corps (BFC): Traitors to the King".[1]

In 1940 (then) Detective Chief Inspector Leonard Burt of London's Metropolitan Police Murder Squad was seconded with four others to the Security Service for the duration of the war.[2] He had no prior connection with Special Branch.[3] By 1945 Burt was a Lieutenant-Colonel in the Intelligence Corps tasked with tracking down traitors in order to bring them to justice in Britain. He states that he and his team of six staff officers had traced about 20 traitors.[4] Two of the biggest traitors captured by Burt and his team were William Joyce "Lord Haw-Haw" and John Amery.

Leonard Burt had travelled in May 1945 to Italy to interrogate Amery. He initially went to Lake Como and then to Tierney Interment Camp near Rome in order to conduct this interrogation. Italian Partisans near Lake Como had captured Amery after he had fled from Milan where he had separated from Benito Mussolini. Burt found Amery more than willing to talk about his activities. After cautioning Amery Burt got him to write everything down. Of Amery's statement Burt wrote that it was, "the full and complete case for the prosecution. Enough to hang him without a word from the Crown".[5] Indeed Amery was not at all worried about his pending return to Britain. He viewed himself as a friend of Britain when "seen in the proper light". Amery believed that his statement proved this and cleared him of any wrongdoing. Leonard Burt states that on the flight back to Britain Amery was "completely cocksure", even to the extent of coming back to Britain, "in his full war paint – a full fascist uniform"! However, by the time Burt saw Amery charged with High Treason at Bow Street in London he was dressed in civilian clothing.[6]

Something of John Amery's character is shown in the following anecdote when he was recruiting for the BFC. Leonard Burt interviewed Merchant Navy Captain Notman who had been Senior British Officer in a POW Camp near Bremen. After Notman had refused to shake Amery's hand when he was attempting to recruit for the BFC in the camp Amery had told Notman in no uncertain terms that he could have him shot. To this threat Notman replied, "Really? Let me tell you – you will be hanged before I am shot".[7]

Leonard Burt placed the evidence against Amery into three main categories:

> Recruiting for the BFC. Amery had attempted to recruit British and Commonwealth POW's by using false statements and promises to fight on the Russian front.

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1 Rohan Goyne. "British Free Corps (BFC): Traitors to the King", *Sabretache*, September 2005, Vol XLVI, No. 3, pp. 39-42.
2 Fido, Martin & Keith Skinner. *The Official Encyclopedia of Scotland Yard*, London, Virgin Books, 1999, p. 247.
3 Allason, Rupert. *The Branch: A History of the Metropolitan Police Special Branch 1883-1983*, London, Secker & Warburg, 1983, p.124.
4 Burt, Leonard, *Commander Burt of Scotland Yard by himself*, London, William Heinemann, 1959, p. 2.
5 ibid, p. 5.
6 ibid, pp 5 & 7.
7 ibid, pp. 23-24.

Lecturing on Germany's behalf in Yugoslavia, Czechoslovakia, Scandinavia, Belgium and France.

Broadcasting from Germany and Italy.[8]

Burt states that he spent much time in Milan "picking out records made by Amery and other renegades who had broadcast pro-German propaganda".[9]

Amery's defence to the charge of High Treason sounds quite bizarre. During the Spanish Civil War (1936-1939) Amery had fought as an officer of Italian troops on Francisco Franco's side. The defence took the line that during this conflict Amery had become a Spanish citizen and was therefore not subject to the jurisdiction of British courts at all. Amery's brother busied himself with gathering evidence to this effect and Burt states that there were many Spanish lawyers at the Old Bailey to give evidence to Amery's naturalisation.[10]

However after the trial began when Amery was asked to enter his plea of guilty or not guilty he replied: "I plead guilty on all counts". As Burt wrote Amery had spoken his death sentence. Amery's cocksureness on the flight back to Britain had clearly disappeared. Leonard Burt states that he (and the prosecution) did not buy the idea that Amery was, or ever had been, a Spanish citizen.[11]

John Amery was executed in Wandsworth Prison on 19 December 1945. Commander Leonard Burt became head of the Metropolitan Police Special Branch on 1 January 1946. Commander Burt provides us with a suitable epitaph for this sad, sorry story. During the flight back to Britain from Italy John Amery had stated that if any charges were brought against him his father would sort it out. Leonard Burt, in reply, told Amery not to bring his father into it, 'I think he has suffered enough".[12]

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The Military Historical Society of Australia

Neville Foldi

Federal Council of the Military Historical Society of Australia extends their deepest sympathy to the family of the late Neville Foldi, a founding member of the ACT Branch in 1963. Federal President 1978 – 1982, then Federal Treasurer for 20 years from 1982 until his retirement in 2002.

