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HOW SOUTHWEST PACIFIC AREA OPERATIONS IN WWII INFLUENCED THE ROYAL AUSTRALIAN AIR FORCE

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Major Jonathan B. Wills

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Preface

I have selected this topic for research mainly due to my experience working with the Royal Australian Air Force (RAAF) during my last assignment as a Exercise Plans Officer at Headquarters Thirteenth Air Force, Andersen AFB, Guam. My interest in this subject started after I observed the aging remnants of a fierce air battle over Northern Australia during my professional travel there. I also found that RAAF experiences in this area during WWII has had a profound impact on today's RAAF.

The RAAF is the second oldest Air Force in the world, dating back to 1921. But its true genesis is found at the beginning of WWII. Naval power dominated Australia's military thinking in the pre-WWII years and limited the RAAF's growth until the outbreak of WWII. After WWII, airpower emerged as the main national military instrument of choice in Australia, and today's RAAF is a reflection of that emphasis. I will attempt to show this evolution in this project.

I also chose this project to complete the requirements for the World War II elective program that I was chosen to participate in as part of the 1997 Air Command and Staff College academic year. Many thanks to my Faculty Research Advisor, Dr. Richard Muller, for the support he provided in this project.

Abstract

This research project will show the evolution of the RAAF's doctrine, strategy, and force structure from the pre-WWII years to today's modern force. Specifically, this project will show how the lessons learned from the air battles in the Southwest Pacific Area of WWII have impacted today's RAAF.

This project will begin by showing the transition of the RAAF from a British Empire dominion, early in WWII, to a force closely aligned with the United States during WWII. The main focus will be on the operational contributions the RAAF made to the Allied Southwest Pacific Area campaign in the Netherlands East Indies, New Guinea, and in Northern Australia. Finally, the project will show how the lessons from experiencing Japanese air superiority, early in WWII, influenced the doctrine, strategy, command organization and force structure of today's modern RAAF.

Chapter 1

Defining Airpower's Role In Australia

Australia became the first British dominion to establish a separate air force. The Royal Australian Air Force (RAAF) was born with 151 personnel, of whom only 21 were officers. It began with more planes than personnel. In addition to the 128 gift planes (obsolete WWI aircraft) from Britain, it took over 20 army trainers, 10 scouting planes and 6 Fairey seaplanes. Due to post WWI attitudes favoring disarmament and the economic depression, it wasn't until 1925 that the first RAAF squadron was established.

Australian national military objectives charged the RAAF to support the Australian Defense Force in providing local protection against small scale raids on the Australian mainland and contribute to British Empire collective security by providing expeditionary forces. Debate on roles for the RAAF and its force structure would continue up to the start of WWII. The first attempt to define roles and missions for the RAAF occurred in the late 1920s. An "Air Board" made up of the ranking RAAF, Australian Army, and Royal Australian Navy (RAN) officers was formed to develop strategy and roles for airpower in Australia. In the published Air Board's judgment: "Australia's isolated position and the limited radius of action of existing aircraft rendered independent action by air forces against enemy centers impractical, as a result of which, the action of airpower in the defense of Australia would be confined to auxiliary work for the army and navy."¹

The Army and Navy agreed that the “key role” for air power was surveillance. They agreed that “aircraft are the chief means of completing long distance reconnaissance with sufficient rapidity and certainty.”² After surveillance, the Army and Navy had widely diverging views on roles for airpower. The navy wanted air power to attack enemy ships and provide protection for Australian ships. The army wanted airpower to deal with enemy aircraft as their first priority, then bombing planes for direct attack on the enemy.

In the 1920s British Empire context, the domination of sea power in strategic military thinking coupled with global economic depression stifled RAAF development. The RAAF Commander, Wing Commander Richard Williams, declared in 1927 that its aging gift planes were quite good for training, but inadequate for defense. The Australian government, faced with major expenditures to equip the RAAF, invited Chief of the RAF, Air Marshal Sir John Salmond, to Australia for recommendations in 1928. In short, Air Marshal Salmond recommended RAAF expansion over a 9 year period with British and locally produced aircraft. This plan was shelved by the Air Board until 1932 when Japanese military conquest in the Pacific and events in Germany motivated the Australian government to reconsider the implementation of the plan.

Air Marshal Salmond’s plan called for expanding the RAAF to 198 aircraft in 17 squadrons with the following roles: cooperation with land and sea forces, reconnaissance and protection of shipping, and direct attack of enemy air and surface forces. Since Salmond was the RAF Chief, it was no surprise that RAF roles became the basis for airpower in Australia. The development of this pre-WWII force structure is outlined in Appendix A. The plan only stated ‘what’ airpower would be used for. It did not suggest ‘how’ it was to be used to meet the Australian military objective of continental defense.

The failure to link these roles with an air strategy for Australia resulted in the ad-hoc aircraft acquisition program that fielded the mostly obsolete force that the RAAF entered WWII with.

Notes

¹ Alan Stephens, *Power plus Attitude: ideas, strategy, and doctrine in the RAAF*, RAAF Air Power Studies Center, 1991, 16.

² Ibid., 16

Chapter 2

Strategy Development for WWII

The increasing German and Japanese naval threats brought into question Great Britain's ability to defend its Far East colonies of Singapore and Malaya. The so called "Singapore strategy" was considered vital to the defense of Australia and the lines of communication to Britain. The Secretary of the Imperial Defense Committee, Sir Maurice Hankey, during a visit in Nov 1935, suggested that Australian interests could require the RAAF to substitute airpower for sea and land power as the main instrument of defense. For this reason, he suggested the RAAF be organized to deploy for "emergency actions" to reinforce the Eastern Imperial route through Singapore and Malaya, Australia's first line of defense. The Australian government adopted this commitment, and in early 1936, solicited recommendations from the RAF's Chief, Sir Edward Ellington. As usual during this period in RAAF history, rarely if ever was anything done by the RAAF until Britain was consulted. This was a major shift in Australian military thinking, substituting airpower for sea or land power as the main national instrument of military power.

In April of 1940, the Australian Defense Committee reached a decision on Australian airpower strategy that would define the RAAF's early operations in WWII. First, the committee agreed that general reconnaissance was vital to the defense of Australia and airpower was the best way to fill this role. The committee then agreed that the destruction

of enemy bases (including aircraft carriers), from which hostile aircraft could launch attacks against Australia, would be a far more effective method of defense than attempting to intercept and destroy aircraft in the air. This reflected the influence of the pre-WWII western airpower doctrine of strategic bombing. This strategy was a mistake that will be highlighted during the battle for air superiority over Northern Australia. The RAAF simply did not appreciate how the lack of resources at its disposal would affect its ability to produce the type and numbers of bomber aircraft to strike enemy centers of gravity from the Australian region. Nor did the RAAF attempt to develop air doctrine that reflected Australia's unique defense requirements as defined by its geography.

Having no choice but to confront aggressive Japanese military expansion, the RAAF finally established an air strategy in early '41. Its basis was to defend Australia from enemy air attack, especially in the northern region. Establishing a reconnaissance screen in the islands north of Australia and on the Malaya peninsula was the first priority. Second, that screen would be supported by "striking forces" to attack enemy lodgments. Finally, the majority of RAAF forces would be allocated in positions around the large cities and industrial areas to protect the vulnerable areas of the country. The RAAF realized that success of the plan was dependent on the ability to reinforce the forward line in the islands. Mobility was identified as the key factor which necessitated the establishment of air transport squadrons on a scale that would permit operational units to be rapidly transferred and sustained. Hence, a new role for RAAF airpower was born.

The plan was immediately implemented with the formation of an air station and two bomber-reconnaissance squadrons at Darwin in Northern Australia. RAAF forces were also sent to augment the RAF in Malaya and Singapore (fig 1) to provide the first line of

defense for Australia. Arrangements were made with the Netherlands East Indies (NEI) government for preparation of RAAF Advanced Operating Bases (AOBs) on Timor and Ambon islands, Rabaul, and Port Moresby in New Guinea. As the RAAF began mobilization for war on the home front, they also became increasingly burdened by the Empire's requirement to send manpower and equipment overseas.

