By Webmaster

The FAAAA is honoured to be able to publish the following Thesis by Dr. Sharron Spargo, who prepared it as part of her Degree of Doctory of Philosophy in 2016. She advises me that the work is currently being rewritten in preparation for publication as a history of the Fleet Air Arm, in its own right.

Any readers who have served in the RAN Fleet Air Arm will relate to this work: it traces the evolution of the FAA from the very early days though to the present, and in doing so delves into detail of the truly memorable post WWII parts of our history: the Korean Conflict and Vietnam in particular. But it is not a dry history, as some are. It contains the names and thoughts of many names that we recognise: ship and squadron mates who served with us, and whose insights into circumstances and events are of themselves great interest.

I commend it to you as a body of work that serves to capture, from a fresh perspective, the life and times of this the very best Arm of the Royal Australian Navy.

Our grateful thanks go to Dr Spargo for allowing this work to be published on our website.

Marcus Peake
Webmaster 10Jun17

We Envy No Man On Earth Because We Fly.

The Australian Fleet Air Arm:
A Comparative Operational Study.

This thesis is presented for the
Degree of Doctor of Philosophy
Murdoch University
2016

Sharron Lee Spargo
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I declare that this thesis is my own account of my research and contains as its main content work which has not previously been submitted for a degree at any tertiary education institution.

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Abstract

This thesis examines a small component of the Australian Navy, the Fleet Air Arm. Naval aviators have been contributing to Australian military history since 1914 but they remain relatively unheard of in the wider community and in some instances, in Australian military circles. Aviation within the maritime environment was, and remains, a versatile weapon in any modern navy but the struggle to initiate an aviation branch within the Royal Australian Navy was a protracted one.

Finally coming into existence in 1947, the Australian Fleet Air Arm operated from the largest of all naval vessels in the post battle ship era; aircraft carriers. HMAS *Albatross*, *Sydney, Vengeance* and *Melbourne* carried, operated and fully maintained various fixed-wing aircraft and the naval personnel needed for operational deployments until 1982. These deployments included contributions to national and multinational combat, peacekeeping and humanitarian operations.

With the Australian government's decision not to replace the last of the aging aircraft carriers, HMAS *Melbourne,* in 1982, the survival of the Australian Fleet Air Arm, and its highly trained personnel, was in grave doubt. This was a major turning point for Australian Naval Aviation; these versatile flyers and the maintenance and technical crews who supported them retrained on rotary aircraft, or helicopters, and adapted to flight operations utilising small compact ships.

Oral testimony of those men who served aboard Australia's aircraft carriers, and those who have served on small helicopter-capable ships, allows for a comparison of operational modes and an assessment of the value of the Australian Fleet Air Arm. Employing these two operational modes the Australian Fleet Air Arm have made small but valuable contributions to various world conflicts, peacekeeping and humanitarian operations.

With little recognition or appreciation the Australian Fleet Air Arm continue to be deployed in national and multinational global security operations in which they play a vital role within Australian military operations.

Acknowledgements

First and foremost I would like to thank each of the members of the Australian Fleet Air Arm, the Birdies, who are listed below. They have always been graciously accepting of my invasiveness and unstinting in sharing their precious memories of their unique and unforgettable service. Always encouraging, their generosity of time and spirit have made this study possible and I remain forever indebted.

A special thank you to the wives and partners of the Birdies who have very generously welcomed me into their fold and offered me their friendships. I have thoroughly enjoyed all the social occasions we have shared and eagerly look forward to those to come.

To my university family whose love, support and encouragement have kept me moving forward, I offer my sincere and heartfelt thanks. To Ann, Helen and Jane I owe much more than I can say.

My sincere thanks to my supervisor, Professor Michael Durey for his patience, support and reassurance during this amazing journey. His experience, knowledge and advice have played a major role in my timely completion. Thanks also go to Professor Michael Sturma for his input.

Glossary of Terms

AFAAA	Australian Fleet Air Arm Association
AHC	Assault Helicopter Company
ANZAM	Australia New Zealand and Malaya
ANZUS	Australia New Zealand United States
ARVN	Army of the Republic of Vietnam
ASW	Anti Submarine Warfare
AVGAS	Aviation Gasoline (Petrol)
BEM	British Empire Medal
CAG	Carrier Air Group
CAP	Combat Air Patrol
CB	Companion of the Order of the Bath
CBE	Companion of the Order of the British Empire
C&C	Command and Control
CNS	Chief of Naval Staff
COMAFV	Commander of Australian Forces Vietnam
DFC	Distinguished Flying Cross
DFDC	Defence Force Development Committee
DFM	Distinguished Flying Medal
DMZ	De-Militarised Zone
DPRK	Democratic People's Republic of Korea
DSC	Distinguished Service Cross
DSO	Distinguished Service Order
DSM	Distinguished Service Medal
EMU	Experimental Military Unit
FAA	Fleet Air Arm
FESR	Far East Strategic Reserve
HMAS	His/Her Majesty's Australian Ship
JINDIVIK	Remote Piloted Aerial Vehicle
KALKARA FLIGHT	Remote Piloted Aerial Vehicle
KILLICK	Leading Seaman
LADS	Laser Airborne Depth Sounder
MBE	Member of the Order of the British Empire
MEDIVAC	Medical Evacuation
MK46	Air launched missile torpedo
MFO	Multinational Force of Observers
MVO	Member of the Royal Victorian Order
NAMAE	Mechanic Airframes and Engines
M16	Colt Rifle used by United States Military Forces
M60	Heavy Machine Gun used by United States Military Forces
NATO	North Atlantic Treaty Organisation
NKPA	North Korean People's Arm
NULKA	Defensive missile decoy
OBE	Order of the British Empire
OIC	Officer in Charge
PR	Public Relations

PTSD	Post Traumatic Stress Disorder
RAAF	Royal Australian Air Force
RAF	Royal Air Force
RAN	Royal Australian Navy
RANHFV	Royal Australian Navy Helicopter Flight Vietnam
RAR	Royal Australian Regiment
R&R	Rest and Recreation
RN	Royal Navy
ROK	Republic Of Korea
RPG	Rocket Propelled Grenade
RVN	Democratic Republic Of Vietnam
SAR	Search and Rescue
SEATO	South East Asian Treaty Alliance
SLR	Self Loading Rifle used by Australian Forces
STOVL	Short Take-Off and Vertical Landing
2IC	Second in Charge
UN	United Nations
USN	United States Navy
VC	Viet Cong

Contents

1. Introduction:

> The end of the FAA? Well I can remember it quite clearly because we were tied up in Auckland harbour, it was most devastating for us all and that's probably when I decided that I was going to get out and join an airline. There didn't appear to be much future in the Fleet Air Arm although subsequently they did have a good future but at that particular time it was all doom and gloom.[1]

In the 1950's my father, Theo Bushe-Jones, joined the Royal Australian Navy and volunteered to become a member of the newly established Australian Fleet Air Arm (FAA). As there were vacancies for armourers in this small aviation branch he underwent a specialised training program before joining a Squadron, after which he was posted to His Majesty's Australian Ship, *Sydney*, an aircraft carrier.

As a Korean War veteran my father's service in the FAA has remained a defining one and in 1975 he, and several other retired Western Australian members, instigated the formation of the Fleet Air Arm Association of Australia and he currently occupies the position of Welfare Officer for Western Australia. As a consequence of his lifelong commitment to the aims of the organisation, one of which is to 'foster the preservation of the history of Aviation in the RAN', the FAA was proposed as the focus of this thesis.

As an associate member of the Fleet Air Arm Association I have access to retired and serving members throughout the organisation; either through my father's contemporaries, by direct contact, or through the Association's quarterly journal, Slipstream, which is available to all financial members. This journal has been in constant publication since 1957 and invites veterans to share memories of their service, their deployments, Squadrons' histories and technical information on the various aircraft and ships which have operated in the FAA. This publication is the source of many reminiscences of camaraderie and mateship that are qualities which continue to underpin this branch of the navy.

The existence of an aviation component in the Australian Navy remains largely unknown in the wider community and in some instances, the military fraternity. From the introduction of flight capability in the Australian Navy, FAA operated purpose-built ships whose modified decks became floating airfields. Specially

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[1]   Brian Poole, transcript of recorded interview, (8 July 2008), p. 7.

modified aircraft were launched from these ships with the aid of a shuttle which is built into the flight deck and attached to the nose of the aircraft to be launched. Initially the propulsion to drive the shuttle was supplied by hydraulic fluid but advances in technology allowed high pressure steam, generated by the ship's operation, to be utilised in launching aircraft in the most modern aircraft carriers. On their return to the ship the aircraft were retrieved using steel cables which 'catch' the aircraft and arrest its flight. These purpose-built aircraft carriers operated fixed-wing aircraft of various types in maritime operations until 1982. At this time the Australian government chose not to replace the last of the ageing aircraft carriers, a decision that rocked the FAA to its foundations. This upheaval caused naval aviation to modify its mode of operation; from large aircraft carriers operating fixed-wing aircraft to smaller ships utilising rotary-wing aircraft or helicopters. The consequences of this modification were not limited to the types of aircraft to be flown in the post aircraft carrier era; I would argue that the loss of Australia's last capital ship, aircraft carrier Melbourne, caused a loss of confidence and damaged morale within naval aviation. The decommissioning of the largest and most recognisable ship in the Australian fleet in 1982, followed by the Labor government's decision of 1983 to dispense with the fixed-wing capacity within the FAA, substantially reduced their previously limited visibility.

As a consequence of this major shift in operational mode, did the FAA also lose their defensive capability? That question is addressed in this thesis and I will demonstrate that this major operational shift was in response to changing ideological, political and economic factors, the combination of which culminated in diversification rather than a loss of its defensive capabilities. The FAA still operates as a defender of Australian sovereignty, but has also diversified into areas such as global security, global terrorism, multi-national peacekeeping forces, anti-piracy and search and rescue.

Evidence of this diversification can be seen in today's FAA which continues to serve as the aviation component of the navy. A Fleet Air Arm is an integral part of any modern navy's weapons system and although the FAA is a numerically small branch of the Australian Navy, it remains an extremely effective weapon in the maritime arsenal, together with its multi-national obligations. In the post-World War II era the success of naval aviation in both the European and Pacific theatres was the catalyst for Australia implementing naval aviation component. The addition of aviation in the maritime milieu greatly extended the geographical reach of naval

assets and projected an image of military power and capability throughout the Asian region. In doing so, Australia's defensive capacity was increased exponentially, thus reducing reliance on British naval intervention. While the FAA was a significantly smaller service in relation to the British or American models, as it remains today, the commitment in resources and manpower was substantial. HMAS *Melbourne* was the largest and most modern of the Australian aircraft carriers and her crew numbered 1335, of which 347 were members of the FAA. In juxtaposition, the Australian Navy operated six helicopter capable Guided Missile Frigates from 1980, each crewed by 210 naval personnel, with approximately 16 being members of the air arm.[2] We can see by these figures that manning Australia's aircraft carriers was a mammoth task; I would argue that the post-war periods of the 1920s and 1940s were unique opportunities in terms of Fleet Air Arm enlistment quotas as further enlistment offered returned service personnel financial security and additional career opportunities.

Servicemen from the Australian, British or New Zealand services joined the fledgling air arm in the late 1940s for just those reasons and they were joined by young Australian working men and inexperienced high school graduates. Public enlistment campaigns highlighted the unique excitement offered by naval aviation; the opportunity of overseas travel; expert training and job security; a life of adventure; or just an escape from the mundane. The recruitment drive had as its aim the enlistment of approximately 4000 men to the Fleet Air Arm, all of whom would require specialist training. Australia's inability to train the new enlistees was seen by naval aviation detractors as insurmountable and without the intervention of the Royal Navy it might well have proved so. Having established a Fleet Air Arm in the Royal Navy (RN) in 1937, the British prototype was the basis for the Australian model and therefore the British training system offered the ideal model. In some instances, pilots and aircraft handlers for example, underwent training at military establishments in Australia, but many of the personnel of the technical branches such as aircraft mechanics or aircraft electricians learned their trades in Britain under the auspices of the British Fleet Air Arm. On completion of training air crews were deployed to the Australian aircraft carrier HMAS *Sydney* which was commissioned in 1948.[3] The same year saw the establishment of the Australian Naval Air Station (ANAS), HMAS *Albatross,* which remains the home base of the

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[2]   Commonwealth of Australia, (2013), *Royal Australian Navy,* http://www.navy.gov.au/fleet/ships-boats-craft [accessed 25/04/2015].

[3]   Ross Gillett, *Wings across the sea* (Sydney: Aerospace Publications, 1988), p. 64.

FAA. In 1953 the RAN commissioned HMAS *Nirimba* at Scholfields in New South Wales. This previously titled RAN Air Repair Yard became the Royal Australian Navy Apprentice Training Establishment (RANATE) in 1955. During the following 39 years 13,000 men and women of the RAN and various Commonwealth navies completed their technical training at this facility which was decommissioned in 1994.

As an essential component in Australian maritime operations, the FAA deploy far from land in defence of Australian sovereignty, values and interests. The RAN are charged with projecting Australia's maritime power by territorial control and deniability as part of constabulary, diplomatic and military roles in the maritime sphere. The addition of an aviation component or Fleet Air Arm in the relatively small RAN greatly extends their ability to fulfill the tenets of Australian maritime doctrine. This thesis evaluates the role of the Australian Fleet Air Arm within that doctrine by contrasting the operational value between the aircraft carrier age and the rise of a small ship force operating helicopters. The 'value' of an aviation component in a maritime force lies in the addition of a quick response capability within a wholly flexible and self-sustaining element to Australian Defence Force operations. Naval aviation, irrespective of its mode of operation, is essential to fulfill the values of Australian Maritime Doctrine. This technologically equal aviation capability allows the numerically smaller RAN to make a significant contribution to multinational forces. Be it combating global terrorism and piracy, embarkation for humanitarian or peacekeeping roles or border protection and security in either an offensive or defensive posture, the FAA brings a unique flexibility to all RAN operations.