Robert Morrison, Federal President on behalf of the MHSA.

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8 ibid, pp. 24-25.
9 ibid, pp. 25.
10 ibid, pp. 26-27.
11 ibid, pp. 27.28.
12 ibid, pp. 7.

IN SEARCH OF TIGGI

Col Adamson

It was 3 am and I stared without much comprehension at the net six inches above my nose. Outside of the tent fly, the rain pelted down and inside, the mosquitoes whined away. I scratched and rubbed at the grille festering in my crutch, fingered a couple of scabrous leech sores and belched wild duck. My canvas stretcher lurched as one of the supporting posts sank another foot into the swamp, and a couple of bush rats scampered off to find fresh shelter. As I drifted off again, I reflected on the good fortune that had placed me in the middle of a sago palm swamp, 200 miles from a cold beer and weeks away from a hot tub.

It was 1959 and the European in the Territory of Papua New Guinea reigned supreme. In Port Moresby, the RSL continued to draw crowds on Sunday mornings, Terry Mitchell jugged 27 Kukukukus in Menyamya for rape , murder and cannibalism, and in Wewak, Tom Ellis (Masta Tom) strode the streets with his . 303 at the trail and a police bugler at his side. It was also the year that Bob Dougherty put down a tribal fight in Mt Hagen by confronting the warriors and telling them that they were silly bastards, and Dennis Faithfull had the bone pointed at him by a sorcerer of Agugunak.

Large areas of the Territory, particularly in the Highlands and the upper Sepik remained unexplored, larger sections were designated Uncontrolled. The Department of Native Affairs (DNA) was undermanned and over-stretched. The Pacific Islands Regiment did its best to assist where it could. And so it came about that a month earlier, Patrol Order NG2/59 arrived for me at Vanimo, Cape Concordia, about 25 miles from the Dutch border, "Proceed to May River Patrol Post, assist DNA, gather topographical information and study techniques of patrolling in uncontrolled territory".

All very straightforward you might think, but the order omitted details of travel to the May. There were not too many choices available. We could walk south for 10 days to the Post at Green River and make a beeline for Soagamuk, fairly near the May and sited on the northern bank of the Sepik or, inspiration, fly into Ambunti and travel comfortably up the Sepik by Admin launch. I put up the last for openers. It took some time before the OK came through, for this was a most radical approach in those days. Our CO was Luke (Kanga) McGuinn and he was little inclined to be soft on young platoon commanders. On patrol we lived on bully beef, brown rice and dog biscuits, and a twist of tea and sugar, and he stirred us along with the stories of the Italians, Germans, Vichy French, Japanese, Chinese and North Koreans that he had put to the sword.

Six of my platoon were to go with me, Corporal Gani of Morobe, Kaiolong of Gasmata, Kopene of Bouganville, Girae of Chimbu and Pulei of Manus Is. We spent the last few days in preparation. Clothing and web equipment changed, rations weighed and packed, rifles waterproofed and the canteen and trade store raided for salt, stick tobacco and fish hooks. Our allowance then was one shilling per man per day. We used it to purchase trade goods and then barter with them for the purchase of such items as sweet potato, bananas and fish to supplement our diet. I spent some time on a map reconnaissance. It didn't reveal too much, 4 miles to the inch, it was white for sago swamp and brown for hill features.

The notes on the map gave me some cause for despair. The Army Topographic Service in 1946 had given credit for the placement of rivers, creeks and tracks to Karius and Champion. Intrepid explorers they were, but map-making was not their forte. Setting off from Daru in September 1927, they reached Bolivip, south of Telefolmin two months later. In early January 1928 they

reached the headwaters of the Sepik and followed it downstream for 12 days until meeting up with the government yacht 'Elevala'. For much of this time they were ill with malaria and dysentery and their path lay some 50 miles to the west of mine.

It was a Norseman that came for us, squat and ugly, single radial engine and corrugated sides. Slow and noisy, it was an excellent aircraft for use in the Sepik where the strips were short, muddy and built in funny places. Our pilot was Wing Commander (retd) Robert Henry (Bobby) Gibbes, DSO DFC and bar, fighter jock, airline entrepreneur (Gibbes Sepik Airways) and plantation owner. He brought Junkers from Sweden in 1946 and barnstormed for a living until Mandated Airlines saw him off. He shrugged a bit when I told him that the load was me and six plus 1200 pounds of cargo. "The strip is a bit short so put the tail wheel in the sand and throw a bit of ballast onto the wings".