Chapter 3

The RAAF's Role In The Empire Air Training Scheme

As the German threat loomed larger, the RAF knew its aircrew production could not keep pace with aircraft production. An agreement was met with all the dominions to start a massive training program to man the RAF. Britain would produce the machines, the dominions would provide the men. The program became known as the Empire Air Training Scheme (EATS) and started in December 1939. "The RAAF, through 1945, eventually trained 27,387 aircrew. Of those, 15,746 were allocated to the RAF, some 4000 more than the 11,641 that were kept to man the RAAF."¹

Two areas of controversy have left lasting bitterness in the RAAF. First was the lack of opportunity under EATS for RAAF officers to gain high level command experience. Out of 17 Australian squadrons that were formed in Britain, none were commanded by RAAF officers. Australian aircrew were present in over two thirds of all RAF squadrons. Second, the RAAF entered the agreement with the belief that Britain needed prompt aid in the air to defend it. However, by the time EATS started producing aircrew, the Battle of Britain had been won. In Nov '44, the Australian Minister for Defense wrote: "someday there will be an outcry about the poor RAAF effort in the SWPA, I place the blame on the 'set-up' under which the RAAF had to send officers to Europe to get 'operational experience' which should have been provided here in the SWPA."² The fact that no

RAAF officer attained high command in the RAF coupled with the manpower shortages experienced at home during the war contributed to the RAAF's post war adoption of American air doctrine and to formulating its modern strategy of national defense through self-reliance.

Notes

¹ Alan Stephens, *Going Solo, the RAAF 1946-1971*, RAAF Air Power Studies Center, 1994, 4.

² Ibid., 54.

Chapter 4

RAAF Operations On The Malaya Peninsula

On 6 Dec 1941, a RAAF Hudson, operating out of Kota Bharu, Malaya (fig 1), sighted a large Japanese convoy in the South China sea steaming towards northern Malaya. Shortly after midnight on 8 Dec, Japanese troops came ashore at Kota Bharu. Six RAAF Hudsons loaded with 250 lb bombs attacked the invasion force inflicting heavy casualties. This force represented the first Allied airmen (apart from the Chinese) to strike blows against the Japanese from the air in WWII. (Due to the international date line, midnight 8 Dec was before 0700 7 Dec at Pearl Harbor).

The RAAF success at Kota Bharu was short-lived. At daylight the next morning, Japanese Betty and Val bombers with Zero fighter escort operating from peninsular Thailand, attacked in formations of 20 to 25 aircraft at persistent intervals throughout the day. Many Hudsons and Brewster Buffalo aircraft were lost. The air threat, coupled with the invading infantry force, forced the RAAF commander to evacuate further south on the Malaya peninsula. Through December of 1941, the RAAF fought a losing battle against a numerically and technically superior Japanese air force. None of the RAAF bases in Malaya at Patani, Ipoh and Butterworth had radar warning devices. "The Buffalo pilots needed 30 minutes warning to take off and climb to 20,000 feet at which the Japanese formations flew. When the Buffaloes did manage to get off, they were met by an enemy

that outnumbered them by 6 and 15 to one!”¹ As the Japanese overran the Malaya airfields, the remaining Buffaloes and Hudsons were withdrawn to Sembawang, Singapore.

On 17 Jan ‘42, the RAAF station at Sembawang came under its first attack. The enemy’s attacks came from captured airfields on mainland Malaya and were made in formations of 21 to 54 bombers with fighter escort. They flew in ‘V’ formations at 16000 to 25000 feet, a pattern technique that had devastating effects on aerodromes. In a late Jan ‘42 account, 8 Buffaloes took off from Sembawang to defend Singapore against Japanese formations numbering more than 100 bombers. When the enemy bomber pilots noticed they were being chased, they went into a shallow dive to increase speed. The Buffalo “interceptors” were left behind. As a RAAF Buffalo pilot said afterwards, “Bombers outpacing fighters, you’ve got to—well laugh!”² They acknowledged their futile attempts to counter Japanese air superiority.

After the fall of Singapore on 15 Feb ‘42, General Gordon Bennett, Commander of the Australian Imperial Force in Malaya, delivered a stinging report on the RAAF claiming that both the quality and quantity of air support in Malaya were inadequate. The report stated that during the last week of the fight, not one RAAF aircraft was seen. This lesson of inadequate early warning, fighter defense, and the inability to strike at enemy bases would be learned several times in the course of the following year.

This was also the event that sealed Australia’s relationship with the U.S. during WWII. Australian Prime Minister John Curtin said, “Now that Singapore was lost our defenses are inadequate to defend Australia against an enemy with command of the sea and air. Australia now looks to America, free from any pangs as to our traditional links or

kinship to Britain, we shall exert all our energies toward shaping a plan to defend Australia with the United States as its cornerstone.”³

Notes

¹ Douglas Gillison, *Australia in the war of 1939-45, Volume 1, Royal Australian Air Force 1939-42*, Australian War Memorial, 1962, 330.

² *ibid*, 329

³ Alan Stephens, *Power plus Attitude: ideas, strategy, and doctrine in the RAAF*, RAAF Air Power Studies Center, 1991, 58.

Chapter 5

Defeat In The Netherlands East Indies

In one year, the RAAF along with Dutch forces had built up AOBs in the Timor, Ambon, Port Moresby and Rabaul areas. As depicted in fig 2, “the RAAF initially positioned 8 Hudsons at Koepang, Timor; 6 Hudsons to Ambon island; 12 Wirraways to Rabaul and, 12 Catalina flying boats at Port Moresby.”¹ This forward “air surveillance system” would facilitate monitoring of enemy actions and the ability to mount small air attacks on enemy lodgments and shipping. The balance of the RAAF was allocated to the highest priority of defending Sydney and other industrial ports in New South Wales.

Deploying the support packages for the Hudson squadrons and evacuating non-combatant Australians from the islands could not be done with the Hudsons alone. The RAAF commissioned QANTAS (Queensland and Northern Territory Aerial Services) Short Empire flying boats for unit deployment, evacuation, and sustainment of the AOB locations. This was the beginning of air transport as a role for the RAAF.

Australia would soon realize the importance of the NEI in the Northwestern Area. The Hudsons, on 10 Dec’41, drew first blood by attacking enemy staging areas in Menado and Kendari on Celebes island. (fig 1) These were to become major Japanese ports and aerodromes for staging the invasion of Timor and Ambon islands. Timor was strategically significant, for land based aircraft on Timor could attack targets on the Australian

mainland. The Hudsons at Timor and Ambon faced serious challenges. No fighters had been allocated to defend the bases, nor did they have radar warning gear or ground defenses. Ammunition, fuel, and other sustainment materials had to be flown in from Australia.

By the middle of Jan '42 (fig 1), the Japanese had established significant air and sea bases on Celebes Island. They attacked Ambon and Timor daily with formations of 20 bombers and 15 fighters. They would bomb from 10-15000 feet on the first pass and then return for multiple low level strafing passes. While the crews tried to conceal the Hudsons on the ground, they were no match, without fighter protection, for the strafing Zeroes. By 25 Jan the enemy had destroyed over 60,000 gallons of fuel and destroyed 13 Hudsons on Timor and Ambon. On 26 Jan, a devastating attack destroyed four more Hudsons on the ground. There was no warning of the attack and no fighters to respond.