Within the naval aviation paradigm the FAA is responsible for the protection of the naval fleet from above, on or below the sea, intelligence gathering and the reconnoitering of enemy positions. While fulfilling their role within maritime doctrine the FAA remains largely operationally independent and self sustaining. The FAA fly aircraft from the decks of surface ships and unlike the Royal Australian Air Force their operations are not dependent on land bases but solely on the naval craft from which they operate. Aircraft carriers of the fixed-wing aircraft era provided a landing strip, albeit a small one, hangars, workshops, fuel and armaments and housed the men who flew and maintained the aircraft. In the modern Australian Navy the men and women of the FAA deploy on a variety of multifunctional ships which are helicopter capable. *Anzac* and *Adelaide* class guided missile frigates operate

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Seahawk helicopters in submarine and surface warfare modes and are search and rescue capable.[4] The acquisition of two Landing Platforms in 1994 greatly extended the FAA's ability to transport Australian Army personnel and equipment while maintaining their aviation capacity. These ships operate the large Army Blackhawk helicopters as well as the substantial Sea King helicopters deployed by the navy.[5] The latest in helicopter-capable multifunctional ships is the Landing Helicopter Dock, two of which have been built for the Australian Navy. These assault ships are the largest ships to be commissioned into the Australian Navy and as such offer a greater level of support in the roles of aviation, transport and amphibious assault, with the added capacity to operate in a command role.[6] Commissioned as *Canberra* and *Adelaide* these two ships will operate the newest FAA aircraft, the sophisticated Seahawk Romeo helicopter. This United States (US) built machine is considered to be the most multifunctional helicopter available in the global maritime environment. The Australian Navy is the first foreign navy to purchase what is the United States Navy's (USN) ultimate maritime helicopter, with 24 machines ordered from Lockheed.[7] With the acquisition of the latest technology in aircraft capable ships and aviation assets, this often contentious branch of the Australian Navy can continue to quietly serve Australian maritime interests.

While I acknowledge that naval aviators participated in the air operations above the beaches of Gallipoli in World War I and in combat operations during World War II, they were not deployed as members of the Fleet Air Arm. For this reason this thesis will predominantly focus on the specific developments that preceded a dedicated Fleet Air Arm being established in 1948 until the demise of the aircraft carrier in 1982.

When examining how the FAA was established, how the personnel were recruited, the various training regimes and the mechanics and operations of this unique form of aviation, I invited veterans and serving members to share their experiences and memories. I feel that in using the voices of Australia's naval aviation personnel this thesis is an authentic representation of the FAA and helps to establish its

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4   *100 Years of the Royal Australian Navy,* ed. by Charles Oldham (Bondi Junction, NSW: Fairmount Media, 2011), pp. 106-107.
5   Oldham, p. 108.
6   'Canberra Class LHD', *HMAS Canberra ,* www.hmascanberra.com/history/nushipcanberra.html. [accessed 7 May 2015].
7   Ben Knight, 'Royal Australian Navy takes delivery of new Seahawk 'Romeo' helicopters'*, ABC News,* http://www.abc.net.au/news/2014-01-25/royal-australian-navy-in-jacksonville-to-fly-seahawk-helicopters/5218816 [accessed 24 September 2015].

contribution to Australian military history. Some of the secondary texts consulted in this study have also used oral testimony to great effect but in this instance I have asked contributors to share their stories on a more ad hoc and less structured basis. In the interviewing process I did not ask a pre-determined set of questions apart from the formalities of ages and dates of joining or separating from the navy. I invited interviewees to tell me their stories of life in the FAA from their own perspective; how they saw events then and how they see them now. In some instances the interviewee talked for many hours about various aspects of their service lives while for others the contribution was much more focused on particular events. In asking veterans to recall their past service I found their memories were often disjointed and did not always follow chronologically. There were certain events that featured prominently in their memories and recollections because these events had had a profound effect on their lives and therefore often became the focus of the interview.

The FAA have made a valid contribution to Australian military history with service in all conflicts in which members of the Royal Australian Navy (RAN) have participated, beginning with the Korean War. Australian Naval Aviation involvement in the Korean War centred on the aircraft carrier HMAS *Sydney* which served under United Nations sanction. While *Sydney* and her aircrew, members of 805, 808 and 817 Squadrons, met all operational requirements during her deployments the ship avoided any direct enemy contact. Her aircrews were tasked with disrupting enemy supply routes and destroying naval vessels, along with land-based strategic targets. HMAS *Sydney* served in support of the United Nations blockade and the supply and support of all allied ground forces, including rescue of compromised troops or downed airmen. During this combat deployment *Sydney* lost three of her senior pilots and one aircrew member sustained an injury. The passage of time has depleted the ranks of all Korean veterans and the FAA is no exception. Therefore the Korean chapter of this thesis relied heavily on secondary texts, as apart from my father and two of his contemporaries who contributed, ill health and fragility limited the availability of contributors. The three veterans who were able to participate either by being interviewed, as was the case with my father, by accessing previous oral testimony in the case of Norman Lee or the submission of a completed questionnaire from Noel Knappstein, recall very different aspects of the conflict. Lee piloted a Firefly aircraft and Knappstein was a Sea Fury pilot, (both of which operate with a two man crew; pilot and observer) fighter aircraft, and Theo Bushe-Jones was an armourer. The two pilots' reminiscences centre on their flight

operations which took place over enemy territory and the emotions these actions raised. For Bushe-Jones, whose service was wholly focused on keeping the aircraft armed, recollections of life aboard *Sydney* resonate further. The incident which is recalled in the most vivid detail by Bushe-Jones is the onslaught of Typhoon Ruth in 1951. The night of October 14-15 has been described as a 'night of terror' by *Sydney's* canteen manager, Alan Zammit,[8] and was the culmination of the appalling weather conditions endured by the FAA during Korean operations according to Shipwright, Lieutenant Vince Fazio, serving on HMAS *Condamine.*[9] Serving aboard *Sydney,* Petty Officer Andrew Nation explains in more detail why the typhoon was so terrifying for all those aboard:

> All the mess decks were flooded. We had 8 inches of water sloshing to and fro on our deck, suitcases, hats, socks, boots all floating around together. … The ship was rolling and pitching all over the shop. … One plane went over the side and three others were hanging in the gun sponsons; two motorboats, the "skimmer", one forklift and a "Clarket" [tractor] all went over the side. Two chaps had legs broken through getting hurled to the deck. It sure was a boomer.[10]

As the above quotation clearly demonstrates, eyewitness testimony adds a realistic dimension to any historic event; the sea's fury as it caused the aircraft carrier to roll and pitch from side to side, to bury itself in the monstrous waves; the discomfort of flooded mess decks are easily imagined. Typhoon Ruth features strongly in many veterans' memories of their deployment to the Korean theatre and there is little doubt that this was a unique situation that heightened emotions and awareness.

In juxtaposition the FAA contribution to the Vietnam War was totally land based. As requested by the American government, naval aviation personnel deployed to Vietnam in October 1967 and until June 1971 were integrated into the United States Army 135th Assault Helicopter Company.[11] From various United States bases in South Vietnam the Australian Naval contingents operated helicopters, not fixed-wing aircraft, in support of American and South Vietnamese forces. The role

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[8] Alan Zammit, 'HMAS Sydney', in Korea Remembered: being the recollections and reminiscences of some of the seventeen thousand Australian military personnel (Army 10,500 – Royal Australian Navy & Royal Australian Air Force 6,500) who served in the Korea War of 1950-1953, ed. by Frederick Kirkland and MB Pears, (Isle of Capri, QLD: Wancliff Pty Ltd, 1996), p. 9.

[9] Vince Fazio, cited in 'War At Sea: The Royal Australian Navy in Korea', *Australian War Memorial*, https://www.awm.gov.au/exhibitions/korea/ausinkorea/navy/ [accessed 3 May 2009].

[10] Nation, cited in 'War At Sea'.

[11] Dennis Fairfax, *Navy in Vietnam: a record of the Royal Australian Navy in the Vietnam War, 1965-1972* (Canberra: Australian Government Publishing Service, 1980), pp. 221-222.

of the aircraft carrier HMAS *Sydney* in this conflict also differed greatly from her traditional role. *Sydney* was used not to launch and retrieve aircraft but to transport Australian Army personnel and material. The success of this unique deployment and the integrated Australian and United States force structure on which it rested, can be seen as a precursor to the multinational deployments which underpin Fleet Air Arm operations today.

The above examples are clearly indicative of the FAA's flexibility and professionalism which allows them to meet any operational needs; in the wholly maritime environment as can be seen in the Korean War or in modified operations far in excess of that traditional paradigm in their deployment to the Vietnam War. Therefore while contributors who served in these combat deployments are adding to the collective memory of FAA operations between the years 1950 and 1971, their memories of their service differ greatly simply because their experiences and perceptions did. According to New Zealand military historian Roberto Rabel 'wars are resolved collectively but experienced individually'[12] and it is that individualism that creates a much more informed collective. The experiences of FAA veterans who did not deploy to either Korea or Vietnam offer equally insightful additions which ensure a more inclusive collective memory.

The use of oral testimony in this study clearly shows that peace time operations are not limited to being an integral component of the FAA; these routine deployments are the foundation from which all other operations are possible. Training, initial and continuous, is paramount in any military milieu and none more so than in the unique environment that is naval aviation. For this reason training and routine operations feature largely when FAA veterans are invited to reflect on their military service, although participants' recollections offer views from a personal perspective, each remembers differently.

Individuals remember particular events, or aspects of a particular event for various reasons and those memories that trigger an emotional response are the most powerful, thus ensuring they are clearly recalled over a long period of time. Remembrances of these past events are always subject to each individual and how they are remembered; whether in short term memory and forgotten or retained in

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[12] Roberto Rabel, cited in *The Oxford Handbook of Oral History,* ed. by Donald A. Ritchie (New York: Oxford Universit
y Press, 2011), p. 233.

long-term memory and clearly recalled years later. According to Oral Historian Alice Hoffman, long-term memories of significant events are enveloped in a cocoon within long-term memory, a separate compartment which she labels; 'I will never forget, as long as I live.'[13]

Long-term memories come into play when inviting naval aviation veterans, especially those who served in the early decades, to share their experiences of fixed-wing operations. When encouraged to recall why they joined the FAA, how they were trained in various operational fields and how their contribution enabled naval aviation, the majority of veterans accessed their long term memories. I would suggest that these memories were retained because they were meaningful, that they were defining moments of their lives. In fact for most, service and the events encountered in that service, were life changing.

By inviting FAA veterans and serving members to contribute to this oral history project I am mindful that the use of oral history and its focus on authenticity remains for some historians a contentious issue. For others the debate is focused less on subjectivity and more on the study of the mechanics of memory. Asking the question 'what is memory?' has opened up fields of enquiry far beyond the historiographical; science, principally the fields of psychology and neurology allow a discourse further than the traditional. In *Thinking about Oral History: Theories and Applications,* published in 2008, oral historian Alice Hoffman and the late author and experimental psychologist Howard Hoffman, took an experimental approach to clarifying their theory of long-term memory. The Hoffmans' theorised that personally significant long-term memories have been retained beyond the level of long-term memory; have in fact, become physiologically archival.[14] Hoffman and Hoffman concluded that for these memories to be termed archival they must stand out in some aspect or have an element of uniqueness that takes them beyond the limits of long-term memories. The Hoffmans' theory centred on the conclusions of their experimental research which sought to 'combine the analytical methodologies of psychology and historiography to assess directly the reliability and validity of the kind of memory claims that most frequently are sought in the oral history interview.'[15] The experiment focused on Howard Hoffman's service in World War II and his recollections; in the first instance 40 years, and again four years later. The

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[13] Alice M. Hoffman and Howard S. Hoffman, cited in *Thinking about Oral History: Theories and Applications,* ed. by Thomas L. Charlton and others, (Lanham, MD: Altamira Press, 2008), p. 39.
[14] Charlton & others, p. 39.
[15] Charlton & others, p. 37.

interviews were essentially the same; each recollection was recalled in the same sequence and in the same language. From this experiment the Hoffmans concluded that long-term recollections were essentially accurate and therefore valuable. In the second part of the experiment, measured over a number of years, Hoffman evaluated how or indeed, if, external prompts such as photographs or contacts with fellow veterans affected long-term memories. In conclusion, the Hoffman experiment found that external input such as those listed above had little discernable impact on long-term or archival memory.[16]

The Hoffman experiment is one example of where the discussion on memory has shifted from the use of memory in historiography to the physiological capacity to remember in the first instance and the ability to recall stored memories. This shift in focus from the authenticity of memories to the more anatomical structure of remembering continues the discourse on the validity of oral history and ensures its questionability for the foreseeable future. Cognitive Psychologist Ulric Neisser, along with Professor of Psychology Daniel Schacter and Neuroscientist Professor Steven Rose,[17] to name just three, focus their research on the human memory; how the brain retains past events, stores them and brings them to the forefront on request. The late psychologist Ulric Neisser and many of his contemporaries concur with Alessandro Portelli's statement that 'memory is not a passive depository of facts, but an active process of creation of meanings'.[18] In light of this Neisser further commented:

> Remembering is not like playing back a tape or looking at a picture; it is more like telling a story. The consistency and accuracy of memories is therefore an achievement not a mechanical production.[19]

Portelli argues that the focus of accuracy in remembering has been overtaken by the topic of the 'meaning' of individual memories. Mary Marshall Clark offers the opinion that Portelli's study has:

> Transformed oral history from being a kind of stepchild of history into a literary genre in its own right. He has allowed us to see oral histories as

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[16]   Charlton & others, p. 38.
[17]   Charlton & others, p. 35.
[18]   Ritchie, p. 82.
[19]   Ritchie, p. 82.

more than eyewitness accounts that are either true or false and to look for themes and structures of the stories.[20]

The above examples encapsulate the various scholarly fields which now drive the study of memory, the analysis of which is thought by some to 'overshadow oral history' according to Paula Hamilton.[21] Encouraging discourse between the interdisciplinary scholars of oral history and memory is hampered by what Hamilton calls 'one-way traffic'[22] or the 'assumption that oral history is a 'method' that needs to be broadened by a wider theoretical context; the fetishisation of practice has not helped this'.[23] Further interdisciplinary discussion is the answer to breaching this theoretical divide according to Hamilton:

> I believe that we have only just begun to explore the possibilities of remembering and the voice – the innovative research in aurality and orality (listening and voice histories) is a way forward and in doing so provide new directions for oral historians and so is its role in exploring the history of the emotions and the senses'.[24]

Valerie J. Janesick is in agreement with Hamilton on the need for further interdisciplinary study. Further, Janesick states that in exploring facets of memory and recall 'oral history takes on more texture and possibly more credibility.'[25] In her 2010 publication, *Oral History for the Qualitative Researcher*, Janesick adds to the interdisciplinary discourse with philosophical argument:

> That oral history can be extended to be understood as a post-modern social justice project by virtue of including those voices on individuals left on the margins and periphery of society or those generally forgotten histories that are documented…documenting someone's lived experiences invites public reading, dialogue and discussion. A person's lived experience is impossible to invalidate.[26]

The addition of postmodernist philosophical theory to the discussion on the validity of oral history takes it further from its origins; which is the recording of individual

20 Mary Marshall Clark, cited in Alexander Stille, 'Prospecting for Truth Amid the Distortions of Oral History', *New York Times,* 10 March 2001, www.newyorktimes.com/2001/03/10arts/10HST.html. [accessed 29 September 2015].
21 Paula Hamilton, 'The Oral Historian as Memorist', *The Oral History Review,* 32, 1 (2005), pp. 11-18, https://opus.lib.uts.edu.au/bitstream/10453/6616/1/2005001023.pdf [accessed 29 September 2015].
22 Hamilton, pp. 11-18.
23 Hamilton, pp. 11-18.
24 Hamilton, pp. 11-18.
25 Valerie J. Janesick, *Oral History for the Qualitative Researcher: Choreographing the Story* (New York: The Guilford Press, 2010), p. 10.
26 Janesick, p. 4.

interpretations of significant events. The act of committing details to memory is always subject to personal interpretation of sensory stimuli; each individual focuses on that aspect of an event that triggers personal meaning in relation to their lives. In this instance, service in the FAA, contributors recalled episodic memories which were 'explicitly and consciously recalled',[27] having been encoded, the process of which follows experiencing an event and interpreting that sensory information. Consolidation of a particular memory ensures its storage and allows for future retrieval. The Neuroscience Centre at the University of California explains the process thus:

> Consolidation is most effective when the information being stored can be linked to an existing network of information. It is also strengthened by repeated access of the information to be remembered. The neural pathways from the hippocampus to the cortex underlie the process of consolidation and storage. The number of neurons that are dedicated to a particular memory, as well as the frequency with which they fire together, help to strengthen the memory traces within the cortex. This process of consolidation occurs over the course of days to weeks and is subject to reorganisation when new, relevant information is learned. This reorganisation assists in the storage of new information, but also continues to strengthen the previously assimilated information. When a memory trace has been consolidated, the memory trace can be stored for later retrieval indefinitely.[28]

The choice to use oral testimony as the primary methodology for this social history of the FAA was my belief in its intrinsic value as an historic source. An oral history allows any historic event to be inclusive of the human element; adding vibrancy, colour, depth, context, and authenticity. The last sentence of the above quotation is the crux of the matter for me; an individual, personal memory of any event is by its very nature inalienable and therefore constitutes validity.

We can see from the research undertaken by the USCF Memory and Aging Centre that neuroscience has clearly demonstrated the causality of stored long-term memories and the long-term ability to consciously recall them. In recalling these long-term memories individual members of the FAA have contributed to a collective memory of service to Australian Naval Aviation. This collective memory relies heavily on individual contributions to ensure greater inclusiveness, ensuring validity and continuity. We can see that any in-depth analysis of the validity of personal memory is not limited to historiography, psychology or physiology but a

[27] 'Episodic Memory', *UCSF Memory and Aging Centre*, (The Regents of the University of California, 2014), http://memory.ucsf.edu/print/brain/memory/episodic [accessed 4 August 2015].
[28] 'Episodic Memory'.

combination of all three. I have no background in either physiology or neuroscience and while I acknowledge the importance of this continuing research methodology, any in-depth scientific interpretation is beyond the ability of this author or the scope of this thesis.

When inviting subjects to recall one aspect of their lives, in this instance, service in the FAA, interviewees invariably exhibited a wide range of emotions; camaraderie, belonging, excitement, joy, happiness, relief, pathos, anxiety, depression, contempt and euphoria. Emotions and the ability to express them is part of the human condition and memories have the power to evoke emotions that bridge the present and the past. An oral history tells a story, an individual story of one person's interpretation of a life event or a collection of life events that may or may not include an event of historical value. This thesis is not a history of the FAA; it is a telling about service in the FAA from each individual's point of view. They are personal narratives of thoughts, feelings and reactions to historic events. They are interpretive and the process of remembering is noted and recorded.

Men from various branches of the FAA have participated by sharing their experiences of training, routine and combat deployments, peacekeeping and humanitarian missions from 1948 into the 21st century. Whether armourers, like my father, or pilots, observers, electricians, mechanics, radio and aircraft technicians, aircraft handlers and safety equipment specialists, they offered me their time and more importantly they shared their precious memories and at times, their long held emotions.

Interviews with 54 veterans began in 2008 and were digitally recorded in the safe and comfortably familiar environs of the contributor's home in most cases, with HMAS *Albatross*, Nowra New South Wales being the venue of choice for some veterans. When conducting a formal interview was not possible for health reasons, family, work or travel commitments or personal choice, 21 previous and currently serving members participated in this study via a completed questionnaire. Unlike those who were interviewed, specific questions were asked of these contributors which included: their decision to join the navy and if they were influenced by tradition, patriotism, political or economic factors; which branch of naval aviation they served in; where they received their training and the level reached; which ships they deployed on and where these deployments took place and in what context. Questions posed included the morale within the FAA and if career

expectations had been met; how long they served or intended to serve and if the FAA contribution was relevant in the context of Australian defence. Additionally I have been given access to personal memoirs, both published and unpublished, which have been written by a small number of FAA veterans. Other contributions have included copies of public addresses when veterans have been invited to speak to various interested groups. As a Korean War veteran Theo Bushe-Jones had previously participated in the Australian War Memorial program to record veterans' memories and a copy of this recording was also made available.

The majority of interview transcripts remain unedited although interviewees have made corrections to place names and technical details where appropriate. This extensive and invaluable collection of memories, anecdotes and personal testimony is the primary resource of this study and is inclusive of FAA recollections from recruitment in 1947 until interviews were concluded in 2012.

All participants were asked if their service in the FAA included regrets and with 99.9% of responders giving an unequivocal 'no' response, they indicated that given the opportunity they would 'do it again in a heartbeat!'[29] I found this positive response quite remarkable given that the majority of contributors who had served in war zones or were witness to FAA tragedies also suffered varying degrees of Post Traumatic Stress Disorder. While we can never completely understand what drives any individual's passion, perhaps this quotation goes some way to offering an explanation:

> When a good pilot leaves the 'job' and retires, many are jealous, some are pleased and yet others, who may have already retired, wonder. We wonder if he knows what he is leaving behind, because we already know. We know, for example, that after a lifetime of camaraderie that few experience, it will remain as a longing for those past times. We know in the world of flying, there is a fellowship which lasts long after the flight suits are hung up in the back of the closet. We know even if he throws them away, they will be on him with every step and breath that remains in his life. We also know how the very bearing of the man speaks of what he was and in his heart still is. Because we fly, we envy no man on earth.[30]

While the above quotation is not inclusive of those members of the FAA who were not flight crew, virtually all interviewees, whether flight crew, maintenance crew or

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[29] Charlie Cifala, completed questionnaire, (2 February 2011).
[30] Unknown author, (contributed by Marion Swinford), 'Odds & Ends', *Light Photographic Squadron 62,* p. 3. www.vfp62.com/odd_and_ends_2html [accessed 24 May 2014].

support crew, exhibited a fascination with flight and aircraft. The unique aspect of a naval environment adds further dimensions to military aviation that cannot be equaled and all those who have served or continue to serve in naval aviation share a quietly enduring passion. Across the various aviation branches emotion is palpable and never more so than in the interviews.

The inclusion of these oral testimonies clearly defines the evolution of the FAA and allows a clear comparison of aircraft carrier based naval aviation and today's helicopter force. From this juxtaposition the question posed by this thesis; did the loss of their fixed-wing component in 1982 adversely affect the FAA's value, can be addressed.

Literature review

Having established that the FAA is a small, little known branch of the navy, it has understandably not dominated Australian military historiography. Much that has been published is written by retired FAA servicemen whose passion for aircraft carriers and naval aviation is often lifelong. The Fleet Air Arm Association of Australia publication *Slipstream*,[31] which has been in print since 1957, is a quarterly journal which continues to be published by volunteer ex-FAA members. As a means to preserve and document the history of Australian Naval Aviation, contributions are invited from all past and present service men and women who relate their personal experiences in the navy's air branch. In 2015 the magazine is inclusive of current Squadron deployments, commissioning and award ceremonies, the latest pilot's course graduates, HMAS *Albatross* and FAA Museum news and events and national memorial services. The association's National and State executives contribute a report detailing association social events and reunions and notifications of members' failing health or passing. *Slipstream* remains a crucial repository for oral history, both individual and collective, which ensures the preservation of the FAA contribution to Australian military history by those who have lived it and continue to do so.

The British author of various aspects of naval operations is retired Royal Navy engineer Bernard Ireland. Primarily focused on the Royal Navy, Ireland's 30

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[31] *Slipstream: The Quarterly Journal of the Fleet Air Arm Association of Australia Inc.,* ed. by Ron Batchelor (Nowra NSW: Fleet Air Arm Association of Australia Inc., 1957 -).

published books have included a critique of naval aviation and the metamorphosis of naval air operations with the rise of Communism and the nuclear age. *The Rise and Fall of the Aircraft Carrier*[32] was published in 1979 and as the title suggests, Ireland documents naval aviation from its inception and service in the First and Second World Wars, the Korean War and the periods of active disarmament. Ireland states that by the 1960s the ageing British aircraft carriers had ceased to be an effective offensive weapon and were largely seen as 'no more than expensive luxuries',[33] an argument which was echoed in Australia in the 1980s. Ireland charts the growing inadequacies of the aircraft carrier as the submarine comes of age during the Cold War and the advent of nuclear weapons. The development of smaller aircraft-capable ships which incorporated the latest missile technology was a more economically viable proposition for the Royal Navy which saw this new direction as the only alternative to abandoning naval aviation.[34]

Australian author and veteran of World War II, Korea and Vietnam, George Odgers began his writing career as a print journalist and went on to head the historical studies section of the Department of Defence. His *Royal Australian Navy, An Illustrated History*, published in 1985, is a comprehensive record of all Australian naval operations in which they played valuable and effective roles as combatant and defender. Inclusive is the role of the FAA and Odgers states that:

> The cabinet decision of March 1983 not to replace the aircraft carrier, HMAS Melbourne, and the consequent decision to disband the fixed-wing element of the Fleet Air Arm, were of major importance in Australian naval history.[35]

The importance of this decision to FAA operations, inclusive of the ships and aircraft involved and including those served onshore during the Vietnam War, are given the attention they are due in Chapter Six. Australia's defence policy, multinational force operability and the perceived threat of communist aggression and its ability to 'dominate the oceans of the world'[36] are indicative of the ideology of the era and as such, Odgers' volume is of value. Both Ireland and Odgers

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[32] Bernard Ireland, *The Rise and Fall of the Aircraft Carrier* (Birmingham: Marshall Cavendish, 1979).

[33] Ireland, p. 145.

[34] Ireland, p. 147.

[35] George Odgers. *The Royal Australian Navy, an illustrated history*, 3rd edn (Brookvale NSW: Child and Henry Australia, 1985), p. 190.

[36] Odgers, p. 193.

document the rise of small rotary-wing capable ships in this era of ideological, political and economic change.