The takeoff was fairly uneventful. The Norseman was wheeled to the end of the strip near the pump house, the troops hauled on the wings and struts for dear life and Bobby gunned it down the strip which also doubled as a sports field. The stick came back as we hit the sand at the far end, and the Mission at Warimo across the water breathed again. The flight to Ambunti took two hours. The sky was blue and cloudless, visibility was good and Bobby was absorbed in a stick book all the way.

And then we hit Ambunti. 200 miles from the mouth of the Sepik, it lay on the northern bank and spread itself over three major ridges. Headquarters of the sub-district which bore its name, the District Officer enforced control over the best part of 10,000 square miles. His bailiwick ran 250 miles to the west of the Dutch border, an indistinct distance to the south to the foothills of the Central Highlands and north apiece towards Maprik.

Landing did not prove to be a major problem. The strip commenced at the north bank of the Sepik and then ran uphill north-south between two of the ridges running uphill a 10 degree slope to a most abrupt halt at the foot of the mountain. I did find that skimming over the river at ten feet was interesting!

Bernie Ryan was the DO, a man of few words. "G'day. Put the troops in with the police. The launch is due in soon. Dinner my place tonight. Bring your own rum". And so we did! And its time to mention here that the Territory favourite was Rhum Negrita from the West Indies. The label featured a dark and comely lady and was fondly known as Meri Buka after the ladies of Bouganville.

We loaded the launch the next morning and set off upstream after lunch. There is not much beauty on the Sepik. Brown, fast flowing and meandering, the banks covered in elephant grass and wild sugar cane, the odd sandbank sporting a crocodile basking in the sun and thousands of mosquitos at night. No villages are in sight, they were all well back on higher ground. Half an inch of rain in the Star Mountains equals a forty foot rise in the Sepik eight hours later !

Three long days later we came to the May River Patrol Post. And there was Jack Mater to meet me. Shortish, barrel-chested and red-bearded. Gentle as a lamb until the Irish in him took over. I had met him in 1957 at the Australian School of Pacific Administration while undergoing training readying me for service in PNG. I ran into Jack outside of the Director's office, he was being cautioned for some form of indiscretion.

There was an apocryphal story about him that some time earlier, he had enjoyed the delights of Marienberg and finished off the night with an argument with a professional croc shooter. The shooter smouldered away for a few days and finally issued a challenge to settle the matter with the knuckle. Jack sent him back a note, "Can't fight, won't run, bring gun". The shooter turned up with two bottles of rum instead.

The Post was not too much to look at. Typical of Sepik encampments it straddled a ridge fifty feet above the high water mark. Haus kiap, haus polis, haus kalabus and haus sik referring to admin building, police quarters, gaol and aid post completed the presence. Dominating the whole was the flagpole. DNA was pretty well low-keyed but the flag bespoke law and order, authority and presence.

Jack's residence was quite palatial. 10 squares, with both living and working space. The whole was protected against mosquitoes and his office included the national flag, photo of the Queen and the spoils of past successes against the Mays, shields, bows and arrows. Part of the furniture was Doki, a young buck from downstream who had volunteered to guide us through the swamps to our first untapped village. Doki was an incredible young man. He was about 30 years old, a self-confessed cannibal and had seen the salt water. His buttocks also bore witness to a crocodile attack. Doki was a character. Sepiks are mostly morose, surly and introverted. Not so he. He was a chatterbox, the bringer of good news and a never failing optimist. We relied on him quite heavily as he was also the "tanim tok", our interpreter.

And so we come to the reason behind this patrol. Minor exploration of secondary rivers flowing into the Sepik near its headwaters had been conducted before 1942 but few people except crocodile shooters had ventured into them since. A massacre in 1956 changed all that. The post was set up in 1957 and for the next 18 months friendly overtures were made to the people on the river. This accomplished, it was then the turn of the inhabitants of the hinterland to be introduced to the delights of civilization. But I go too fast.

The peoples of the Yellow River and the May River had been traditional enemies for eons. Rape, murder, sackings and cannibalism against each other was traditional, ritualized and formalized, and demanded of the young men by village lore and custom. They lived fearful lives, bodies, deformed through disease and malnutrition, minds twisted by sorcerers and their life expectancy limited to 32 by crocodile or arrow. But the Yellows realized that times were changing. DNA had established a permanent post there in 1951 and the Baptists had followed with a mission the next year. In 1956 they put out peace feelers to the Mays. They sent out a tanget, the territory-wide sign of peace and invited the Mays, chiefly the people of Wanimowi on the Sepik-May junction, to a feast, to discuss mutual problems and seek a rapprochement.