Late in the afternoon on 26 Jan, the crew of one of the last Hudsons from Ambon located an enemy convoy of 22 ships east of Menado heading southeast (towards Ambon). The RAAF commander at Ambon requested QANTAS flying boats for evacuation and also started stripping the remaining Hudsons for evac duty. On 27 Jan all RAAF personnel were evacuated except a small contingent to conduct demolition work. However, for the Australian Imperial Force (AIF) , there would be no evacuation. The RAAF withdrawal won few friends among the AIF contingent. Some RAAF personnel felt so guilt-ridden after leaving Ambon that one RAAF officer labeled the RAAF's departure as: "the dirtiest trick ever played on white men." During the night of 30 Jan, the Japanese occupied Ambon. "Of the 1396 AIF men that were left behind, only 305 returned to Australia after the war ended."²

The priority for forward deploying RAAF units was the defense of Rabaul and Port Moresby, in the Northeastern Area. The Australian Chiefs of Staff stated that if the enemy were allowed to establish a base at Rabaul or Port Moresby, attacks could be carried out on Australian coastal areas and more importantly, the Trans-Pacific air route to the U.S. could be denied. The RAAF squadron knew the continual reconnaissance and raids by the enemy on the Rabaul aerodrome was a pointer to things to come. One of the most daring RAAF missions of the war was undertaken on 10 Jan '42 when a single Hudson flew an armed reconnaissance mission to the main Japanese naval base at Truk (fig 1). The results of this mission revealed the “main body” Japanese naval force that was poised for operations further south. This evidence, coupled with the growing intensity of raids on the Rabaul aerodrome indicated that invasion was imminent.

On 20 Jan, coastwatchers on New Ireland signaled that 20 enemy aircraft were heading for Rabaul. The 20 were joined by 33 Val bombers from the west and were not sighted until over the town. 5 minutes later, 50 additional enemy aircraft were sighted approaching Rabaul—heavy bombers, dive bombers and fighter escort. During the 10 minute engagement, the 8 serviceable Wirraways scrambled to meet the enemy, only 2 returned. After shooting down the Wirraways, the Japanese Zeroes alternated low level strafing passes with taunting aerobatic displays.

The first word of this attack was sent to RAAF Hqs: “waves of enemy fighters shot down Wirraways, waves of bombers attacking aerodromes, over 100 enemy aircraft sighted thus far, two remaining Wirraways useless defense, will you now please send some fighters? The reply from RAAF Hqs was simply: regret inability to send fighters”³ The next morning, 21 Jan, it was reported that 4 enemy cruisers accompanied by “other

vessels” were sighted 65 miles north of Rabaul steaming south. The squadron subsequently received a message ordering all available aircraft to attack these ships. All available aircraft amounted to two Wirraways and one Hudson. The squadron decided to withdraw to Port Moresby.

With Ambon occupied, the Japanese quickly turned their attention to Timor. Capturing Timor would bring land-based airpower within range of the main Allied staging base in northern Australia: Darwin. On 30 Jan ‘42, the same day the enemy occupied Ambon, a devastating air strike was conducted on the RAAF base at Koepang, Timor. Again with no fighter or ground defenses to provide defense and no early warning, the RAAF paid the price. Three Hudsons were destroyed on the ground. A QANTAS flying boat evacuating woman and children was shot down trying to take off. The Hudsons were dispersed between two bases, Koepang in the west and Dili in the east of Timor. Despite twice-daily enemy attacks, the Hudsons continued armed reconnaissance missions, without fighter escort, to Kendari and Menado to monitor enemy movements at their bases to the north on Celebes (fig 1).

Realizing the importance of Timor, the Chiefs of Staff ordered a reinforcement of Timor with 2 AIF battalions. The convoy taking the AIF to Timor came under enemy air surveillance as soon as it departed Darwin. Midway through the voyage, the convoy came under attack by 35 bombers and 9 flying boats. Luckily none of the ships were hit, but the convoy decided to return to Darwin.

The Japanese reconnaissance of Timor now increased unhindered, some dropping leaflets ordering the natives not to aid the Allies and threatening anyone who conducted demolition work. The RAAF decided to evacuate on 18 Feb ‘42. Enemy forces landed

at Koepang and Dili on the evening of 18 Feb before all RAAF personnel could be evacuated by armed Hudsons. 29 RAAF personnel evaded in the Timor jungle for over 2 months before the American submarine *Searaven* conducted the rescue operation.

The RAAF's strategy for a forward surveillance system had collapsed. Air reconnaissance had proved worthy of its role by identifying enemy movements, but the RAAF did not possess the force to defend against the attacks in the forward area. The RAAF inputs to the United States Strategic Bombing Survey after the war contributed the defeat in the NEI to: "1. Japanese superiority in number and type of aircraft, 2. Enemy sea supremacy and, 3. Lack of fighter cover for aerodrome defense."⁴

Notes

¹ Douglas Gillison, *Australia in the war of 1939-45, Volume 1, Royal Australian Air Force 1939-42*, Australian War Memorial, 1962, 238.

² George Odgers, *The RAAF an illustrated history*, The Griffin Press, 1965, 112

³ Douglas Gillison, *Australia in the war of 1939-45, Volume 1, Royal Australian Air Force 1939-42*, Australian War Memorial, 1962, 356

⁴ Wing Commander B.C. Waddy, History of the RAAF in the Pacific area input for the United States Strategic Bombing Survey, USAF/HRA, 10 Dec 1945, 2.

Chapter 6

Lessons From Japanese Air Superiority

Thursday, February 19, 1942 began as a quiet morning. It was ‘the day that will live in infamy’ for Australians. At the RAAF station in Darwin, the Hudsons executing the Timor evacuation had just arrived at 0730 from Koepang. Resident aircraft at Darwin that morning were 9 Hudsons and 10 US Army Air Force (USAAF) P-40 Kittyhawks. There was no radar to provide warning of enemy attack and only four anti-aircraft guns, acquired from the USAAF, for aerodrome defense. The RAAF’s meager air defense resources had been allocated to the defense of the southern industrial areas.

At 0945 that morning, coast-watchers warned of 27 enemy bombers approaching from the southeast (the Japanese bases were to the north). They were flying an impeccable ‘V’ formation, creating the impression among local civilians that American aircraft were arriving and there was no reason for alarm. An additional 50 Val and Kate enemy bombers with fighter escort appeared from the north. The RAAF base, town, and harbor were attacked repeatedly by dive bombing, and low level strafing. A second wave came two hours later, an unescorted formation of 54 Val dive bombers which fire bombed the town and the base facilities. All of the Kittyhawks and Hudsons were destroyed along with the majority of the base facilities. The convoy of 7 ships which failed to reinforce the Timor AIF contingent, still heavily laden with fuel and ammo, was destroyed at anchor in

the harbor. The hospital, post office, stores and communication centers in town were all destroyed. The Japanese method of advance had been totally effective, the overwhelming employment of escorted bombers to destroy air and sea defenses. An amphibious assault of Darwin was sure to follow like in Ambon, Rabaul and Timor. The invasion of Australia never came.

Australia had been attacked with airpower for the first time. Japanese control of the islands in the NEI and the 'air-sea' gap (Arafura Sea-fig 1) to the north of Australia allowed their umbrella of air superiority to extend over Australia. The control of this "air-sea gap" to the north will forever be an Australian military objective as a result of these events. The RAAF began building a series of dispersal bases around the Darwin and Northern areas to make enemy targeting more difficult, to accommodate newly acquired RAAF aircraft, for arriving American aircraft, and to provide support bases for aircraft transiting to New Guinea.

The lessons from Japanese air supremacy over the NEI and Northern Australia are forever etched on the RAAF. The most glaring lesson was their failure to protect the AOBs with fighter aircraft. The RAAF's pre-war doctrine of strategic bombing of enemy bases as the best defense was not feasible with Australia's limited resources and industrial capacity for building bombers. Aircraft acquisition, whether fighter or bomber, was difficult with the Allied priority of 'beat Hitler first'. Nevertheless, fighter defense emerged as new doctrine that became a RAAF priority as a result of the events in Singapore and the NEI. The Chiefs of Staff met on 26 Feb '42 and concluded that "in view of the lack of air support for ground forces, every effort should be made to provide adequate fighter defense."¹

Notes

¹ Alan Stephens, *Power plus Attitude: ideas, strategy, and doctrine in the RAAF*, RAAF Air Power Studies Center, 1991, 54.