The previously mentioned texts were predominantly based on naval operations. The first publication solely devoted to documenting Australian Naval Aviation from its beginnings in World War I was Ross Gillett's *Wings Across The Sea* in 1988.[37] At that time the FAA was celebrating 40 years of Australian service and Gillett sought to acknowledge that milestone within the context of a 'technically correct account' that places naval aviation in its historical context.[38] Gillett purports to address technical inconsistencies in previous official publications and acknowledges the input of ex-Royal Australian Navy Lieutenant Joe Straczek, Senior Naval Historical Officer in the Australian Naval History Directorate, Department of Defence in maintaining technical and historical accuracy. Straczek's contribution centred on the first aircraft carrier to serve in the Australian Navy, HMAS *Albatross* and her amphibious aircraft, the Supermarine Seagull. Gillett has written an historically accurate representation of Australian Naval Aviation from 1918 until 1984 that has been an invaluable resource, as has Colin Jones' *Wings and the Navy 1947-1953*, published in 1997.[39] As the title suggests, Jones begins his history of the FAA at its inception and offers insight into the post-World War II naval operations with the advent of naval aviation being the primary focus. Like Gillett, Jones has written a history of the FAA but from this point the similarities are few. In *Wings and the Navy* Jones infuses his text with the human perspective with the voices of naval aviation personnel who experienced what were termed 'showing the flag' routine peacetime cruisers.[40] Descriptions of everyday life aboard the aircraft carrier *Sydney* included such mundane activities as ensuring the uniform met the exacting standards of the navy as Jones describes here:

> The sight of a matelot putting the traditional seven horizontal creases in his bell-bottoms is not soon to be forgotten. First the trousers are turned inside out and the distance between each crease is measured carefully. Then the iron is applied lovingly. There are scores of irons in the *Sydney*.[41]

Jones describes how the after aircraft lift was used for showing movies and lists the favourites shown aboard *Sydney* including '*The Treasure of the Sierra Madre, All*

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[37] Gillett, *Wings*.
[38] Gillett, *Wings,* p. 6.
[39] Colin Jones, *Wings and the Navy 1947-1953* (Kenthurst, NSW: Kangaroo Press, 1997).
[40] Jones, p. 18.
[41] Jones, p. 70.

the King's Men and All About Eve'.[42] Another favourite pastime was story telling, which according to Jones 'often became more elaborate with every telling'.[43] One such example given by Jones is that of a Sea Fury being flown upside down under the Sydney harbour bridge by one of *Sydney's* pilots, a story also told to me by a retired FAA pilot.[44] Unfortunately, I have been unable to authenticate the story but many more retold escapades of disastrous landings attempts, aircraft accidents and incredible flying feats form part of all FAA Squadron histories. Jones' use of oral testimony allows for a much more inclusive historical record; a much warmer story which tells about the past.

While Jones' and Gillett's backgrounds do not include naval service, retired Shipwright Lieutenant Vince Fazio, author of *RAN Aircraft Carriers*[45] served aboard various Australian Navy vessels including both HMAS *Melbourne* and *Sydney* during his 25-year career. Covering the years between 1929 and 1982 Fazio focuses specifically on the four aircraft carriers to have served in the Australian Navy and the aircraft they launched and retrieved during their operations. Technical details and drawings of both aircraft and their carriers, Squadron deployments along with a large collection of photographs of men and machines are included. This volume also lists each Commanding Officer and their period of tenure up until *Melbourne* was placed in reserve before being decommissioned. Fazio does not discuss the political, economic or ideological influences that led to the loss of a fixed-wing component in the FAA. What *RAN Aircraft Carriers* does offer is a comprehensive record of the service of ships and aircraft that introduced an aviation component to the Australian Navy.

Expanding on Fazio's publication, Mike Lehan, the Director of the Australian Naval Aviation Museum, acknowledges an inclusive editorial committee who are responsible for the Museum's 1998 publication, *Flying Stations*.[46] The use of oral history is extensive and allows the recording of many veterans' experiences that document fledgling aviation from its earliest days. The trials of establishing a naval aviation component in the RAN encompasses the political and economic limitations

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[42]   Jones, p. 71.
[43]   Jones, p. 71
[44]   Jones, p. 71.
[45]   Vince Fazio, *RAN Aircraft Carriers: the story of the service in the Royal Australian Navy of HMA Ships Albatross, Sydney, Vengeance, and Melbourne* (Garden Island, N.S.W.: The Naval Historical Society of Australia, 1997).
[46]   The Australian Naval Aviation Museum, friends and volunteers, *Flying Stations: A Story of Australian Naval Aviation*, (|St. Leonards, N.S.W.: Allen & Unwin, 1998).

of the times. Fixed-wing and aircraft carrier operations that include the Korean War are extensively documented with the inclusion of eyewitness testimony. Personal experiences are less comprehensive in chronicling the Vietnam War and continuing rotary-wing operations which encompass the Gulf War. *Flying Stations* is an historical record of Australian Naval Aviation and as such details the ramifications of the political and economic factors which came to the fore in the 1980s. The follow up publication *HMAS Albatross: A Collection of Memories*, is as the title states, a record of life on the Nowra Air Station. Published in 2000, the 50th Anniversary of *Albatross*, Lehan examines the land based history of the FAA with members and their families recalling the initial establishment of *Albatross* and charting its development. Having been produced as a 'souvenir for the 40,000 sailors and their families who have served at HMAS *Albatross* over the years',[47] Lehan has included testimony from both Air Arm personnel, the Birdies, and their wives. These contributors have described the primitive living and working conditions, initial construction and redevelopment from the 1940s through to the transition from fixed-wing to rotary aircraft. In the 1990s HMAS *Albatross* became home to various 'lodger' units which today include No 2 Squadron Royal New Zealand Air Force; British Aerospace Australia; Australian Defence Forces Training Support; Royal Australian Navy Tactical Electronics Warfare Support Section; The Australian Joint Acoustic Analysis Centre; The Nowra Meteorological Office; Aircraft Maintenance and Flight Trials Unit; Air Warfare System Centre; Royal Australian Navy Fleet Aviation Engineering Unit; Royal Australian Navy Historical Flight; Parachute Training School and the Naval Aviation Museum.[48] As can be seen from this extensive list of units, *Albatross* is the hub of Naval Aviation training and development, its metamorphosis has been both rapid and far-reaching and today *Albatross* remains the bedrock of the FAA. As Aviation Museum publications, both *Flying Stations* and *Albatross* offer exclusive insight into the unique life of a Birdie, whether on deployment or at home.

From the informality of the previous two publications and their personal perspectives, placing the FAA in the wider context of the Australian Navy is naval veteran and Inaugural Director of Naval Historical Studies within the Maritime Studies Program, David Stevens. As editor of the third volume in the series Centenary History of Defence, published in 2001, *The Royal Australian Navy: The*

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[47] Mike Lehan. *HMAS Albatross: a collection of memories* (Canberra: Australian Naval Aviation Museum, 2000), p. iii.
[48] Lehan, *HMAS Albatross,* pp. 253-264.

Australian Centenary History of Defence,[49] Stevens offers an invaluable analysis of the strategic and technological development within shifting Australian defence policy, and the political and economic climate of the 20th century. Stevens follows the development of the Australian Navy from 1901 and documents the building and acquisition of Australia's four aircraft carriers and the role of the FAA in the 'forward defence' policy of the Cold War era. Moving towards defensive self-reliance from 1972, the Australian fleet relied heavily on its core: Naval Aviation. Stevens states that the transition from aircraft carrier to the greater flexibility of smaller ships and rotary aircraft was paramount in enabling the Australian Navy to establish the essential independent status necessary in the 21st century.

While Stevens placed the FAA within the Australian Navy and Australian defensive policy, United States military historian and Naval Academy lecturer, Clark Reynolds, located Naval Aviation and its development in a wider global military context. In *Epic of Flight - The Carrier War,*[50] published in 2004, Reynolds firmly establishes Naval Aviation's operational credentials during the two World Wars with particular emphasis on World War II. The *Aircraft Carrier War* began with the attack on Pearl Harbor in 1941 and culminated in the allied victory at the Battle of Midway in 1942; the definitive example of aircraft carrier warfare.

Naval Aviation played a much less significant role in the Korean War (1950-1953) although this conflict was much more noteworthy for the FAA as it was there that they made their operational debut. Once widely referred to as 'The Forgotten War', the conflict has attracted much greater strategic, diplomatic and ideological examination into the 21st century.[51] Despite this, the role of naval aviation operations in general and the FAA specifically has not yet reached prominence. One example of this omission is Norman Bartlett's *With the Australians in Korea*[52] which was published 1954 by the Australian War Memorial. In what Bartlett describes as 'a short official history of the Korean War'[53] the combatants themselves have contributed the majority of the historical storyline. While the

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[49] *The Royal Australian Navy: The Australian Centenary History of Defence,* Vol III, ed. by David Stevens (Melbourne: Oxford University Press, 2001).

[50] Clark Reynolds, *Epic of Flight -The Carrier War* (London: Caxton Publishing Group, 2004).

[51] Australian War Memorial Research Centre lists 860 publications pertaining to the Korean War and the Murdoch University Library contains 200 publications, with 174 published between 2000 and 2015.

[52] *With the Australians in Korea,* ed. by Norman Bartlett (Canberra: Australian War Memorial, 1954).

[53] Bartlett, p. ii.

author acknowledges that the Korean War was an 'American show'[54] with Australian forces one of 15 international combatants, he states that the 'Australians more than earned their place'.[55] Those who served in the Australian Army are in the majority in this compilation of personal recollections with Bartlett citing the restrictions of time and limited contact opportunities for these limits in this volume, published just one year after the war concluded.

Following Bartlett's 1954 compilation, Robert O'Neill's 1983 book *Australia in the Korean War 1950 - 1953*[56] differs greatly in its focus as O'Neill records the political, diplomatic and strategic machinations of the conflict from the Australian perspective. As such, this background text places the Australian military involvement in its historical context from which we can consider the role of naval aviation and examine its contribution. As Bartlett stated, the Korean War was primarily an American fought war and, while these two volumes place Australia within the conflict, the majority of publications offer a wholly American and South Korean political and strategic perspective on operations.

Critically acclaimed British author and ex-Royal Navy member, Michael Hickey has re-examined the political and warring ideologies of North and South Korea in light of recently declassified documents in *The Korean War*. The *West Confronts Communism,* published in 1999.[57] Hickey places the struggle between the West and Communism within the context of the Cold War and the growing threat posed by the nuclear age. The author was conscious that this conflict became the final military collaborative operation featuring the nations that constituted the old Commonwealth and tested the resolve of the newly formed United Nations (UN). This volume analyses the British Commonwealth contribution and the post-World War II supremacy of the American military machine. Hickey has evaluated how British involvement was a catalyst for change in the British Army but took a backwards step in naval aviation. Hickey states:

> The value of the large aircraft carrier as a means of projecting air power well beyond the range of land based aircraft was evident; the

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[54] Bartlett, p. ii.
[55] Bartlett, p. ii.
[56] Robert O'Neill, *Australia in the Korean War 1950-1953, Volume 1, Strategy and Diplomacy* (Canberra: Australian War Memorial and the Australian Government Publishing Service, 1981).
[57] Michael Hickey, *The Korean War: The West Confronts Communism 1950-1953* (London: John Murray, 1999).

Americans have never forgotten this whilst successive British governments have yielded to other temptations.[58]

Further, Hickey affirms that the naval contribution to the Korean conflict was 'decisive', with naval aviation being a 'key' component in UN operations.[59] The east coast operations of British, American and Australian aircraft carriers offered essential close air support in a timely manner when land based UN aircraft were based in Japan.[60]

Unlike the epic World War II aircraft carrier battles of Midway and the Coral Sea in which naval aviation featured prominently, the Korean War offered no such prospect of visibility. It could be argued that the lack of decisive naval operations, with their heroic implication, negates inclusion in the general examination of the Korean War and therefore in Australian military history and tradition. In *A Different Sort of War. Australians in Korea 1950-1953*,[61] Richard Trembath suggests that 'in Australia the Korean War has few identifiable battles'[62] and proposes a direct link between this quantifiable measure of collective heroism and national remembrance.[63] In relation to FAA operations in the Korean theatre and tracing a direct line of causality, Trembath's theory has merit. While individual acts of heroism are undoubtedly part of the FAA deployment to the Korean War, their service did lack the visibility, the collective occasion so obvious to operations in the Second World War. In juxtaposition the Australian ground forces participated in the Battle for Kapyong in 1951 and Trembath suggests that the United States Presidential Unit Citation bestowed on 3 Royal Australian Regiment was a 'public gesture that indicated that this was a battle to remember'.[64] There was no such public accolade for HMAS *Sydney* and her flight crews whose participation remains largely unheralded beyond the historical record of the FAA.

To some extent Trembath's theory can also be applied to the FAA's contribution to the Vietnam War. Undoubtedly playing a minor role to that of United States forces, Australian servicemen were deployed to this conflict as early as 1962 in an advisory role, escalating to combat forces in 1964. For Australians, The Battle of

[58] Hickey, p. 361.
[59] Hickey, p. 300.
[60] Hickey, p. 300.
[61] Richard Trembath, *A Different Sort of War. Australians in Korea 1950-1953* (Melbourne: Australian Scholarly, 2005).
[62] Trembath, p. 162.
[63] Trembath, p. 162.
[64] Trembath, p. 163.