The Wanimowis responded, "Yes, we'll meet on the sandbar opposite our village, bring bananas, fish, sago and taro and let's talk. By all accounts, the gathering started off fairly well. 26 Yellows turned up and brought 3 pigs as well as other food. They were heavily armed with bows and arrows and one man carried a rusty Japanese rifle. (The Yellows accounted for a large number of Japanese after the Maprik campaign). A similar number of Wanimowis turned up on the sandbar and they sat around a blazing fire, alternately one Yellow one May. There were many speeches and harangues, the gist from the Yellows being that they were tired of fighting and afraid of the white man's power. As the gathering progressed, bows and arrows were broken over the knee and cast upon the fire.

Friendship was bountiful until Nanggatta, leader of the Mays asked a compatriot for more sago, whereat the Mays produced hidden cassowary bone knives and stabbed their neighbours to death. All 26 of the Yellows perished. The flesh from their upper arms and thighs, together with their kidneys and livers were eaten. Their heads were also decapitated and stuck on poles surrounding a brand new single man's house at Wanimowi. Several days later, bits and pieces began to bump against the wharf at Ambunti.

Word moves fast on the Sepik. The garamut, a huge hollowed log beaten to prescribed patterns was widely used to send messages. In 1956, DNA used it frequently as a means of communication throughout the District, to announce the arrival of a Patrol Officer, to call in the

Luluai and Tul Tuls and so on. This time the garamut beat out a message regarding a feast and a massacre.

Bernie Ryan didn't have the details but they were enough for him to call in the three officers and forty police from his sub-districts to Ambunti. The bodies in the Sepik gave him more than enough reason to investigate. A week later, Bernie and his team paddled by dugout into Wanimowi and surrounded the single man's house just before dawn. A most knowledgeable man, he had beaten the garamut by incarcerating visitors to Ambunti who would have seen his preparations, and sending out a message on the drums that he was on to his way to Maprik to investigate village toilet systems, a story guaranteed to put idle hands to work, and minds on matters far removed from a massacre.

As the sun streamed through the fog, Police Constable Aiisa, 19 years of age, filed-toothed and son of a former head-hunter from Angoram, crawled into the single men's house by the ladder beneath it. Armed with a torch, he kicked out bows by the dozen and arrows by the hundred and then gently told the sleepers with the word that they should move out slowly.

Bernie assembled the court. A betel nut palm was felled, a halliard attached and the flag raised. A folding camp table was produced and Bernie presided. He was judge and jury, prosecutor and defender. Rough by most standards but that was the system: it was swift, honest, fair and understood.

Plenty of evidence against the killers was available. The heads were still on the poles but most came from self-indictment, "they were enemies, they were men of no account, they were weaklings, they were nothing men and they were rubbish men. I ate his parts because they give me strength and it is prescribed by custom. I merely killed him first before he killed me." And so the entire adult male population of Wanimowi was re-educated at Boram gaol, Wewak, for six months. The youngest may have been fourteen years. Little wonder that when we set up our first base camp, the local ladies were not too much pleased with our presence.

For five days we slogged through the swamp. Mostly ankle-deep, it was frequently up to the waist. Interminable sago palm, it stank, tore at us and impeded us. The water softened our feet, the sago needles infected us and the mosquitoes never left us alone. Rest in the afternoon brought little relief. There was no dry ground to sit on, the rain bucketed down from 4 pm onwards and there was little doubt that we were under observation and being followed. There were bird calls that made the carriers go cross-eyed and put Doki to silence. There were times to, when the whole swamp was silent. The police grunted in anticipation, the carriers gathered closer together and Jack grinned with the delight of coming upon new people.

On Day 6 they came. Nine young bucks appeared in front of us as if from nowhere. They were naked and mud-smeared, their heads shaved back to the crown and the remainder of their shoulder-length hair plaited with mud. They all carried bows armed with pig arrows, accurate enough at 10 paces and the arrow designed to tear through the flesh and arteries with little effort. The arrows were taut on the string, pulled back by the thumb and little finger while the other fingers drummed away on the string. Several of them were pointed at me and I felt a little sick. The carriers moaned, rooted to the spot, and the police and my soldiers straightened their shoulders.

Jack lit a cigarette, grabbed Doki by the ear and told them to get out of his way, he was a messenger of the Queen, on government business and an important person. Where was their village, how far away was it and how many people were there. They went, scowling, angry and upset. The carriers were white-eyed, the police and soldiers relieved and Jack and me shaky-kneed!