Chapter 7

Defense Of Port Moresby

Port Moresby (fig 3) was the last AOB not occupied by the enemy. It was essentially an enclave now surrounded by enemy forces in Northern New Guinea, Rabaul, and the NEI to the west. 12 Catalina flying boats, four QANTAS flying boats, 12 Hudsons, and a handful of Wirraways were all that stood up to the growing Japanese air strength at Rabaul. The RAAF desperately sought to reinforce Port Moresby with reconnaissance, bomber, and fighter aircraft to counter daily enemy attacks and to support the Australian Army in eastern New Guinea. On 14 Mar '42 the first RAAF Kittyhawk squadron with 17 aircraft was established and moved to Port Moresby.

The Kittyhawks of No. 75 Squadron engaged enemy forces daily. They provided air defense for Allied forces at Port Moresby and conducted raids on enemy airfields in the Rabaul area. On 30 April with 3 aircraft left, No. 75 squadron was relieved of the responsibility for the air defense of Port Moresby by two American P-39 Airacobra squadrons. "For the first time, the enemy encountered capable fighter opposition in the SWPA. No. 75 Squadron had flown 638 combat hours, destroyed 35 enemy aircraft and damaged 22 in the first fortnight."¹

Air transport was a critical mission since the Port Moresby base was sustained totally by airlift of supplies and personnel. "By 12 March the RAAF had organized four

squadrons with a number of C-47 Dakota, 25 Catalina flying boats, 34 DH-84, and 36 DC-2 civil transport aircraft.”² This air transport force would be instrumental in the resupply of Port Moresby and the Australian Army as enemy ground forces attempted to seize Port Moresby by land after their defeat in the Battle of the Coral Sea.

There were several examples of RAAF-USAAF integration during Feb-Apr ‘42 in the Port Moresby area as USAAF forces started to arrive. On Feb 23, USAAF B-17 Flying Fortresses arrived in theater. RAAF officers crewed on initial bombing missions to Rabaul to orient American aircrews in targeting, navigation and tropical flying conditions. The RAAF did the same for newly arriving U.S. Navy Catalina flying boat crews. “In order to make a truly Allied organization, Americans and Australians were mixed everywhere, a bomber might have an American pilot, an Australian co-pilot and bombardier, an American navigator, and a mixed collection of machine gunners. It sounded screwy, but it was working.”³

Fighter defense and air transport had become vital missions for the RAAF to deploy and sustain forces in the Port Moresby area, but the RAAF was still losing a war of attrition with the Japanese. Events beyond the RAAF’s scope of operations gave the RAAF the time it needed to build a viable force. Aggressive Japanese action in the NEI and Rabaul was slowed in April ‘42 after the Doolittle raids on the enemy homeland. In May ‘42, with RAAF forces under constant enemy attack and on the verge of collapse, the Coral Sea battle had prevented an enemy amphibious invasion of Port Moresby.

Notes

¹ Wing Commander B.C. Waddy, *History of the RAAF in the Pacific area input for the United States Strategic Bombing Survey*, USAF/HRA, 10 Dec 1945, 9.

Notes

² Douglas Gillison, *Australia in the war of 1939-45, Volume 1, Royal Australian Air Force 1939-42.*, Australian War Memorial, 1962, 391.

³ General George C. Kenney, *General Kenney Reports*, Office of Air Force History, USAF, 1987, 32

Chapter 8

RAAF Operations In New Guinea

The summer of 1942 represented a major turning point for Allied forces in Australia. General MacArthur became Supreme Commander and appointed Major General George Kenney as Commander of Allied Air Forces (AAF). General Kenney reorganized the previously integrated AAF into separate American and RAAF organizations. This controversial action served to streamline the American air effort, but created a bitter power struggle within the RAAF over command authority and organization. The power struggle within the RAAF during WWII directly influenced today's RAAF organization and is outlined in Appendix B.

After Kenney's division of the AAF into the Fifth Air Force (USAAF) and RAAF Command, he gave RAAF Command the responsibility for the defense of the Australian continent and for the Northwestern Area (fig 3). The Northwestern Area was centered around the Darwin area, from which reconnaissance and bombing missions were flown into the NEI. Fifth Air Force was assigned the Northeastern Area (New Guinea) from which the planned offensive was to be launched. This arrangement remained flexible to meet operational requirements. The RAAF's No. 9 Group was attached to the Fifth Air Force for New Guinea operations and Fifth Air Force frequently supported RAAF Command operations in the Northwestern area.

The reorganized AAF assigned these roles to the RAAF in Sep '42: "1. support offensive action in New Guinea and NEI, 2. provide local air defense, 3. maritime reconnaissance and protection, 4. defend the Australian continent, and 5. Support of Army units."¹ These roles reflect a culmination of the RAAF's pre-war "Salmond doctrine" and the emerging doctrine from the RAAF's defeat in the NEI and Malaya peninsula.

After the attempted amphibious invasion of Port Moresby had failed (Coral Sea), the enemy staged a land invasion of Port Moresby over the Owen Stanley mountain range. The enemy's two axis attack strategy came from the north over the mountains and from the east through Milne Bay (fig 3). Two RAAF P-40 Kittyhawk squadrons were assigned to the Milne Bay area on 1 Aug '42. A total of 30 Kittyhawks and two radar stations were established by 11 Aug. A squadron of Hudsons arrived also to provide armed reconnaissance over the Solomon Sea (fig 3).

At midnight on 25 Aug, the enemy attempted to land a brigade at Milne Bay for the invasion's eastern axis. They were surprised by the numerically superior RAAF force and the presence of the Australian 7th Brigade. The RAAF Kittyhawks attacked the beachhead by dive bombing with 300lb bombs and low level strafing. As the enemy force moved inland, the Kittyhawks engaged and marked enemy target areas for the Hudsons and USAAF B-26 Marauder bombers. The Kittyhawks also provided air defense against enemy Zeroes from Rabaul attempting to support the invasion. This battle lasted 14 days until the Japanese withdrew on 8 Sep. The AIF commander said afterwards: "the action of the two RAAF Kittyhawk squadrons on the first three days was the decisive factor...there is a new sense of comradeship that is in happy contrast to the cynical relations between services after the fall of Singapore."² This was the first defeat for the

Japanese on land and the first time in history where the RAAF “controlled the air” over the battlespace.

No. 9 Operational Group was the RAAF’s “mobile task force” that was part of the Advanced Echelon of Fifth Air Force in New Guinea. It was formed in Oct ‘42 to support the Allied offensive up the northern New Guinea coast. Its force included four mixed-squadrons of Kittyhawks, Hudsons, Bostons (A-20s), Wirraways and the newly delivered Beaufighters, and Vultee Vengeances.

No. 9 Group’s first task was to interdict enemy shipping in the Normanby and Goodenough Islands vicinity (fig 3). On 8 Oct ‘42, Hudson crews sighted enemy cruisers and destroyers near Normanby island. The three Hudsons, accompanied by Bostons and Beaufighters, were supported by 16 Kittyhawks flying topcover. While the success of the strike was not conclusive, it marked the first composite force operation that the RAAF had ever put together. The RAAF now had the equipment and doctrine to conduct offensive operations.

No. 9 Group also supported Allied ground operations during the effort to destroy the enemy stronghold at Buna (fig 3). The Wirraways, albeit obsolete, were used to spot artillery fire for ground forces. “They would brief with the artillery troops before every mission. Even though they heavily depended on fighter cover, the Wirraway would continually hover over Jap lines giving target coordinates and luring enemy anti-aircraft (AA) guns into disclosing their positions. The Wirraways provided observation for the 105mm Howitzers to register on the enemy AA positions.”³ Conducting close air support without air superiority reflected the RAAF’s dedication to the Army support role.