Long Tan in August 1966[65] is the only nationally identifiable act of collective heroism in the ten years of Australian military involvement. As with the Korean War, the Australian Navy was not prominently displayed in Vietnam; the aircraft carrier *Sydney* deployed in a wholly support and transport role as did newly commissioned cargo ships *Jeparit* and *Boonaroo*. Four destroyers; HMAS *Hobart*, *Perth*, *Brisbane* and *Vendetta*, served combative roles in Vietnamese waters under the United States Seventh Fleet from 1967 until 1972 and tasked with 'general and administrative support'.[66] In *The Royal Australian Navy in Vietnam*, naval member Dennis Fairfax records that *Hobart* and *Perth* both received United States Unit Citations for 'exceptionally meritorious service'[67] during their deployments. Unlike the Citation received by 3 Royal Australian Regiment in the Korean War, these awards were not linked to one remembered heroically fought battle and are therefore not nationally celebrated. Just as those who served on HMA ships during the Vietnam War are not as visible as their Army counterparts, members of the FAA who were attached to the United States Army 135th Assault Helicopter Company also occupy a peripheral position within Australian military history. Although the unique characteristics of this Australian Naval deployment have not been sufficiently visible to attract a great deal of scholarly interest, Fairfax documents all four contingents of the Royal Australian Navy Helicopter Flight Vietnam. Told from an operational view point, Fairfax compiled this volume 'primarily for the men who took part in the Vietnam War, to provide a permanent record of their service from 1965 until 1972'.[68]

The first publication to focus solely on the operations of the amalgamation of United States Army and Australian naval personnel in Vietnam was *Get The Bloody Job Done: The Royal Australian Navy Helicopter Flight Vietnam and the 135th Assault Helicopter Company 1967-1971*.[69] Steve Eather, a former Royal Australian Air Force pilot, used the motto of this combined unit to great effect in the title in his 1998 book which is an historical record of this very successful interdisciplinary unit. Eather has made extensive use of oral testimony with both Australian and American personnel featuring in chapters which are devoted to each of the four contingents. Initial training before deployment is not examined but Eather does

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[65] Lex McAulay, *The Battle of Long Tan: The Legend of Anzac Upheld* (London: Arrow Books, 1986).
[66] Fairfax, p. 19.
[67] Fairfax, p. 19.
[68] Fairfax, p. vii.
[69] Steve Eather, *Get the bloody job done: The Royal Australian Navy Helicopter Flight Vietnam and the 135th assault Helicopter Company 1967-1971* (St Leonards, NSW: Allen & Unwin, 1998).

include a chapter on the Royal Australian Air Force operations, which due to shortages of trained air crew, again included naval personnel. Ten years later Max Speedy and Bob Ray produced 'the closest thing to an official history of the Royal Australian Navy Helicopter Flight Vietnam is ever likely to have'.[70] Titled *A Bloody Job Well Done: The History of the Royal Australian Navy Helicopter Flight Vietnam 1967-1971,* Speedy and Ray begin with a short historical background of political and economic factors of the 1960s that led to the inclusion of Naval Aviation crews in the Vietnam War. Forty contributors, both Australian and American, recollect an aspect of their service which is recorded as one chapter of this compilation. This oral testimony from those men who served with the 135th Assault Helicopter Company reinforces its value as an historic record as these two publications, although recorded 10 years apart and presented in different formats, imbue the reader with a clearer snapshot of this unique experience. These texts record a wider view which is inclusive of day to day life interspersed with flight operations, again allowing a more complete historical record. The inclusion of private photographs adds a further dimension to Speedy and Ray's text; there is a sense of realism and immediacy that photographic evidence brings to any text, although none more so than in conjunction with oral testimony.

While the FAA experience of Vietnam has not been closely examined since the above mentioned texts, John Perryman, retired Naval officer and Senior Naval Historical Officer at the Australian Sea Power Centre, and his colleague Brett Mitchell, published *Australia's Navy in Vietnam: Royal Australian Operations 1965-72* in 2007.[71] All naval operations during the Vietnam War, including the naval attachment to the 135th and those undertaken by the eight contingents of Clearance Diving Team Three, are briefly recorded in this text that, while not extensive, is a full account of the Australian naval commitment. A more in depth record followed in 2013 with John R. Carroll's *Out of Sight, Out of Mind: The Royal Australian Navy in Vietnam 1965-1972.*[72] As the subject of his PhD dissertation, Carroll examined the logistical and support roles played by the Australian Navy in Vietnam, concluding that wider appreciation for this vital role was needed. Published in 2013, this study places the war in its historic context in the first

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[70] *A Bloody Job Well Done: The History of the Royal Australian Navy Helicopter Flight Vietnam 1967-1971,* ed. by Max Speedy and Bob Ray, (Canberra: M. Speedy & B. Ray, 2008), p. v.

[71] John Perryman and Brett Mitchell, *Australia's Navy in Vietnam: Royal Australian Navy Operations 1965-72* (Silverwater, N.S.W.: Topmill, 2007).

[72] John R. Carroll, *Out of Sight, Out of Mind: The Royal Australian Navy in Vietnam 1965-1972* (Dural, N.S.W.: Rosenberg, 2013).

instance and where possible, the use of oral testimony from those in command of logistical support and transport vessels, adds a level of authenticity which furthers the aim of a more extensive appreciation.

We can see that whilst the RAN has been the subject of some fairly extensive research, naval aviation itself has not generated much scholarly interest. The little that has been published, together with various unpublished works, have largely been the domain of retired FAA members. Extensive media coverage in the 1940s of the purchase and commissioning of the largest and most expensive members of the Australian Fleet ensured the aircraft carriers HMAS *Albatross*, *Sydney* and *Melbourne* generated substantial public interest. Ongoing routine deployments which incorporated flight demonstrations in most Australian capital cities ensured their continued visibility but it was two incidents in 1964 and 1969 which captured the public's attention. The FAA and their operations remain largely unknown outside Australian military circles but for many Australians the aircraft carrier HMAS *Melbourne* is clearly recalled.

In her 27 years of service, HMAS *Melbourne* was involved in two tragic accidents, culminating in the loss of HMAS *Voyager* in 1964 and USS *Frank E. Evans* in 1969.[73] These destroyers were operating as plane guards; they were on standby as rescue vehicles for any downed air crew during flight operations and as such they operated within close proximity to the aircraft carrier. In the case of *Voyager*, 82 crew members died in what was the Australia's worst peacetime disaster and resulted in two Royal Commissions, the second reversing the decision of the first. Tom Frame's publication *Where Fate Calls: The HMAS Voyager Tragedy*[74] is initially an intricate examination of all events which culminated with *Voyager's* loss. Frame's extensive research into this accident and the two subsequent Royal Commissions originally formed his doctoral thesis and resulted in 1992 with this publication. Written by a serving member of the Australian Navy, Frame is committed to recording 'an accurate account, to lay bare the facts from which observation, interpretations and judgements can be made'.[75] This account examines in detail how *Voyager,* in her role as plane guard, crossed *Melbourne's* bows and was sliced in two. The inclusion of eyewitness accounts of approximately

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[73] See appendix B for a complete list of FAA lives lost on duty.
[74] Tom Frame, *Where Fate Calls: The HMAS Voyager Tragedy* (Sydney: Hodder & Stroughton, 1992).
[75] Frame, *Where Fate Calls,* p. xxvii.

100 interviewees who were aboard both ships drove Frame towards a comprehensive historical record. In addition this book is a critique of the controversial legal and political machinations, the inadequacy of Royal Commissions held in 1964 and 1967 in this instance; and the intersection of government, media and the navy, their responsibilities and consequences. Frame is in no doubt that 'the method of enquiry played too great a role in affecting the outcome of events in both 1964 and 1967'.[76]

In 2005 Peter Cabban, the central witness in the second Royal Commission into the *Voyager* disaster held in 1967, and journalist and documentary film producer David Salter, collaborated on the publication *Breaking Ranks: The true story behind the HMAS Voyager scandal.*[77] Cabban served as HMAS *Voyager's* Executive Officer until five weeks before the two ships collided and on the publication of results of the first Royal Commission, which he believed to be a collaborative naval and government cover up, Cabban stepped forward to refute those findings. This step was the catalyst for the second Royal Commission and in this publication Cabban and Salter place the blame very firmly on Captain Duncan Stevens, *Voyager's* commanding officer and exonerated *Melbourne's* captain John Robertson, implicated by the first commission. Any examination of this highly contentious tragedy, which has been likened to that which surrounds the Petrov defection and the dismissal of the Whitlam government, is beyond the scope of this study. These two texts are however necessarily vital resources that accurately record events of the night of February 10 1964. Members of the FAA aboard HMAS *Melbourne* and *Voyager* recall this event and how these memories continue to impact on their lives.

In 1969 *Melbourne* was once again involved in a collision, this time with the United States destroyer USS *Frank E. Evans*. In the early hours of June 3 the American ship was acting plane guard for the aircraft carrier in joint *SEATO* exercises in the South China Sea when once again the smaller ship collided with *Melbourne*. The American destroyer was sliced in two with the tragic loss of 74 crew members in the seventh accident, accounting for 313 lives, involving the United States Navy in three years.[78] Author of *In The Wake*, Jo Stevenson, wife of *Melbourne's*

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[76] Frame, *Where Fate Calls,* p. 345.
[77] Peter Cabban and David Salter, *Breaking Ranks: The true story behind the HMAS Voyager scandal* (Sydney: Random House, 2005).
[78] Jo Stevenson, *In the Wake*: *The True Story of the Melbourne-Evans Collision, Conspiracy and Cover-Up* (Alexandria, N.S.W.: Hale and Iremonger,1999), p. 10.

Commanding Officer, attended each day of the American-led Naval Board of Inquiry and it is her extensive notes that form the basis of this publication. There is little doubt that John Stevenson was not at fault but as the sacrificial lamb he was court martialled before finally being exonerated. While this book is primarily an examination of the evidence which was presented to the Board of Inquiry and which was ultimately suppressed, Stevenson uses ships' documents and official signals to plot the course of each ship thereby establishing how the collision occurred. Those who were aboard HMAS *Melbourne* on June 3, 1969 share their painful memories of this second tragic episode in Australia's naval history.   The *Melbourne* collisions are discussed more fully in Chapter Seven.

Thesis Framework

The FAA has overcome prolonged political, economic and bureaucratic stumbling blocks to serve a valuable and supportive role within the RAN and the wider global military environment. This thesis will show that naval aviators have been an integral part of Australian military history since World War I and have been represented in every RAN deployed conflict, humanitarian and peacekeeping operation since. This thesis will also argue that the flexibility allowed the FAA to play an essential role in the naval milieu but a role which has been mostly unacknowledged. The small number of FAA personnel and their quiet resolve has perhaps precluded them from further scholarly examination. This chapter has stated that between the years 1947 and 1982, the aircraft carrier-based FAA played a vital role in Australian protection and security. In this comparative assessment between fixed-wing and rotary-wing operational deployments, this thesis argues that the FAA continue to extend vital assistance wherever needed and in doing so make a valuable contribution to Australian military history.

The next chapter will place Australian Naval Aviation within the broader international framework and document its survival against strenuous opposition. Recruitment and training are the focus of chapter three with the perceived lack of man-power coupled with the scarcity of training facilities being the next hurdles to be overcome. In determining the operational value of naval aviation in both its traditional and modern guises it is necessary to establish how they differ. In chapter four the aircraft carrier operations conducted with fixed-wing aircraft are contrasted to the rotary aircraft flown by the FAA of today. Chapter Five and Six offer a

comparison between combat deployments in the Korean War and the Vietnam War, and the role played by fixed-wing and rotary aircraft. Chapter seven examines the continuing evolution of the FAA into the 21st century.

For many FAA members of the fixed-wing, aircraft carrier era, the loss of HMAS *Melbourne* in 1982 equated to the end of naval aviation in the Australian Navy. It was a devastating blow that saw many experienced aviators separate from the navy as the only means to continue to fly. In focusing my study on this metamorphosis and evaluating both modes of operation within the perception of validity, this thesis differs from any previous examination of the FAA.

2. Tracing the Evolution of Military Aviation, and its Roots and Trajectory in the Australian Navy 1914-2015

The notion of aviation in a military context has fired the imagination of military personnel since the Wright brothers introduced powered flight to the world in 1903.[1] However, un-powered flight had previously played a substantial role in the military environment prior to the early twentieth century.[2] Hot air balloons proved irrevocably that tactical advantage was the province of the aeronauts and with the development of powered flight this theory was reinforced. The first step towards the sophisticated operations we see deployed by the world navies today was taken in 1794 when the French developed the Corp d'Aerostiers, in effect, an 'Air Force'.[3] Comprising two companies of balloonists, or Aeronauts, the blue garbed commissioned officers operated the balloons in flight while the enlisted men, termed 'ground crew' provided the support both pre and post flight.[4]

Official historian of the Strategic Air Offensive on World War II and former Director of the Imperial War Museum, Dr Noble Frankland has stated that:

> War itself, much more than the prospect of it, generates the most important advances in the machines and weapons which make it increasingly ruinous. Airships and aeroplanes were seized by the compelling appetite of war when they were scarcely beyond their infancy.[5]

Proving Frankland's point and following the successes of the French model, the Austrian Army utilised balloons to destroy their Italian enemies in 1849, and Union forces in the American Civil War introduced the practical possibility of air reconnaissance in 1861.[6]

It was scientist and early American ballooning pioneer Thaddeus Lowe's impressive 900 mile flight just eight days after the first shots of the Civil War were fired at Fort

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[1] Louis S. Casey, *Naval Aircraft* (London: Phoebus Publishing, 1977), p. 7.

[2] Casey, p. 7.

[3] L.T.C. Rolt, *The Balloonists: The History of the First Aeronauts* (Gloucestershire: Sutton Publishing, 2006), p. 161.

[4] *The Balloonists,* p. 161.

[5] Dr. Noble Frankland, (Principal Editor) *The Encyclopedia of 20th Century Warfare,* ed. by Dr Noble Frankland, (London: Mitchell Beazley Publishers, 1989), p. 194.