And so we slogged on, the rain continued to bucket down on us and the mosquitos and leeches chewed on us. The sago palm needles dug in and the swamp sucked away and stank, releasing odious gases. Doki alone remained undaunted, "Not far" he'd say "the kanakas say not far now, klostu tru."

And there it was, a rise of ground no larger that a tennis court, two feet above the swamp with three betel nut palms and two huts. The huts were ramshackle, nondescript, poor and uninhabited. They were on stilts, roofed over with sago palm leaves and had hot embers in the cooking sections. Both were about 3 metres square and had several sleeping sections. Crocodile and human skulls adorned the rafters.

We settled down in the swamp. The tent flys were erected. The flag was raised and the cooking pots started. Brown rice, wild duck and pigeon (we had a couple of small calibre shotguns) tinned tomatoes and carrots. There was sago too, but I passed.

Jack had a goodie box. It was filled with glass beads, razor blades, small knives and axe heads. Several of each were placed on stumps at the edge of the clearing. They were gone the next morning so we replaced them.

Again they were taken, but around noon the following day, three young men appeared. They were as nervous as we were. They whistled, clucked their tongues and drummed their bow strings. Pale-skinned men were beyond their comprehension and they sweated profusely. Jack offered them tobacco which they took and left.

We put out more offerings and again they were gone the next morning. In the afternoon however, two of the young men reappeared with bundles of sago, obviously for trade. We spoke to them briefly. They were nervous, fearful and upset. They rolled their eyes, clicked their tongues and searched for escape routes. There was not much doubt of the presence of a cover party. They grabbed the tobacco and knife and ran for it.

For the next two days we continued to leave out small tokens of tobacco and red cloth. We saw no one, but they continued to be taken.

Our campsite became a prison. The carriers sat, glowered and ate. The police and soldiers became restless and uncertain. Jack and I played patience, lied outrageously to each other and learned Polis Motu. Food became the panacea, but it was staples only, as we had no wish to send out parties in a neighbourhood like this one.

On day six, the young men arrived again. They carried their bows and arrows, but this time they were held by the side. With them were three older adults and a young girl with a baby.

We had come to Tiggi.

This is but the start of the story. As the patrol continued, the people became easier to contact. They allowed us to give them injections and dress their yaws. They taught us how they fought the elements and nature in a bid for survival.

The passage of years helps to improve a good story, this one has not been meddled with too much. In all truth however, this patrol was the forerunner of many more. Jim Devitt followed me into the August River a month later, Greg Warland broke into the Dutch enclave west of Pagei and Terry Gray took his troops over the Strickland Gorge.

In later years we challenged the Telefolmins, the Kukukukus and the Biamis. I am proud to recount my contribution to that scene

BEYOND THE ASSAULT RIFLE

Duncan Gordon

To the generation which grew up in the aftermath of world war two, in the shadow of a nuclear holocaust, guns were a tool, used by all classes for recreational shooting. Skill-at-arms was fostered officially with young men by the school cadets in the fifties and sixties. Large numbers went on to serve in the army of the Vietnam era.

Accurate shooting with rifles became a military skill with the Rifle Regiments of the British Army in the Napoleonic wars. The percussion cap and Minie conical ball gave the (muzzle-loading) rifle to every infantry soldier in 1853. The infantryman rammed a paper cartridge down the muzzle replaced his ramrod, and primed his rifle as a drill, normally standing .

The solid-drawn, centre-fire brass cartridge case, smokeless powder, and jacketed bullet which could feed out of a magazine led to the development of the bolt-action rifle by 1890. The origin of the term machine gun dates from this time when the guns were hand cranked.

In that twilight of the early twentieth century machine-guns were deemed to be complex and unreliable, The Rules of War dictated that projectiles were to be jacketed. The Dum Dum hollow point bullet, and explosive projectiles for weapons with a calibre less than 20 mm were banned.

Drawing on the lessons of the Boer War, the British Army devoted considerable resources to developing the Short Magazine Lee Enfield to out-perform the 7 mm Mauser. The doctrine of accurate rifle shooting, to an effective range of one thousand yards, was expounded by the School of Musketry at Hythe. Proficiency as a soldier required qualification with twelve aimed shots per minute.

The First World War saw machine guns, predominantly the recoil operated, water-cooled Maxims, dominate the battlefields. Using streamlined bullets machine-guns could fire barrages on beaten zones many thousands of yards out. As the war progressed, air-cooled light machine guns were incorporated into British infantry sub-units.