The RAAF and Australia made a considerable contribution to air transport requirements in New Guinea. In Nov '42 after the Allies captured airfields in the Buna area, the RAAF commissioned several varieties of civil aircraft to use for transport. The Allied occupation of the Buna airfields was risky since the enemy still had a measure of air and sea superiority. Air transport was the only way to resupply the Allied troops. 15 transport aircraft acquired by the RAAF, consisting of the Douglas DC-2, DC-3 and Lockheed 10 and 14, hauled and air dropped over 40,000 pounds of supplies in the Buna area during a three week period in Nov-Dec '42. Hudsons could haul 1200lbs of cargo and got in the air transport business as well. From 14 Dec to 11 Jan '43, Hudsons flew 645 sorties carrying 1,107 troops and 780 tons of supplies. This role was new to the RAAF, as evident by their equipment, but they made a significant impact with what resources they had.

The RAAF clearly was the main contributor in air reconnaissance operations in the SWPA. RAAF Catalinas and Hudsons based at Port Moresby and Milne Bay flew armed reconnaissance missions both day and night over Rabaul, New Britain, and the Huon Gulf area of New Guinea (fig 3). "Four squadrons of Catalinas and Hudsons combined during the period Feb-Jul '43 to fly over 3700 reconnaissance sorties out of the 4950 (75%) that were flown by the AAF in the SWPA."⁴ This was a significant contribution during a decisive time in the campaign that culminated in the Battle of the Bismark Sea.

Night reconnaissance of shipping lanes between New Britain and New Guinea combined with night bombing of enemy airfields were the preferred RAAF tactics. RAAF Catalinas were noted by General Kenney for remaining over enemy aerodromes on New Guinea and at Rabaul for several hours at a time during the night conducting 'area

bombing' with incendiary bombs. The RAAF preferred to make night attacks following the RAF bomber doctrine with lightly-armed bombers carrying large payloads as opposed to American daytime bombing with heavily-armed bombers.

The Japanese, feeling threatened by Allied advances up the Huon Gulf region of New Guinea, attempted to reinforce their garrisons in the Markam Valley region with a 16 ship convoy from Rabaul. A USAAF B-24 Liberator sighted this convoy off the north coast of New Britain on 1 Mar '43. RAAF Catalinas shadowed the convoy continuously at night. The AAF was waiting for this convoy on 3 Mar in the Vitiaz Strait (fig 3). RAAF Bostons and Beafighters strafed and "skip-bombed" the convoy repeatedly for the next 3 days in support of USAAF B-25 and B-24 strikes on the convoy. RAAF Hudsons, Bostons and Beaufighters supported AAF bombing of enemy airfields in the Huon Gulf area to ensure AAF air superiority during the convoy strikes. This engagement was named the Battle of the Bismark Sea which MacArthur described as the "decisive battle" in the air war over New Guinea.

No. 9 Group, after the Bismark Sea battle, occupied the new airfields on Goodenough Island. The Group was assigned the task of disrupting enemy shipping on New Britain in preparation for the landing at Cape Gloucester (fig 3). RAAF Bostons and Beaufighters searched the coastlines, rivers, and beaches of New Britain destroying as many as 200 ships a month between Apr and Jul '43. The Kittyhawks, by carrying bombs, served dual roles on these missions. The RAAF's No. 9 Group would remain on Goodenough Island until Feb '44 when Rabaul had been "neutralized" and then by-passed.

Notes

¹ George Odgers, *Australia in the War of 1939-45, Volume 2, Air War against Japan, 1943-45.*, Australian War Memorial, 1962, 7.

² Douglas Gillison, *Australia in the war of 1939-45, Volume 1, Royal Australian Air Force 1939-42.*, Australian War Memorial, 1962, 617.

³ Richard L. Watson, *Air Action in the Papuan Campaign, AAF Historical Study # 17*, 21 Jun 1942-23 Jan 1943., USAF/HRA, 89.

⁴ *Allied Air Forces Southwest Pacific Area, Summary of Operations (Jan-Jul 1943).*, Allied Air Force Hqs, Jul 1943., USAF/HRA

Chapter 9

RAAF Command In The Northwestern Area

“Analysis of enemy intentions has shown an uncertainty in his mind as to just where the Allied offensive will begin and when. In order to assist the New Guinea offensive and to further increase the confusion in the enemy plans, you are directed to take measures to increase the show of force in the Northwestern area.”¹ This guidance from Gen Kenney to AVM Bostock essentially became RAAF Command’s mission statement.

Kenney’s guidance went on to emphasize the need to persistently bomb the main enemy airfields at Kendari on Celebes, Ambon, and Keopang in Timor. This would not only confuse the enemy as to the main Allied attack axis, but it provided protection to the Allied western flank, and also limited the enemy’s ability to supply airfields in northern New Guinea. RAAF Hudsons, Catalinas and Beaufort bombers, operating from the Darwin area, stepped up operations in early ‘43 on the Ambon and Timor airfields. “Bombing activity on these airfields reached 763 sorties for the six months up to Nov ‘43. Hudsons alone flew 298 of these missions losing 7 aircraft to enemy fighters in the Mar-May ‘43 timeframe.”²

After the initial attack on Darwin in Feb ‘42, the Australian Prime Minister John Curtin convinced Winston Churchill of the need for fighter defense in Northern Australia. In Dec ‘42, three squadrons of British Spitfires, manned by RAAF crews trained by

EATS in England, arrived at Darwin to provide air defense. Early warning radar had been installed at two sites in the Darwin area and the Australian Navy placed a ship on patrol between Timor and Darwin to supplement the warning net. Throughout the first six months of 1943, RAAF operational activity at Darwin was intense. The enemy conducted 50 raids on Darwin during this period, the Spitfires responding with 629 sorties. This potent air defense force at Darwin, coupled with the enemy's concern over the Allied offensive in New Guinea, led to a decrease in the number of enemy air raids on Darwin in late '43.

RAAF Catalinas, Beauforts and Hudsons from the Darwin area repeatedly bombed the airfields at Kendari and Keopang at night using flares to light the target area. This tactic was preferred since the Spitfires and Kittyhawks did not have the range for escort to these targets. The RAAF knew the enemy airfields on Timor were a constant threat to Darwin, but with its small bomber force, it would be Dec '43 before the RAAF achieved air superiority over Australia. This was due in part to the requirement for using RAAF bombers for constant reconnaissance of the Arafura Sea (fig 1) to protect shipping and provide early warning of enemy intentions at sea.

One of RAAF Command's most consuming tasks was maritime control through reconnaissance and strike. After a Japanese submarine sank the hospital ship *Centaur* in May '43 in the Coral Sea, 13 RAAF squadrons of Ansons, Wirraways, Beaufighters and Catalinas were engaged in persistent anti-submarine patrols. Patrols had to flown daily in search of enemy submarines in the Coral Sea and Torres Straits (fig 3) to protect merchant shipping taking supplies to the Allied forward areas such as Darwin and Port Moresby. Japanese flying boats continued to harass shipping in the Torres straits through 1943. The

RAAF rotated Beaufighters and Hudsons through bases on the Cape York (fig 3) peninsula to protect shipping. Air Commodore Cole, the RAAF commander at Darwin, stated in Aug '43: "Without additional squadrons, we did not have the ability to attack a wider variety of targets in the NEI until we were relieved of the reconnaissance duties."³

Notes

¹ General George C. Kenney, *Gen Kenney letter to RAAF Command Hqs*, 20 May 43, USAF/HRA

² Wing Commander B.C. Waddy, *History of the RAAF in the Pacific area input for the United States Strategic Bombing Survey*, USAF/HRA, 10 Dec 1945, 15

³ George Odgers, *Australia in the War of 1939-45, Volume 2, Air War against Japan, 1943-45.*, Australian War Memorial, 1962, 111.