[6] Dennis Carman, 'Lowe and his Balloon Corps'*, Hargrave Timeline,* www.ctie.monash.edu.au/hargrave/timeline2.html [accessed 27 April 2010)

Sumter that cemented aviation in the military lexicon.[7] Rebel and Union balloonists saw the potential for reconnaissance from the air and both sides lobbied for government support in creating a Corps of Balloonists. Union supporter Lowe succeeded in this task when he impressed President Lincoln with the balloon's military application by sending the President a telegram while aloft.[8] On 24 July 1861 Lowe reported to Washington on the movements of the Confederate Army and as a result, Lowe's funding was immediately forthcoming.[9] Subsequently the seven Union balloons played a valuable role in the Civil War and were proven assets in the roles of reconnaissance and transportation.[10] A change in leadership of the Union Army would see the demise of the Balloon Corps in 1863, as General Burnside lacked the foresight of his predecessor.[11] From these beginnings aircraft were further developed for use in the military paradigm and as an extension, the machines were adapted for use with the world's navies. Aviation became, and remains, an effective, necessary and advantageous component within the naval milieu.

The first step towards the sophisticated operations we see deployed by the world's navies today was taken in 1908 when Wilbur Wright took to the air in a demonstration seen by two United States Navy (USN) observers.[12] While the USN showed great interest in the new technology, the Wright Company showed little inclination to develop a naval application. Aircraft required large flat fields to operate successfully and to substitute water for stable ground necessitated adapting the existing aircraft in ways thought far too impracticable by the Wright Company.[13] Fellow aviator Glenn Curtiss was in the process of establishing his own aviation company and accepted the challenge to modify aircraft for use in the naval environment.[14] A few years later, on 14 November 1910, the problem of how

7   'Civil War Ballooning', *Civil War Trust*, http://www.civilwar.org/education/history/civil-war-ballooning/civil-war-ballooning.html?referrer=https://www.google.com.au/ [accessed 8 June 2014]
8   'Lowe and his Balloon Corps'.
9   Gillett, *Wings Across the Sea,* p. 8.
10   'Lowe and his Balloon Corps'.
11   'Lowe and his Balloon Corps'.
12   Pamela Feltus, 'The Development of Naval Aviation', *U.S. Centennial of Flight Commission* http://www.centennialofflight.net/essay/Air_Power/early_navy/AP13.htm [accessed 28 April 2010].
13   'The Wright Brothers: The Invention of the Aerial Age', *Smithsonian National Air and Space Museum* http://airandspace.si.edu/exhibitions/wright-brothers/online/age/1910/military.cfm. [accessed 6 June 2014].
14   Feltus, n.p.

to modify the aircraft to suit the navy was overcome by Curtiss employee Eugene Ely.[15]

The idea to launch a powered aircraft from atop a ship had originated in Germany with the Hamburg-American Steamship Line to facilitate the speedy delivery of mail between ships and shore.[16] This challenging notion spurred Ely, an American barnstormer, to make the first successful attempt in November 1910. The operation made use of a purpose-built ramp on the deck of USS *Birmingham* to fly off a Curtiss biplane.[17] Landing an aircraft on a ship's deck is also attributed to Ely who made use of 22 ropes attached to 50lb sand bags to catch the three pairs of grappling hooks attached to the landing gear.[18] With the ship stationary, the weather conditions were anything but ideal, with the wind blowing from the stern at 10 miles per hour and the tide ebbing. As he came in to land, the wind direction shifted producing a cross wind but at approximately 100 feet above the deck, at a speed estimated to be 39 to 40 nautical miles per hour, the aircraft flew steadily on. The grappling hooks missed the first 11 of the 'arrester wires' but the aircraft was successfully restrained by the remaining 11.[19] 'Landing on the smallest field ever encountered', Ely's feat was the first demonstration of a form of arrested landing that is still used in naval aviation today.[20] Ely clearly understood the implications of his historic accomplishment:

> I have proved that a machine can leave a ship and return to it, and others proved that an aeroplane can remain in the air for a long time… the value of the aeroplane for the navy is unquestioned.[21]

Ely had successfully demonstrated that aircraft were capable of using ships as flying platforms and as the appropriate funding was approved Curtiss began training the first American navy pilot, Lieutenant T. G. Ellyson.[22] The development of naval aviation from this point on seems to negate Ely's astonishing success. Surprisingly, perfecting launch and retrieval of float planes took precedent over furthering ship borne aircraft technique. It is logical to assume that Louis S. Casey

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[15]   Reynolds, *Epic Of Flight*, p. 7.
[16]   Ireland, p. 12.
[17]   Ireland, p. 12.
[18]   Casey, p. 8.
[19]   Casey, p. 8.
[20]   Reynolds, *Epic Of Flight*, p. 7.
[21]   Reynolds, *Epic Of Flight*, p. 24.
[22]   Feltus, n.p.

was correct in his proffered reason for this lack of forethought which he articulated in *Naval Aircraft*:

> Failure to utilise these techniques can probably be attributed to the battleship fixation of the senior naval personnel of nations. The thought of having their ships' decks encumbered or obstructed by the gear necessary to handle aircraft was out of the question.[23]

At this time the number of battleships, or capital ships, in any navy was the standard by which power and strength was measured. They were the heavily armed, well armoured and highly efficient progeny of the ships of the line in the age of sail which had served the world's navies well. To overthrow the old guard's reliance on the conventional ship would require tenacious enthusiasm for change within the world's navies.

While the United States Navy continued its opposition to deck launch and retrieval methods they did continue to experiment with amphibious aircraft. Across the Atlantic the Royal Navy (RN) showed little enthusiasm for aviation in any form. A demonstration of flight in 1907 was met with 'Regretfully, they [Their Lordships] perceive no practical use to the naval service'.[24] While the Lords of the Admiralty were disinclined to see any naval potential, not all in the British Navy were so short sighted. At the instigation of Senior Naval staff, the first British Naval airship, HMS Airship 1 (*Mayfly*), was built for the purpose of extending the range of communications and spotting for naval gunnery.[25] Although *Mayfly* never flew, having been destroyed before its first flight, the naval aviation program had been established.[26]

The British Army had been more farsighted in relation to aviation and Samuel Cody piloted the first British Army Aeroplane in 1908.[27] Further progress towards the inclusion of aviation in a military context was made in 1909 when Rheims played host to an international air show. Over a million spectators, including military personnel were enthralled with the 23 aviators who fired their imaginations.[28]

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[23] Casey, p. 8.

[24] Christopher Shores, *100 Years of British Naval Aviation* (Somerset, UK: J.H. Haynes & Co. Ltd, 2009), p. 11.

[25] Shores, p. 11.

[26] 'Naval Aviation History and Fleet Air Arm Origins', http://www.fleetairarmarchive.net/History/Index.htm [accessed 12 January 2016].

[27] Michael Armitage, *The Royal Air Force: An Illustrated History* (London: Brockhampton Press, 1995), p. 11.

[28] Armitage, p. 11.

Worldwide enthusiasm for aviation, both civil and military, culminated in 11 countries establishing aviation components within their armies and navies by 1911.[29]

The use of an amphibian aircraft, which utilised water to take off and land rather than the deck or platform of a ship, was a significant step in naval aircraft development. Commander Oliver Schwann, using his own biplane, modified by replacing the wheels with air-filled floatation devices to keep the airplane buoyant, successfully took off from the water in November 1911 although the aircraft was unsuccessful in the landing attempt.[30] Using the same floatation devices a month later, Sub-lieutenant Longmore succeeded in landing his aircraft on the sea. Unfortunately the successful launching and retrieval of amphibian or 'float' planes from the water was heavily dependent on ideal weather conditions, as rough seas made the process extremely dangerous. Ideal conditions demanded a calm sea with little wind.[31] Ways of overcoming this drawback were in the forefront of aviation development and success was achieved in January 1912.[32] Sub-lieutenant C. R. Samson successfully flew off a platform fitted to battleship HMS *Africa*, although the ship was anchored at the time.[33] In an editorial eight days after this auspicious event British aeronautical magazine *The Aeroplane* reported that:

> It must not be thought for a moment that alighting with a large biplane in still harbour water, or getting a biplane off a large and clumsy platform built on the bow of a battleship, had any direct relation to naval aviation proper…As has already been pointed out in The Aeroplane with considerable emphasis the only possible naval aeroplane for use at sea is one which is launched from the ship by auxiliary power, and on returning alights on the water as near the ship as may be.[34]

Further, *The Aeroplane* editorialising included the very short-sighted opinion that Samson should not risk his life because 'when all is said and done, [it is] simply a dangerous trick which, though it may perhaps seem convincing to a few old-fashioned officers…is actually of no practical value whatever.'[35] Fortuitously for the

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[29] Armitage, p. 11.
[30] 'Fleet Air Arm History: Naval Pioneer takes off from the water, November 18', *Fleet Air Arm Officers Association,* http://www.fleetairarmoa.org/fleet-air-arm-history-timeline. (accessed 11 January 2016).
[31] Casey, p. 8.
[32] Oldham, p. 140.
[33] Casey, p. 7.
[34] Cited in Shores, p. 15.
[35] Casey, p. 15.

future of naval aviation, Samson did not heed *The Aeroplane's* warning and experiments in naval flight continued unabated.

Samson and colleague Lieutenant Malone made a further two flights from the deck of HMS *Hibernia* in May 1912, the first while a ship was underway, thereby overcoming the problem of landing on a rough sea.[36] In the context of reviewing the British Navy's position on the importance of an aviation component, two technical sub committee members representing the Committee of Imperial Defence toured Germany, Austria and France to compare the progress of aeronautical military applications. Their report stated that Germany had 30 airships in service and concluded:

> …that German airships have, by repeated voyages, proved their ability to reconnoiter the whole of the German coastline on the North Sea. In any future war with Germany, except in foggy or stormy weather, it is probable that no British war vessels or torpedo craft will be able to approach within many miles of the German coast without their presence being discovered and reported.[37]

As a result of these developments the Royal Flying Corps (RFC) was established in 1912[38] from which the naval component formed as the Royal Naval Air Service (RNAS) in 1914.[39] The British further developed ship-borne aircraft and the facilities for launching and retrieving them, negating the previous limitations of both weather conditions and time required for the launch and retrieval of amphibian aircraft.[40] According to Air Marshall Sir Michael Armitage in *The Royal Air Force,* at the outbreak of war in 1914 the RNAS was equipped with '105 officers, 755 men, 95 transport vehicles and 63 airplanes in the fighting unit with another 20 machines in the Aircraft Park'.[41]

Prior to the outbreak of hostilities the Royal Australian Navy (RAN) was established in 1911 and as a Dominion navy it mirrored the traditional RN in structure and policy. Unlike its British counterpart the RAN did not incorporate a formal aviation component at this time. George A Taylor, founder and secretary of the *Australian*

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[36] Casey, p. 8.

[37] Walter Raleigh, *The History of the War in the Air, 1914-1918* (Barnsley, South Yorkshire: Pen & Sword Aviation, 2014), p. 152.

[38] Group Captain Keith Isaacs, AFC, 'Australian Naval Aviation – Part 1', *Naval Historical Society of Australia, https://www.navyhistory.org.au/australian-naval-aviation-part-1/* [accessed 24 July 2009], (first published in the *Naval Historical Review,* December 1972)

[39] Isaacs, *Australian Naval Aviation,* n.p.

[40] Casey, p. 8.

[41] Armitage, p. 13.

Aerial League spearheaded an ongoing campaign for the government to create a 'Military Australian Flying Corps'.[42] Taylor's campaign made great use of the press coupled with direct addresses to parliament which coincided with the Australian government's commitment to defensive self reliance. As a direct consequence, the Australian Flying Corps (AFC) was established in 1913.[43] Three aircraft were procured from Britain for use with pilot training, although not without setbacks. The culmination of distance, bureaucracy and the rumblings of war meant that those first trainees did not begin their flight training until late in 1914.[44] Rudimentary training completed, four Squadrons of the AFC were attached to the Australian Imperial Force (AIF) during World War I. This amalgamation of naval and Army pilots, radio operators and observers fought in Egypt and Palestine for the duration of hostilities.[45] For the Australian aviators who wished to continue to push the boundaries of flight that only sea borne aircraft offered, the only option was to join the RNAS. Many Australian naval offers took this option and served alongside their British counterparts in the maritime environment.[46] The British admiralty was anxious to counter the German submarine threat to its fleet and naval aircraft were used initially and fundamentally as an anti-submarine measure.[47] The ability to remain undetected is paramount for submarine operations; they exist to disrupt and ultimately destroy enemy shipping. Operating below the surface the submersibles were able to track unsuspecting ships and either fire their torpedoes when confronted with armed enemy vessels, or surface to attack unarmed merchantmen with gunfire.[48] Aircraft were ideally situated to sight a torpedo track or the low lying silhouette of an enemy submersible and communicating that information to naval assets on the surface. Being sighted insured the submersible dived which effectively nullified their threat and validated the use of aircraft in the naval milieu.

The advantages offered by the use of naval aircraft ensured that by 1916 many of the world's navies carried aircraft that were either amphibian, launched and

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[42] Ian Debenham, 'First Powered Flight in Australia-Episode 1 – George and Florence Taylor, The First Untethered heavier–than–air flights', *Museum of Applied Arts and Sciences,* http://www.powerhousemuseum.com/collection/database/theme,1739,First_Powered_Flight_in_Australia_-_Episode_1_-_George_and_Florence_Taylor,_the_first_untethered_heavier-than-air_flights. (accessed 10 December 2015).