The Americans came into the war in 1917. Their involvement in the close-quarter fighting in the trenches led to their immediate use of pump-action shotguns. There was a diplomatic uproar from the Germans, which the US State Department rejected. The Colt .45 automatic pistol was deemed to be so effective, consideration was given to the proposal that every infantryman should be issued with one as an additional weapon. The idea of a weapon option was put into production with the Pedersen Device. This was a semi-automatic mechanism with a forty round magazine which could be fitted into the breech of the Springfield Rifle to fire a .30 calibre pistol bullet. Regrettably this weapon was not tried in battle.

The Italians had used a 9 mm submachine gun, the Villar Perosa, to compensate for poor machine guns. Using captured examples, the Germans accepted the need for the firepower of a machine gun in close quarter fighting and developed rifle configured 9 mm machine pistols.

Arising from the war, the umbilical cord of communications to indirect fire weapons led to doctrines of command to manoeuvre units of all arms. The tank had been developed to overcome the machine gun. Within years Liddell Hart and Bony Fuller would enunciate the doctrines. These the Germans embraced, testing them with the collaboration of the Russians in the east.

Blitzkrieg the German War machine doctrine, relied upon tanks supported by mechanized infantry, artillery and air support. The umbilical cord of wireless enabled it to happen. The infantry weapons were air-cooled belt-fed machine guns, bolt-action rifles, and machine pistols

carried by the officers and NCOs. The dogma of a common cartridge for all weapons was no more.

After Dunkirk the British Army purchased whatever Thompson submachine guns could be produced. The role of the machine pistol in infantry fighting was now self-evident. No army could afford the time to train expert riflemen. Tactics now required complex and coordinated training and skills from units.

The German Warmachine attacked the Russians in summer 1941. With a combination of distance and winter, the Germans found themselves fighting an enemy for whom the losses of a million men outside Moscow, simply expended to wear down their static defences, was unquestioned.

The Russians had excellent tanks, large numbers of self-loading rifles, and hosts of soldiers armed with machine pistols, "burp guns" as they were known. The German General Staff reacted by ordering the production of semi-automatic rifles. These were produced but the vast quantities required to replace their millions of bolt-action rifles was beyond them. At the same time, the Assault Rifle, a weapon in development for years, was approved for immediate service. Using an intermediate cartridge of the same calibre as their rifle, this selective fire weapon, the final version of which was the MP 44, was recognized by the combatant powers, as the most advanced infantry weapon of the war. There were now three cartridges within the infantry unit inventory.

Early in the war, the Americans had adopted the .30 M1 Carbine, a two handed pistol for use by support troops, officers and N.C.O.s, the Americans also had three cartridges.

German small arms developments were analysed by the allies. In Britain a design team developed the EM-2 rifle. Using a 7 mm short round based on the .30M1 case the weapon was selective fire. The ballistic coefficient of the bullet was sufficient for the same round to be used for the Light Machine Gun. The Americans had propellants which enabled the cartridge to exceed the designer's performance, but, like access to Atomic secrets this was denied.

Britain and ourselves became embroiled in the Malayan Emergency, an infantry war fought by small units in the jungle. The weapons were .303 Carbines, Bren's, 9 mm submachine guns, and 12 gauge Browning automatic shotguns with "double waxed" cartridges.

The Korean War erupted almost at the same time. The Chinese showed what determined massed attacks could achieve and almost overran the whole peninsula.

Given the importance of American backup in the envisaged conflagration with the Soviets, our weapons had to be standardized. In 1957 the Americans made the decision to include the British in access to Atomic secrets. Australia remained excluded from this arrangement. The EM-2 was dead in the water.

The lessons from Korea were new rifles and machine-guns based on the 7.62 mm NATO round. The umbilical cord of radio to indirect fire weapons and tactical air support was confirmed. The Claymore mine for defence of fixed positions, and the airburst Splintex artillery shell was the US Army's solution to massed attacks. Standardisation of munitions did take place within the ABCA Pact and NATO. National armaments industries meant that weapons were not common. The key thing achieved was officers were exchanged between all the armed forces and attended each other's staff colleges.

The Vietnam War can be seen as taking place to establish the boundaries of Communism in South East Asia. The war built up incrementally. The Americans and Russians met at the UN in New York and informally agreed on the terms of engagement, these agreements were binding but

nothing was put on paper. An example of this was the use by the Egyptians in 1967 of a Russian anti-ship missile to sink an Israeli naval vessel miles out in the Mediterranean Sea.