Chapter 10

RAAF Rear Area Operations In The SWPA

RAAF operations in New Guinea split into two main efforts in Dec '43. No. 9 Group with 13 squadrons of Beaufighters, Bostons and Beaforts were supporting the Cape Gloucester landings from Goodenough Island (fig 3). The newly formed No.10 Group with three squadrons of Vultee Vengeances and three Kittyhawk squadrons were supporting the offensive at Markham Valley, New Guinea (fig 3). No.9 Group attacked enemy positions on New Britain in support of the Cape Gloucester landing “dropping 205 tons of bombs during the month before the landing on 26 Dec '43 compared to the 3,926 tons dropped by Fifth Air Force.”¹ Afterwards, No.9 Group established a garrison at Cape Gloucester to keep the remaining enemy forces at Rabaul in check as the Allied offensive continued into the Admiralties. This was the start of the Allied strategy to Australianize the rear areas and move U.S. forces to the forward areas.

RAAF No. 10 Group was established to replace the “mobile air task force” that No. 9 Group represented. No. 9 group’s aircraft were not suitable for rapid mobility on the northern New Guinea coast. No. 10 Group established operations on 13 Jan '44 and patrolled over the Markham Valley which, by this date, was in the rear area of operations. No. 10 Group attacked by-passed enemy aerodromes at Alexishaven and Madang in preparation for the Allied landing at Hollandia. Only after a few weeks, the group was

withdrawn by Gen Kenney. Fifth Air Force had received superior aircraft (P-38 Lightnings and P-47 Thunderbolts) and airfield space in the forward areas was limited. The withdrawal of No.10 to the rear area inflamed RAAF members who felt the Americans wanted all the glory to themselves while the RAAF “mopped-up” rear areas.

After the Hollandia landing in Apr ‘44, the New Guinea and Bismarck Archipelago areas were placed under the RAAF Command while the new Far East Air Force (Fifth and Thirteenth Air Force combined under Kenney) launched an offensive in the Philippines. No. 9 Group occupied Manus Island in the Admiralties to conduct “mop-up” operations on by-passed areas of northern New Guinea and to ensure that remaining enemy forces on New Britain remained isolated. RAAF Command also continued operations in the NEI in preparation for the upcoming operation in Borneo. The expanded RAAF Command area of responsibility is depicted at fig 4. The Australianization of the rear areas continued to create contempt within the RAAF. Air Commodore Lukis, commander of No. 9 Group, “strongly protested to Gen Kenney on the RAAF assignment to the Admiralties on the grounds that there would be little work for the fighters there since Rabaul and New Guinea were isolated and contact with the enemy unlikely.”²

In Aug ‘44, the RAAF realized one of its pre-war goals by acquiring heavy bombers. The RAAF started flying B-24 Liberators out of Darwin after training with the USAAF 380th Bomb Group. Their first offensive missions from Darwin was against the enemy aerodromes at Kendari and Menado in the Celebes, the same bases that the initial enemy air attacks on Darwin were mounted from. These were combined strikes with up to 25 B-24 aircraft per strike manned by RAAF and USAAF aircrews. The RAAF Liberators

continued in Oct '44 by targeting enemy shipping in the Celebes in support of the Leyte Gulf landings in the Philippines.

RAAF Command was delegated the final task in May '45 of neutralizing enemy defenses in the Balikpapan area of Borneo (fig 1) in preparation for the Allied landing. With RAAF B-24 bombers flying from Morotai Island and Spitfire escort flying from Tarakan Island (fig 1) on 1 July '45, over 50 tons of bombs were dropped on enemy defensive positions before a 200 ship amphibious force came ashore. After the invasion, the RAAF established three squadrons of Liberators and two Spitfire squadrons at Balikpapan to support the Australian Army's 7th Division during Borneo mop-up operations. This was the last significant RAAF operation during WWII.

"In as little as six years, the RAAF had come from a 3489 personnel, 12 squadron, 246 (mostly obsolete aircraft) force to a 173,622 personnel, 75 squadron, 5585 aircraft force with every type of aircraft from transport to fighters to heavy bombers."³ This experience in the SWPA during WWII has had a significant impact on today's RAAF.

Notes

¹ George Odgers, *Australia in the War of 1939-45, Volume 2, Air War against Japan, 1943-45.*, Australian War Memorial, 1962, 128.

² George Odgers, *The RAAF an illustrated history*, The Griffin Press, 1965, 190.

³ Alan Stephens, *Going Solo, the RAAF 1946-1971*, RAAF Air Power Studies Center, 1994, 10.

Chapter 11

Modern RAAF Doctrine and Force Structure

The RAAF's warfighting relationship with the USAAF during the war has had a lasting impact on the doctrine of today's RAAF. The RAAF adopted the USAAF's "Arnold Doctrine" after the war believing that its main tenets: 1. control of the air was the prime task of airpower, 2. that aircraft are inherently offensive, and 3. airpower must support ground forces; applied to Australia's airpower needs as well. Political debate questioned the applicability of Arnold's offensive doctrine to Australian airpower needs on the basis that it focused on global influence with nuclear-armed bombers. The RAAF had learned early in WWII that it could never expect to mount an offensive bombing force with the limited resources it possessed as a method for gaining control of the air. Nor did the Australian government ever seek to develop nuclear weapons. The framework for defensive doctrine had been set.

As learned from the defeat in the NEI, Australian air doctrine has to emphasize the defensive. Air Marshal Hardman, the RAAF's chief in 1954 stated: "The RAAF's most important task is to establish local air superiority with its fighter force over key areas, with the objective of holding a defensive line until reinforcements arrived."¹ The RAAF retained the key concepts of USAAF airpower doctrine, but concentrated on developing its use for defensive operations with regional, vice global focus.

Today's RAAF doctrine categorizes airpower employment into three "campaigns": 1. Control of the Air, 2. Air Bombardment, and 3. Air support of Combat forces. The three tier RAAF doctrine is depicted at fig 5. The campaigns are viewed as essential uses of airpower that must succeed. The RAAF calls the Control of the Air campaign: the "Prime Campaign" that is waged at the strategic level of war. "Current Australian strategic guidance endorses the need for Control of the Air as a defense priority."² The Prime Campaign emphasizes the need to balance defensive and offensive counter-air operations to be successful. This is clearly a lesson from the days in 1942 when the RAAF was on the receiving end of Japanese air superiority.

The Air Bombardment campaign is used to strike the enemy's national military interests and to provide credible deterrence. "The size of the RAAF bomber force is not critical, but must be credible. A purely defensive force would invite provocation which would not be considered if this retaliatory capability exists."³ The threat of this campaign provides political deterrent options, but if these options fail, it provides retaliatory force projection well beyond Australian shores.

The Air Support of Combat forces campaign complements forces in the air, sea, and land campaigns. This campaign covers a wide range of airpower roles that directly and indirectly support air and surface forces. Many of these roles, such as reconnaissance and air transport evolved during RAAF operations in the SWPA of WWII.

The "Air Operations and Roles" of today's RAAF are listed at figure 5. Notably, the counterair, airlift, reconnaissance, maritime strike, and combat air support operations were developed during WWII in the SWPA and now represent the areas the RAAF places the most emphasis on as shown by today's RAAF force structure at figure 6. Some modern

roles such as Strategic Transport and Airborne Warning and Control, the RAAF relies on the USAF to provide.

In 1954, the Australian Defense Minister, decided that Australia could not afford two air forces between the RAAF and RAN and decided to place the sole responsibility for maritime protection and strike with the RAAF as it had during WWII in the SWPA. This created a shift in military spending toward the RAAF that enabled the RAAF to build today's force structure . Because of limited monetary resources from a population of only 18 million, each aircraft purchased by the RAAF today were carefully chosen to serve in multiple "Air Operations" as depicted in figure 7.