[43] Australian War Memorial, 'Australian Military History: An Overview', *Warfare in a New Dimension: The Australian Flying Corps in the First World War,* https://www.awm.gov.au/atwar/ww1-flying/ [accessed 10 December 2015]

[44] *Warfare in a New Dimension: The Australian Flying Corps in the First World War.*

[45] *Warfare in a New Dimension: The Australian Flying Corps in the First World War.*

[46] Oldham, p 140.

[47] Stevens, *The Royal Australian Navy,* p 51.

[48] Robert D. Ballard, *Exploring The Lusitania* (London: Weidenfeld and Nicolson, 1995), p. 38.

retrieved from the water, or launched off makeshift platforms carried in various craft.[49] The means of launching from the deck of a ship was made possible with the inclusion of purpose-built platforms attached to gun mountings although retrieval still necessitated the aircraft being hoisted from the water. This far from ideal situation continued until RNAS pilot Commander E.H. Dunning safely landed on the deck of battlecruiser HMS *Furious* while the ship was steaming, a milestone for the RN.[50] To further develop this technological innovation the British purchased the uncompleted Italian liner *Conte Rosso* in 1916 and modifications produced the first ship to feature a deck dedicated to flight.[51] This permanent flight deck was built from the bow to the stern and was unencumbered by either funnels or superstructure. This modification allowed the renamed HMS *Argus* to carry 20 aircraft in an under-deck hangar.[52] The British Navy had made it possible for purpose-built ships to fill the niche generated by naval aviation and the era of the capital ship was to be consigned to the past. The aircraft carrier as we know it today evolved from this and other World War I converted merchant ships and HMS *Argus* was the first of the flush deck carriers developed. The war ended before she could put into operation her single seat Sopwith Cuckoo bomber.[53]

As previously stated, the use of aircraft in the maritime environment was limited to the role of countering the submarine threat but that restricted thinking was permanently expanded in 1916. The Battle of Jutland took place in May and saw Flight Lieutenant Frederick J. Rutland, RNAS, pilot a Short Sunbeam sea plane above the battle and communicate enemy positions to the fleet.[54] Thus 'HMS *Engadine* made history by being the first war ship to employ aircraft in a naval action'.[55] The British Battlecruiser Fleet was commanded by Vice Admiral David Beatty who was quick to realise the potential inherent in ship-based reconnaissance aircraft.[56] Beatty lost two battlecruisers during the Battle of Jutland; the HMS *Queen Mary* and HMS *Indefatigable,* his 'eyes of the fleet'.[57] The tactical advantage of aircraft ranging ahead of the fleet was quickly apparent to Beatty; aircraft had a far greater range and speed and his cruisers would not be risked in

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[49] Ray Sturtivant, *British Naval Aviation: The Fleet Air Arm, 1917 – 1990* (London: Arms & Armour Press, 1990), p. 8.
[50] Gillett, *Wings,* p. 8.
[51] Shores, p. 47.
[52] Shores, p. 47.
[53] Sturtivant, p. 9.
[54] Ireland, p. 11.
[55] Ireland, p. 11.
[56] Reynolds, *Epic Of Flight*, p. 24.
[57] Reynolds, *Epic Of Flight*, p. 24.

gaining intelligence.[58] While Beatty acknowledged the limitations weather conditions presented to amphibious aircraft, he remained confident in the effectiveness of naval aviation within the fleet.[59] The Battle of Jutland emphatically proved the value of aviation in the wider context of the naval environment and the RN.

Naval administrator and author of *Aye Aye Minister* Robert Hyslop records HMAS *Australia* as being the first Australian ship to launch an aircraft off her deck in December 1917.[60] The aircraft concerned, a Baby Sopwith, was on loan from HMS *Raven II* to HMAS *Brisbane*.[61] The ship used deck cranes to launch and retrieve the Sopwith from the water twice daily in operations against the German raiders *Seeadler* and *Wolf*.[62]

Two RAN ships contributed to the Battle of Heligoland Bight under RN Admiral Beatty later that month. HMAS *Sydney I* and *Melbourne I* launched two Sopwith Camels, piloted by Flight-Lieutenants L.B. Gibson and A.C. Sharwood in an unsuccessful pursuit of a German reconnaissance aircraft.[63] This practical demonstration of the ability of naval aviation to greatly extend the operational field of battle was a laudable contribution to Beatty's forces.

Following Heligoland Bight HMAS *Sydney,* under the command of Australian RN officer Captain J. S. Dumaresq, survived a Zepplin attack in 1917, operating in defence of HMS *Dublin.* The Zepplin carried out successful bombing runs while staying out of range of the *Sydney'*s guns and *Dublin* was lost.[64] Once again the practicability of an aircraft's uses in the naval theatre was unambiguously demonstrated which led to Dumaresq becoming a staunch advocate of naval aviation. The Zepplin's ability to attack allied ships with impunity, coupled with the allied inability to effectively counter the German air offensive,[65] saw Dumeresq's interest in fledgling naval aviation develop into a passion and he stated in February 1921:

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[58] Reynolds, *Epic Of Flight*, p. 24.
[59] Reynolds, *Epic Of Flight*, p. 24.
[60] Robert Hyslop, *Aye Aye, Minister: Australian Naval Administration 1939 – 59* (Canberra: AGPS Publication, 1990), p. 81.
[61] Odgers, p. 64.
[62] Odgers, p. 64.
[63] Odgers, p. 64.
[64] Gillett, *Wings,* p. 10.
[65] Gillett, *Wings,* p. 10.

> HMA Fleet is strategically impotent and tactically ineffective owing to …[the] absence of Deep Sea Naval Flying Organisation without which no naval force can be tactically efficient, particularly on a station of a very large area, where intelligence on the whereabouts of an enemy force is more than usually important.[66]

Dumeresq's experience at the hands of German air power was a life changing experience and he was enormously enthusiastic regarding its potential in the naval milieu. In the above quotation he advocates strongly the introduction of this service to the RAN. In fact, Dumeresq did more than advocate, he took matters into his own hands and *Sydney* was fitted with a rotating flying off platform, the design and installation of which was overseen by her captain.[67] The success of flight trials with a Sopwith Pup led to the *Sydney* being allocated a Sopwith Camel which in June 1918 'destroyed a German fixed-wing reconnaissance machine, the first time in history of air warfare that a ship-launched aircraft had achieved such a feat'.[68] As a direct consequence of Dumeresq's forward thinking, the five ships of *Sydney's* Second Light Cruiser Squadron operated seaborne Sopwith aircraft.[69]

The Sopwith Camel and the Pup were single-seat fighter aircraft, the limitations of which centered on reconnaissance. The necessity for the pilot to focus on the challenges of flight naturally limited his ability to register intelligence. This shortfall was overcome with the addition of a two- seater aircraft, able to carry the pilot and an observer and was trialed by Indefatigable class Battlecruiser HMAS *Australia* in March 1918. To make a launch possible it was necessary to construct a ramp which protruded from the starboard midships 12 inch gun turret. Flight Lieutenant F.M. Fox's flight in a Sopwith 1½ Strutter proved successful, as did his later attempt carrying an observer and full wireless equipment.

Fox's flight completed the first successful launch of a two-seater aircraft from a British/Australian warship.[70] These aviation milestones established naval aviation as a potentially effective weapon during World War I. American Norman Polmer, a naval aviator, stated in *A History of Carrier Aviation and Its Influence on World*

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[66] Commodore J.S. Dumaresq, RN, 'Documents on Australian Maritime Strategy' in *In Search of a Maritime Strategy: the maritime element in Australian defence planning since 1901,* ed. by D. Stevens (Canberra: The Australian National University, 1997), p. 173.

[67] Sea Power Centre – Australia, 'RAN Aviation and Air Combat – First and Last', *Semaphore,* 2 (January 2008), http://www.navy.gov.au/sites/default/files/documents/Semaphore_2008_2.pdf [accessed 30 December 2015].

[68] 'RAN Aviation and Air Combat' n.d.

[69] 'RAN Aviation and Air Combat' n.d.

[70] Jimmy Lee & Les Matterson, *Albatross Melbourne Sydney Vengeance* (unpublished history of the FAA, 1988), p. 3.

Events, Volume I: 1909-1945, that 'the men of the RNAS demonstrated a high level of ingenuity, innovation and audacity as well as perseverance by the naval aviators. Those traits were seen in ongoing RNAS operations'.[71]

Clearly naval aviation vastly extended the reach of the fleet in the areas of reconnaissance and the intelligence of enemy positions and strength. The inclusion of aircraft into the naval theatre additionally provided an efficient counter to the newly developed, torpedo-armed, submersibles. Germany operated 35 submarines by 1915 which took a heavy toll on allied shipping.[72] The introduction of merchant shipping convoys with RN escorts proved an effective counter, even more so with the inclusion of maritime aircraft. The ability to observe and track the course of the torpedo to its source placed the submarines in the role of the hunted for the first time.[73] Height above sea level is of paramount importance to sighting these low riding weapons and there is no better vantage point than that of an airborne craft.

These examples clearly show that the addition of naval aircraft provided added protection for vulnerable fleet assets and in addition, communicated accurate fall of shot for naval guns. Successful action by German Zeppelins established both the naval vessels' vulnerability to attack and the effectiveness of air attacks on naval assets. The inclusion of aircraft into the naval arsenal proved extremely successful and naval aviation played a small but relevantly significant role in the war at sea.

The end of WW1 resulted in Australian naval craft returning to home waters from the European theatre, complete with flying-off platforms but without their borrowed aircraft. The successful use of aircraft in a naval environment had proved beyond doubt to the Australian Naval Board that the development of a Fleet Air Arm was a necessity. The Naval Board, which had previously shown little enthusiasm for naval aviation, issued a statement on 25 June 1918 which stated in part:

> …A Naval Air Service will form a very important factor in the future defence of Australia, having primary regard to the immense stretches of coastline to be patrolled and the extensive distances otherwise to be achieved by ships of war at a greater cost and in a longer time. The values of aircraft against submarine attack has been fully demonstrated in the present war and is now an accepted fact. It must be recognised

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[71] Norman Polmer, *Aircraft Carriers: A History of Carrier Aviation and Its Influence on World Events: Volume I: 1909-1945,* (Nebraska: Potomac Books, 2006), p. 14.

[72] Brayton Harris, '1914 – 1941', *World Submarine Timeline 1580-2000,* http://www.submarine-history.com/NOVAthree.htm. (accessed 1 June 2015).

[73] Harris, *World Submarine Timeline.*

that in the event of an attack on Australia our modern force would be provided with aircraft, and fighting machines prepared to meet an assault.[74]

The undisputed effectiveness of naval aviation, particularly as an aid to reconnaissance and intelligence gathering, was no justification for its development in the economically prudent post-war period. Hence, in the post-war environment British, and therefore Australian, enthusiasm for further developing naval aviation waned. In a difficult post-war political and economic environment the meagre British military budget focused on the development of the Royal Air Force (RAF) in 1918.[75] The successful use of aircraft to support allied ground forces was enthusiastically embraced by the British military and the focus centered on developing a land-based force. Developing naval aviation was therefore consigned to a much less significant second place.

The establishment of military aviation during the Great War and the success of air raids over London in the summer of 1917 highlighted the importance of British air defence. Various government-sponsored reports indicated that the creation of 'one single unified command that would include all the fighter aircraft in Britain'[76] would offer the best solution. This land based defensive shield would be inclusive of all anti aircraft protocols and therefore offered the best form of protection. A 'unified command' would offer an expanded force which was able to support both British naval and Army forces in conjunction with expanding bombing capabilities.[77] Thus the established Royal Flying Corps (RFC) and the RNAS combined and came under the control of the Air Ministry.[78] At this time the RNAS consisted of 67,000 personnel with approximately 3,000 aircraft which were to be taken over by the RAF.[79]

The Australian government had approved the purchase of aircraft to be carried aboard RAN ships in December 1918, but the lack of facilities in Australia to maintain the aircraft resulted in the order being rescinded.[80] As it did in Britain, the

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[74] Gillett, *Wings,* p. 18.

[75] Ireland, p. 20.

[76] Armitage, p. 26.

[77] Armitage, p. 27.

[78] 'The Royal Flying Corps: Briefing No. 8', *Farnborough Air Sciences Trust*, http://www.airsciences.org.uk/FAST_Briefings_08_RoyalFlyingCorps.pdf (accessed 24 January 2015).

[79] Armitage, p. 27.

[80] Lew Lind. *The Royal Australian Navy: historical naval events year by year* (Frenchs Forrest, N.S.W.: Reed Books, 1982), p. 62.

end of the war resulted in a dramatic drop in defence expenditure. In 1920 the Australian government combined aviation under the umbrella of a newly formed Air Force, being in all respects a copy of the British model. Similar to what occurred in Britain, the formation of an Australian Air Force further strained the very limited defence budget.[81]

The Royal Australian Air Force (RAAF) incorporated the Australian Air Corps and from this point all aircraft came under control of the RAAF. Budgetary restraint in the post-war period and the necessity to streamline control over military aviation under one ministerial umbrella were the mitigating factors for both the British and Australian governments' decision to amalgamate aviation services. The Australian Prime Minister William Hughes announced that a board would be set up to oversee the Air Force which would include representatives of both naval and civil aviation. The Minister for Defence, Senator George Pearce, stated on September 17 that a separate naval air service was both militarily unnecessary as well as fiscally unviable with the establishment of the RAAF.[82] This new autonomous force would provide aerial support to both the Army and the navy.[83]

The total Royal Australian Air Force complement comprised only 20 officers and 120 airmen who were based at Point Cook, Victoria.[84] The RAAF took delivery of the Fairey IIID aircraft which were previously proposed for the navy and supplied the pilots to fly them. However, with little more than 140 personnel the fledgling RAAF had little option but to look to the RAN to supply trained aircrew for their six new Fairey amphibian aircraft. The amalgamation of the essential RAN members with RAAF crews resulted in these aircraft and their crews forming 101 Flight of the RAAF in 1923.[85]

While the Australian military was taking advantage of technological innovations, the political circumstances of the post-war years stymied naval growth. As a member of the Commonwealth, Australia's service personnel had served with British military forces during the First World War and Australia was therefore a signatory to the Washington Naval Treaty. As such, post-war Australia conformed to the terms of

[81] Group Captain Keith Isaacs, AFC, 'First of the Line – HMAS Albatross, first aircraft carrier', *Naval Historical Society of Australia, https://www.navyhistory.org.au/australian-naval-aviation-part-1/* [accessed 24 July 2009], (first published in the *Naval Historical Review,* October 1977).