Weapons to fight the Vietnam War, which was initially a guerrilla war, came from American war stocks. The .30 M1 Carbine and .45 M3A1 Grease Guns were preferred weapons. Pump-action shotguns were poured into the country for distribution to village guards, police and paramilitary units concerned with static defence. Winchester was contracted to develop the multiple flechette 12 gauge round for use in these shotguns. This was not public knowledge even in 1971. (Conversation with Donald A McCall of Winchester, Geelong in late 1971.)

The Army of the Republic of Viet Nam (ARVN) fought courageously. In 1965 whole battalions died to a man in their trenches. Effectively two wars were being fought, conventional war against the North Vietnamese Army, and, a guerrilla war. Different mixes of weapons were deployed, but substantially they were not weapons intended to counter Mao Tse Tung's guerrilla doctrine of "overwhelming force with the element of surprise." Australian advocates of aggressive and ceaseless patrolling by the Vietnamese forces concerned with static defence were unable to impress this doctrine on the allied leadership.

From 1966 onwards the American Army was issued with the 5.56 mm Armalite on the grounds it was light, more ammunition could be carried, and it was suited to warfare in the tropics. The Secretary of Defense had said so. (Many years later the shortcoming of the 5.56 mm round was overcome.)

Effectively the American field forces carried the AR15, and later the M203 40 mm grenade launcher, but retained the M60 GPMG for fire support within the Squad. (The 7.62 mm M14 rifle became history.) Once in a static position, heavy weapons such as .50 Brownings and later the 40 mm Mod 19 Mk5 automatic grenade launchers were transported in with hot meals and other supplies. There were now two weapons systems, one for carrying in the field, and the other, for static defence. With the burst fire capability of the AR15 every soldier now had a multiple hit option with his rifle. The 40 mm M79 or M203 gave the infantry subunit the option of a high explosive round for aimed fire, superior in range and accuracy to a muzzle-launched grenade. A 40 mm shotted cartridge was also available. Large numbers of modified commercial shotguns were used.

Towards the end of the sixties, drawing on American analysis of small arms in Vietnam, experimentation was undertaken on combat shotguns and munitions. Starting with the Winchester multiple-hit flechette round, design was undertaken of a multiple option ammunition family, to comprise; High-explosive, anti-tank, smoke, and illuminating rounds. There was now a family of munitions. A prototype weapon was developed. With the decision to withdraw from Vietnam after the chattering classes accepted Hanoi's version of the 1968 Tet offensive, the project was closed down.

Perhaps the focus by the UK (who had used shotguns extensively in Malaya,) and the American General Staff, on a major war in Europe, together with the political vacillation over Vietnam was the reason an Operational Requirement for a combat shotgun was never tabled within the ABCA Pact. The major American arms producers, rather than having had the courage of their convictions and producing an appropriate weapon regardless of cost at the beginning of the war, all deferred to "the guvmint" to eliminate the possibility of financial loss. Perhaps the reality that after the defeat in Vietnam it would be a generation before America was involved in infantry fighting made the exercise irrelevant.

Brigadier SLA Marshall quoted in *Australian Infantry Magazine* in 1971 states "75% of all enemy casualties (in Vietnam,) are inflicted by the weapons integral to the infantry company..."

This was corroborated by Major General RNL Hopkins in a conversation with the author in 1972 with the words, "This has been known for a long time. It is just not talked about very often."

Major Frank Hobart in his foreword to *Jane Infantry Weapons* 1975, points out 86% of all rifle contacts do not exceed 300 metres. With regard to light machine gun contacts 80% do not exceed 1,200 metres. An omission in the published literature has to be the breakdown between kills achieved by machine guns, rifles and other weapons. As the Major did not attribute any of the foregoing data to the Tactical Retrieval Cell at the Staff College in Camberley we can only assume he was not an "infantry officer" instructing at the Royal Military College of Science.

The current family of military small arms was developed in the context of vast mechanized hordes of Soviet troops pouring over the German border. The German tradition of mechanized troops riding around in "battle-wagons" de-bussing with machine pistols carried the day. The umbilical cord of signals underpins this doctrine. There is one round for the rifle and light support weapon using common components, the 7.62 mm light machine gun for fire to 1,200 metres, effectively giving four cartridges, 9 mm, 5.56, 7.62, and 40 mm.

Much weapons design is undertaken as a result of bureaucratic deliberation within both armies, and arms firms which are, in most cases, an arm of government. It is a bit like the Assault Rifle, development of the cartridge was taking place and years later the weapon. For various reasons nobody stood back and said, never mind producing Mausers by the million on our existing tooling, let us take a quantum leap into the future...Thank God.