Notes

¹ Alan Stephens, *RAAF Policy, Plans and Doctrine 1946-71*, 17 Feb 95, Air Power Studies Center, 19.

² *RAAF Air Power Manual AAP1000.*, Air Power Studies Center, 1990, 92.

³ *Ibid.*, 92

Chapter 12

Modern RAAF Strategy

In 1949, Air Marshal Jones, the RAAF COS, submitted a plan for the air defense of Australia. The Defense Minister and other service chiefs agreed that in the early stages in any war, an attack on Australia would come from the north. Defending the air approaches to Northern Australia over the Arafura Sea, or the “air-sea gap,” has become the cornerstone of today’s RAAF strategy. It clearly comes from the experience during 1942 when Japanese air and sea control of this area resulted in attacks on the Australian mainland.

The RAAF plans to face low-level conflict only due to the isolation of the Australian continent and the present regional military capabilities. The RAAF employs a five element strategy for the defense of Australia called “Defense in Depth.” Defense in Depth is envisaged as a layered, but seamless defense of the air-sea gap in the north. The first layer consists of intelligence collection and warning of threats. The second layer comprises surveillance assets covering the northern area. The third is denial operations in the air-sea gap. Fourth is the employment of mobile land and sea forces supported by air forces to deny enemy lodgments on Australian soil, and to protect civilian centers. The final defensive layer is offensive operations against the enemy. The type of “Air Operations” the RAAF employs during each layer in this strategy are listed in figure 7. The first two

layers are critical if Australia's small military force is to successfully defend a huge land mass against numerically superior enemy forces. Enemy forces must be detected, located, and targeted with decisive force to deny an enemy lodgment on Australian soil.

Post-WWII planning started with the assumption that "the worst may happen." The obvious example being the fall of Singapore and the loss of command in the sea and air that followed. The failure of the British Empire to come to Australia's defense during WWII contributed to Australia's policy of defense through self-reliance. In contrast to the early WWII RAAF force structure and strategy disconnect, the RAAF's force structure is now capable of executing the Australian defense strategy as stated, a testament to the lessons learned in 1942. "Self-reliance does not mean self-sufficiency. Australia does not possess the capability to produce high technology aircraft and weapons. RAAF force structure (fig 6) reflects the benefits of its alliance with the United States, but the RAAF realizes there may be situations in the region where traditional allies may be unwilling to assist Australia."¹

Several political alliances were formed after WWII that effect RAAF operations today. The Australia, New Zealand, and United States pact (ANZUS), signed in Sep '51, secured a commitment from the U.S. to defend against large-scale aggression in the region. ANZUS also formally aligned Australian defense planning and acquisition to the U.S. The RAAF supports the ANZUS related Radford-Collins Agreement where Australia contributes to the protection and control of U.S. shipping in the Pacific and Indian Ocean areas.

The Five Power Defense Arrangement brought together Britain, Australia, New Zealand, Singapore, and Malaysia to provide for the security of Malaysia and Singapore.

The key element in this arrangement has been an integrated air defense system, in which the RAAF has played a prominent role. The Joint Declaration of Principles has formalized a system to provide defense co-operation with Papua New Guinea in times of regional crisis. All of these alliances effect the strategy of modern RAAF employment and are direct results of the events and lessons learned during WWII in the SWPA.

Notes

¹ Alan Stephens, *Power plus Attitude: ideas, strategy, and doctrine in the RAAF*, RAAF Air Power Studies Center, 1991, 9.

Chapter 13

Conclusion

More than any other event, the British Empire's defeat at Singapore motivated the RAAF to develop a self-reliant force to defend Australia. The belief that Britain would provide defensive support during a crisis overshadowed any RAAF attempt to develop this force before WWII. Before the war, the RAAF purchased any affordable aircraft to build its inventory without thought to mission requirements defined by the threat, thus the impotent RAAF defense of the NEI and Northern Australia. The adoption of western strategic bombing theory by the RAAF, as the method for 'controlling the air' during WWII, failed mainly due to contextual factors unique to Australia.

Since the end of WWII, RAAF policy has adopted a self-reliant defense strategy. The lessons from RAAF experience in the SWPA have formed the doctrinal base of "Air Campaigns, Operations and Roles" to build a force to execute this defensive strategy. During the air battles over Malaya and the NEI, the RAAF realized it must employ defensive and offensive counterair operations during the "Prime Campaign" to gain control of the air. The RAAF also realized that the constraints of Australia's geography and resources have to be considered in building air strategy and force structure.

The modern five- layered 'Defense in Depth' strategy for the defense of Australia is heavily dependent on the airpower roles of counterair, reconnaissance, and air transport,

roles in which the RAAF made the most contributions to the Allied air effort in the SWPA. The RAAF has succeeded in using this “doctrine of experience” in building a multi-roled Air Force that will meet any regional threat to Australia.

Appendix A

Pre-WWII Force Development

In implementing the Salmond plan in 1932, the RAAF began an economically constrained acquisition program with the purchase of Hawker Demon, Bristol Bulldogs, and Westland Wapiti aircraft for attack and defense, and Avro Anson bombers for direct attack. In 1936 a group of Australian industrial companies joined to form the Commonwealth Aircraft Corporation. Their first venture was a modified version of the North American NA33 fighter. The RAAF renamed this aircraft the Wirraway, an aboriginal word for challenge, and over 200 were delivered by the end of 1940. Expansion of the RAAF with any affordable aircraft was the thinking, rather than identifying aircraft mission requirements to execute an air strategy that didn't exist. This is why the RAAF entered WWII with an obsolete force incapable of meeting the Japanese air threat.

Despite the Salmond plan effort, in early 1939, "the RAAF force structure only consisted of 12 squadrons of mostly obsolescent machines with 82 Anson bombers, 54 Demons, seven Wirraways, 21 Seagulls and 82 trainers."¹ The Chiefs of Staff had feared that in the event of simultaneous wars in Europe and Asia, Britain would not be able to keep its pledge for the defense of Australia and that adequate numbers of front line warplanes would not be available from the traditional source. For the first time in RAAF

history it was decided to look to the United States for support and to purchase 50 Lockheed Hudsons for general reconnaissance and bombing.

After the Australian Defense Committee decision to further expand the RAAF in April 1940, the RAAF submitted a plan for a 32-squadron home defense force with aircraft purchased mostly from the U.S. 146 Lockheed Hudsons for general reconnaissance and bombing, 243 general purpose bombers consisting of the Bristol Beaufort, the Brewster Buffalo and the Boston (British name for the American A-20), 27 Catalina flying boats for Fleet cooperation, and 54 American P-40 Kittyhawk fighters. At the outbreak of WWII in Dec 1941, the RAAF possessed about half the numbers for each type aircraft and squadrons in this plan.

The Australian Government continued the aggressive bid to acquire aircraft from Great Britain after the war started. Britain had placed priority on all aircraft production to go to units in the European theater. It wasn't until the Australian Prime Minister's trip to London in early '42, when a promise to provide 60 British Spitfires was secured. The Spitfires arrived in late '42 to supplement the growing air defense force at Darwin. Australian companies also started producing the British Bristol Beaufighter and Beaufort torpedo bomber, but did not produce significant numbers prior to late '43.

The RAAF in early '44 acquired B-24 Liberators and B-25 Mitchell bombers from the U.S. and additional P-40 Kittyhawk fighters. The RAAF acquired the P-51 Mustang shortly before the war ended in '45 and used them to provide a significant portion of the Allied occupation force in Japan after the war. The equipment provided to the RAAF from the U.S. set the stage for the modern RAAF reliance on acquiring U.S. manufactured aircraft.

Appendix B

Command Relationships

General Douglas MacArthur arrived in Australia after his evacuation from the Philippines. On 18 April '42 he was appointed the Supreme Commander of Allied Forces in the SWPA. This placed all Australian Forces under his command. The RAAF and USAAF up to this time had been functioning as the Allied Air Forces (AAF) commanded by Lt. General George Brett, USAAF with Air Vice Marshal (AVM) Bostock, RAAF, as his chief of staff. This closely integrated organization did not change initially, but a debate had started on how the RAAF should be organized under American Operational Control (OPCON).

Because of the integrated nature of the staffs, Americans had effectively been under the control of the RAAF. "Contrary to War Department policy that states foreign officers are prohibited from commanding U.S. units, the situation was brought about by two factors: 1. RAAF officers being in positions of control at air facilities utilized by USAAF units, and 2. the inability of the War Department to furnish enough USAAF officers of suitable rank and experience to the Australian theater."² This forced USAAF officers into subordinate positions in the AAF structure. Gen. Brett's failure to "gain control of air operations" in the SWPA led to his dismissal.

Major General George Kenney was designated Commander of the AAF in Aug. '42. One of his first actions was the rejection of a fully integrated AAF. Gen Kenney: "I decided to separate the Americans and the Australians and form the Americans into a numbered air force that I would command in addition to the AAF. The Australians would be organized into a command of their own and I'd put AVM Bostock in charge of it."³ Gen Kenney, with MacArthur's support, took this action unilaterally, notifying the RAAF Chief of Staff (COS), AVM G. Jones, instead of consulting with him first. Kenney stated "the Americans were operating under considerable disability because of the combined staffs which caused confusion and undermined confidence."⁴

OPCON of RAAF forces gave Kenney the authority to organize RAAF combat forces, but his authority to name Bostock as commander of the RAAF organization was questionable, and both areas were sources of controversy. Kenney separated the AAF into the Fifth Air Force and RAAF Command. A power struggle between AVM Bostock, Commander RAAF Command, and AVM Jones, RAAF COS, started as a result of Kenney's actions. This struggle would have a continuing impact on RAAF operations in the SWPA, and ironically, a positive impact on today's RAAF organization.

Early in 1942, AVM G. Jones was named as the RAAF COS. AVM Bostock was the senior RAAF officer at the time, but was not in good standing with the Air Board and Minister of Defense. AVM Jones was serving as a Group Captain (O-6) and was promoted 3 ranks ahead of Bostock and several other more senior RAAF officers. Jones was the more senior now since he was the COS, but he and Bostock held the same rank. This, coupled with MacArthur's and Kenney's full endorsement of Bostock to head RAAF Command, led to a bitter power struggle for control of the RAAF. Both Jones and

Bostock insisted they should have full control over both operational and administrative functions of the RAAF. This unfortunate struggle continued throughout the war. The Minister of Defense commented in 1944: “Bostock and Jones were so preoccupied with their personal struggle that they had no time to develop a strategic doctrine for the RAAF in the SWPA.”⁵

Gen Kenney, with OPCON over the RAAF, said: “except for the feud over control of the RAAF, which was a nuisance, I liked the situation as it was. I considered Bostock the better field commander and preferred Jones as the RAAF administrative and supply lead.”⁶ Kenney got his way because MacArthur supported him and the Australian Prime Minister supported MacArthur.

Immediately after the war ended, Bostock was dismissed and the RAAF Command abolished. Jones remained COS until 1952. An example of the bitterness toward the command arrangements of the RAAF in the SWPA was made after the war by AVM Jones: “MacArthur side-stepped Australia out of the final victory over Japan wanting all the glory himself. In my opinion, the RAAF could have handled the air war on its own.”⁷³⁶

The RAAF has went through several organization changes since WWII, but in 1985 adopted an organization similar to the one in the SWPA during WWII. Air Commander Australia now has OPCON of all RAAF combat forces in an organization called Air Command. He is responsible to the Chief of the Australian Defense Force for planning and conducting air operations. The Air Commander remains subordinate to the RAAF COS for training, but the COS is now responsible to the Air Commander for administrative and logistic support of forces. “This clear division of operational and administrative functions

reflect RAAF organization during WWII. The change is intended to better facilitate joint operations, and to divest the commander of peripheral tasks and allow them to concentrate on the practical aspects of employing airpower.”⁸

Notes

¹ Alan Stephens, *Power plus Attitude: ideas, strategy, and doctrine in the RAAF*, RAAF Air Power Studies Center, 1991, 72.

² James D. Rorrison, *Nor the Years Contemn: Air War on the Australian Front 1941-42*, Palomar Publications, 1992, 326.

³ General George C. Kenney, *General Kenney Reports*, Office of Air Force History, USAF, 1987, 53.

⁴ Alan Stephens, *Power plus Attitude: ideas, strategy, and doctrine in the RAAF*, RAAF Air Power Studies Center, 1991, 62.

⁵ Ibid., 65

⁶ General George C. Kenney, *General Kenney Reports*, Office of Air Force History, USAF, 1987, 88.

⁷ Alan Stephens, *Power plus Attitude: ideas, strategy, and doctrine in the RAAF*, RAAF Air Power Studies Center, 1991, 57.

⁸ Ibid., 179

Glossary

AAF	Allied Air Force
AIF	Australian Imperial Force
AOB	Advanced Operating Base
AVM	Air Vice Marshal
COS	Chief of Staff
EATS	Empire Air Training Scheme
NEI	Netherlands East Indies
OPCON	Operational Control
RAAF	Royal Australian Air Force
RAF	Royal Air Force
RAN	Royal Australian Navy
SWPA	SouthWest Pacific Area
USAF	United States Air Force
USAAF	United States Army Air Force
WWI	World War One
WWII	World War Two

Bibliography

- Air Power Manual AAP1000*. Royal Australian Air Force Air Power Studies Center, 1990
- Allied Air Forces Southwest Pacific Area, Summary of Operations*, Jan - Jul 1943., Allied Air Force Headquarters, Jul 1943, USAF/HRA, Doc # 706.3083.
- Birrer, Wing Commander Kenneth N., RAAF. *Key Role of Airpower in the Defense of Australia*, United States Air War College paper, 1993.
- Criss, P.J., and D.J. Schubert. *The Leading Edge: Air Power in Australia's Unique Environment*. Australian National University, 1990.
- Gillison, Douglas. *Australia in the war of 1939-1945*. Series 3 (Air), Australian War Memorial, Canberra, Australia, 1962. Volume 1.
- Historical Data on the Fifth Air Force Operations.*, AC/AS Intelligence Division, 27 Mar 1944, USAF/HRA, Doc # 730.8069.
- Kenney, General George C. *General Kenney Reports*. Office of Air Force History, USAF, Washington D.C., reprinted 1987.
- Odgers, George. *Royal Australian Air Force 1939-1942, Air War against Japan*. Series 3 (Air), Australian War Memorial, Canberra, Australia, 1962. Volume 2.
- Odgers, George. *The Royal Australian Air Force an illustrated history*. The Griffin Press, Adelaide, Australia, 1965.
- Rorrison, James D. *Nor the years Contemn: Air War on the Australian front 1941-1942*. Brisbane, Australia, 1992.
- Stephens, Alan. *Going Solo, the RAAF 1946 - 1971*. Royal Australian Air Force Air Power Studies Center, Canberra, Australia, 1994.
- Stephens, Alan. *Power Plus Attitude: ideas, strategy, and doctrine in the RAAF 1921 - 1991*. Royal Australian Air Force Air Power Studies Center, Canberra, Australia, 1991.
- Stephens, Alan. *RAAF Policy, Plans, and Doctrine 1946-197*. Royal Australian Air Force Air Power Studies Center paper # 29, Canberra, Australia, Feb 1995.
- Waddy, Wing Commander B.C. *History of the RAAF in the Pacific Area input for the United States Strategic Bombing Survey*, 10 Dec 1945. USAF/HRA.
- Watson, Richard L. *Air Action in the Papuan Campaign*. AAF Historical Studies #17, 21 Jun 1942 - 23 Jan 1943, USAF/HRA 101-17.

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