The multiple option ammunition family of multiple-hit, high-explosive, anti-tank, smoke, and illuminating has now been in development for thirty years. Submissiles and other munitions for use in smoothbore weapons were developed in the fifties but never incorporated into infantry weapons. The calibre of 20 mm seems to be immutable. It is understood the limiting factors have been the technology, and cost of producing fuses of an acceptable size. Given there is now a limited issue 20 mm infantry weapon in the US Army inventory, it must be assumed these handicaps have been overcome.

The 20 mm/5.56 mm weapon shown in photographs in popular journals displays a compact weapon. Since it does not have a long barrel in proportion to the calibre it would be a fair assumption that it is intended for use in the situations not exceeding three hundred metres. As there is no muzzle-brake discernable it can be assumed to be smoothbore.

The multiple option ammunition family has two requirements, it must be capable of being fired from light weapons carried by the soldier in the field. The velocity of the 20 mm projectiles needs to be such that repeated rounds can be fired without the soldier thinking he is firing an anti-tank rifle every time he pulls the trigger. Thus, the requirement is for a common family of munitions, but with different (propellant) charges. One for a weapon which may be fired offhand and frequently, with a range not exceeding 300 metres, the other for the Light Machine Gun role to reach targets at 1,200 metres and even beyond if the old ideas of barrages and beaten ground are considered for future conflicts.

The idea that the multiple option ammunition family have variable charges such that extra charges can be added or removed in the field, as happens with Quick Firing field guns was put forward in the seventies. The author was admonished by the official concerned, "I would not discuss that with the ammunition companies you are going to call on..." The benefits of such a design are that the weapon option of the carbine can use the LMG ammunition simply by removing the heavier propellant charges. Similarly in a defended position, the LMG may be loaded with belts of the carbine charge because it is close country and the company commander wants a burst of multiple hit interspersed with HE if there is a rush for the wire.

In tactical situations where a unit is moving in open ground, the LMG role requires a reach of 1,200 metres or even further. The belts of ammunition and propellant charges are assembled in whatever combination was ordered and the gunners know, if they see something move within range they fire a burst of HE, or if it is fire from a sangar in the hills they give it a belt of anti-tank...

Back in the good old days, the Vickers machine gun was set on its tripod and indirect fire could be dropped into dead ground. There are modern mortars and artillery but if you are in a small unit up in the hills, especially if they are bristling with fire and forget rockets for helicopters, the option of sending a belt of projectiles in a high trajectory to fall behind cover is something which may appeal to a junior officer.

The Pedersen idea of weapon options in 1917, was pursued by Eugene Stoner (who designed the Armalite,) in the mid-sixties. Essentially his idea was that using the one calibre, 5.56 mm. The basic weapon might be configured as a magazine fed carbine, a rifle, and magazine or belt-fed machine gun variants.

Arising from Stoner's concept, the next step put forward perhaps a decade later, was for an integrated multi-purpose weapon system based around the 12 gauge, 18 mm shotgun cartridge. Given the designer had no access to the multiple option ammunition family developments, the proposal was to fire rockets from steel cases which would reach the 1,200 metres required for the machine gun role. These are munitions which may have been developed in the fifties. The weapon options within the proposed weapon were belt-feeds and magazine feed. By exchanging components; barrels, breech-blocks, feed mechanisms or magazine housings, it was proposed the smoothbore weapon be reconfigured into a rifle calibre weapon, in either of the two calibres required.

By definition war is chaos, unpredictable. The rifle cartridge is still useful in a mobile situation where a soldier is moving in open country in vehicles with backup, or over rough ground. An obvious solution to the weight and bulk of the multiple option ammunition is to have belts of the heavier charge in HE, AT, smoke and illuminating being carried within a platoon for the section support weapons. The forward scout might have the carbine version of the 20 mm but loaded with HE and multiple-hit for a counter ambush contact. The remainder of the section carrying belts might use a rifle calibre version of the carbine to engage targets at ranges accepted for small arms today. When they reach a static position and are re-supplied, the weapon and or ammunition options are simply "delivered" along with stores. At the discretion of the company commander, whose weapons cause 75% of all enemy casualties, the weapon configurations and roles are issued to his subordinates.

Bibliography

Australia's Bid for the Atomic Bomb Wayne Reynolds Melbourne University Press 2000

EM-2 Concept and Design Thomas B Dugelby Collector Grade Publications Toronto, 1980

Janes Infantry Weapons 1975 Foreword

Hatcher's Notebook, The Stackpole Company 1957 Ch 15

Textbook of Automatic Pistols R K Wilson with I V Hogg Arms and Armour Press 1975 p282

The World's Fighting Shotguns Thomas F Swearengen TBN Enterprises 1978 Ch 8

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