[82] Gillett, *Wings,* p. 21.

[83] Gillett, *Wings,* p. 21.

[84] Greg Copley, *Australians in the Air,* (Port Melbourne: Rigby, 1973), p. 52.

[85] Gillett, *Wings,* p. 157.

the treaty signed in Washington on February 6, 1922. The treaty effectively limited the construction of naval ships by the former allies and honed security agreements between Pacific nations.[86] To meet these agreements the Australian government instigated a vast reduction in naval personnel in 1922.[87] Following this global pattern of disarmament, the Australian Navy scrapped and sank the battlecruiser HMAS *Australia* followed by six RN submarines in 1924.[88]

The 1923 Imperial Conference focused on the development of individual foreign policy in the dominions and strengthening Commonwealth ties. With regard to Australia and future reliance on RN protection a consensus was reached; Australia must begin developing a self defence capability.[89] In the fiscally constrained decade of the 1920s expanding an already inadequate defensive force and countering the previous disarmament policy, it was proposed that Australia establish an independent Fleet Air Arm.[90] The RAAF stridently voiced its disapproval and made a concerted effort to have the agreement rescinded.[91] With the introduction of a naval air arm the inadequate defence budget would be expected to extend further, perhaps becoming problematic for the newly formed RAAF.

One of Australia's staunchest opponents of naval aviation was RAAF Air Marshall Richard Williams and his opinions are made succinct in his autobiography:

> The Navy came to the Defence Department in 1921, thus putting all three Services under one Minister, but there was no subsequent interest by the Navy in the development of the Air Force. However, successive Admirals of the Royal Navy, as Chiefs of the Naval staff, tried to introduce the principle that no aircraft was to be sent over the sea without approval of the Navy. That was so absurd that the Minister ignored it and so did I.[92]

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[86] The Editors of Encyclopædia Britannica, 'Washington Conference: 1921-1922', *Encyclopaedia Britannica,* http://www.britannica.com/event/Washington-Conference-1921-1922 [accessed 29 December 2015].

[87] Department of Defence, *Australian Naval History* (Canberra: Australian Government Publishing Service, 1977), p. 8.

[88] A.K. MacDougall, *Australians at War: A Pictorial History* (Noble Park, Victoria: Five Mile Press, 2002), p. 158.

[89] *Flying Stations,* p. 16.

[90] *Flying Stations,* p. 16.

[91] *Flying Stations,* p. 16.

[92] Stewart Wilson, *Military Aircraft of Australia* (Weston Creek, A.C.T.: Aerospace Publications, 1994), p. 18.

In traditional Australian military strategy, naval forces constitute the first line of defence and the inclusion of a navy-controlled aviation component would further strengthen that defensive line. From the RAAF point of view, funding needed to establish a Fleet Air Arm would be better spent on expanding the Air Force. An expanded RAAF could adequately maintain Australia's security with naval forces focused on securing Australian waters. At the heart of the debate lay the proportioning of the limited defence budget.

As 101 Flight (Fleet Co-Operation) of the RAAF, the naval and Air Force crew and aircraft participated in gunnery spotting for the fleet and limited short reconnaissance flights.[93] The RAN observers used by the RAAF for 101 Flight were specially trained by the RAN from 1923 in accordance with Admiralty instructions. The observers included many naval air crews who had found themselves otherwise superfluous to naval requirements.[94] This amalgamation of flight crews brought its own idiosyncrasies with the naval personnel 'required to wear RAAF uniform as field dress but continued to wear RAN uniform for all other occasions'.[95] Naval personnel who had an interest in flight were initially channelled into observer training. By 1925 the RAAF set in motion a four-year pilot's course to be undertaken at RAAF's Point Cook base which included RAN personnel who would become members of the co-operation flight.[96]

The amalgamation of pilots of two services was problematic and far from ideal, therefore agreement on the need to establish the FAA was reached in 1923. While the debate raged between the RAN and the RAAF over control, Prime Minister Stanley Bruce announced in 1924 that two aircraft-capable cruisers were to be built. *Australia* (II) and *Canberra* were to be built in England, another decision that caused heated debate during a time of economic uncertainty.[97] The contract was nonetheless awarded to a British shipyard for economic reasons despite the argument that Australian jobs would be jeopardised, as would the dockyard facilities at Cockatoo Island.[98] Progress towards their completion was being made

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[93] Stevens, *Royal Australian Navy,* p. 59.
[94] Gillett, *Wings*, p. 24.
[95] Lee & Matterson, p. 5.
[96] Lind, p. 75.
[97] Air Marshall Sir Richard Williams, cited in 'First of the Line – HMAS Albatross, first aircraft carrier', *Naval Historical Society of Australia, https://www.navyhistory.org.au/australian-naval-aviation-part-1/* [accessed 24 July 2009], (first published in the *Naval Historical Review,* October 1977).
[98] David Joseph Wilson, *The Eagle and the Albatross: Australian Aerial Maritime Operations 1921 – 1971* (unpublished PhD thesis, University of New South Wales, 2003), p. 16.

in June 1925 when the Governor General, Lord Stonehaven, made an unprecedented public announcement to the effect that the Australian government had reached agreement on the purchase of a seaplane carrier. This announcement caught the RAAF hierarchy by surprise as no discussion had been entered into with the Australian government regarding this purchase. Air Marshall Williams recalls his reaction when it was announced in the press:

> In 1926…I read in the Press one morning that on the previous day the Government had placed a contract with a dockyard in Sydney for the construction of a seaplane carrier to be known as HMAS Albatross. I had heard nothing of this from the Navy so I sought confirmation of it from the Minister, and when I asked him who was to supply the aircraft he said 'You will'. He had not mentioned the matter to me previously. This was an extraordinary position.[99]

The decision to construct the RAN's first seaplane carrier, HMAS *Albatross,* in Australia would offer employment opportunities in the wake of the decision to construct the cruisers in Britain. *Albatross* was considered a financially viable alternative to constructing or purchasing a purpose-built aircraft carrier.[100] At the time of this announcement the RAN did not require a seaplane carrier and no plans to acquire one were in evidence. According to the author of *Australian Carrier Decisions: The Acquisition of HMA Ships Albatross, Sydney and Melbourne,* Anthony Wright:

> Finally, not only was there no seaplane carrier in the five-year programme placed before Parliament by the Treasurer on 31 July 1924, but also provision was made for a land based reconnaissance, patrol and gunnery-spotting capability: a RAAF float seaplane flight of about five aircraft to be established by the end of the financial year at Sydney for naval co-operation. Clearly then, the acquisition of a seaplane carrier had become "urgently necessary" by 12 September 1924 not for the naval defence of Australia, but for political reasons.[101]

We can see from this change of plans from July to September 1924 that the building of the *Albatross* was a purely political decision. This act of appeasement

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http://www.unsworks.unsw.edu.au/primo_library/libweb/action/dlDisplay.do?vid=UNSWORKS&docId=unsworks_3183 [accessed 28 July 2009].

[99] 'First of the Line', n.d. .

[100] Vic Cassells, *The Capital Ships: their battles and their badges* (East Roseville, N.S.W.: Kangaroo Press, 2000), p. 12.

[101] Anthony Wright, *Australian Carrier Decisions: The Acquisition of HMA Ships Albatross, Sydney and Melbourne*, Papers in Australian Maritime Affairs, No.4 (Canberra: Maritime Studies Program) 1998, cited in Wilson, *The Eagle and the Albatross,* p. 17. http://www.unsworks.unsw.edu.au/primo_library/libweb/action/dlDisplay.do?vid=UNSWORKS&docId=unsworks_3183 [accessed 28 July 2009].

hoped to mollify those strident voices agitating against awarding a British company a significant financial contract. Incorporating an aviation component within the RAN would require extensive financial outlay, the greatest of which would be the acquisition of aircraft capable ships, *Australia* and *Canberra.*

Naval aviators had considered themselves members of the FAA branch of the RAN since its promulgation by the government in 1923. This however was never formalised.[102] In 1926 the Defence Committee was confident that the FAA would be retained although the Australian government formally reversed their decision to form an FAA in 1928.[103]

This reversal effectively placed the RAAF in absolute control of the country's present and future aircraft needs.[104] The policy of 'participation in Empire defence and the maintenance of the RAN as an independent - albeit token – contribution towards that defence' was supported by the Labor government.[105] The relationship between senior ranking RAN officers and Labor ministers was strained and tensions persisted. A point was reached where the government thought it necessary to issue a warning against making policy criticism public.[106]

The situation between the RAAF and the RAN was no less acrimonious with the Navy doubtful of the Air Force's ability to secure the nation's defence.[107] This atmosphere of distrust resulted in the lines of communication between the two services becoming more tenuous, the result of which was that the lessons learned over complex and protracted naval operations in regard to defence were not shared.[108] To add insult to injury the three-month flight training course instigated by the RAN became 'a very effective RAAF recruiting tool for some of the RAN's brightest officers'.[109]

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[102] *Flying Stations,* p. 16.
[103] *Flying Stations,* p. 16.
[104] Fazio, p. 7.
[105] Stevens, *Australian Centenary,* p. 86.
[106] Stevens, *Australian Centenary,* p. 86.
[107] Essay No. 1: Economy in Defence, 1930, NAA (ACT):A594/1, 39/6, p.3, cited in Stevens, *Australian Centenary,* p. 85.
[108] Stevens, *Australian Centenary,* p. 85.
[109] *Flying Stations,* p. 15.

The worldwide economic decline of 1929 shifted the focus from the struggle for control within the Australian military to one of survival. The downturn resulted in the Australian government cancelling compulsory military service and while enlistment applications were high, acceptances plummeted.[110] Training programs within the navy were pared to the minimum, pay cuts were instigated and officers and ratings deemed to be superfluous were retrenched.[111]

The Australian military budget was further reduced between 1930 and 1932. In this era of economic uncertainty, RN Rear Admiral Kerr, First Naval Member, presented an alarming assessment of Japanese political intentions. The chiefs of staff posited that the rise of German militarism forced the RN to keep the majority of her fleet in Europe; Japan would take advantage of her inattention in the Asian region. A declaration of war was, therefore, imminent.[112] With the British Fleet occupied, Singapore was particularly vulnerable and if the port fell into Japanese hands, Australia was open to invasion.[113] Kerr was confident that the British base in Singapore would be completed before a declaration of war; therefore the RN would protect her interests.[114] Discussion on Australia's Defence Policy swiftly followed with debate focused on the possibility of invasion and the ability of the RAAF to counter any aggressive Japanese move. According to David Stevens, the debate divided the Defence Committee. The RAAF vehemently argued the superiority of ground and Air Forces as opposed to placing naval aviation capabilities within the RAN:

> The ideal of an Australian Navy has nothing really to recommend itself as a national institution. With the big developments in Naval Disarmament policies, it is hardly justified, having regard to the financial position, and the marked advantages of employing a British Squadron, when the greater and the only duty is co-operation with the British Navy. The opportunity is now open to the Australian nation to develop the Air Force as a national institution of primary importance.[115]

Relations between the RAAF and the RAN continued to be contentious and, with budget cuts, by 1933 the RAN was reduced to three commissioned ships, HMAS *Canberra, Australia* (*Albatross* was in reserve at this time) and *Anzac,* the only destroyer. In a move to bolster Australian security, *Anzac* was to be joined by

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[110] Stevens, *Australian Centenary,* p. 84.
[111] Stevens, *Australian Centenary,* pp. 87-88.
[112] Stevens, *Australian Centenary,* p. 85.
[113] Stevens, *Australian Centenary,* p. 85.
[114] Stevens, *Australian Centenary,* p. 85.
[115] Stevens, *Australian Centenary,* p. 85.

HMAS *Vampire, Voyager, Vendetta, Waterhen* and *Stuart,* destroyers on loan from Britain, which were all commissioned in October 1933.[116] The acquisition of five ships into the much reduced RAN was the first tentative step in a three-year program to increase Australian defence capabilities.[117] As part of this increase in assets, the RAN accepted increased Commonwealth defence responsibility. The RAN was charged with maintaining the vital lines of communication between Singapore and Hong Kong and to ensure the Straits of Malacca remained un-mined and free of Japanese submarines.[118]

By the end of 1935 Japan had withdrawn from the Washington Treaty and the London Naval Conference and Germany had revoked the Treaty of Versailles. Australian Opposition Leader John Curtin joined others in suggesting the defence budget be increased to ensure the Army and the Air Force were able to support the Navy in her defensive role.[119] To this end, by 1935 the Australian Navy had acquired three light cruisers with HMAS *Hobart* gained in exchange for the now ageing *Albatross*. With the loss of the seaplane carrier the FAA ceased to exist with RAAF personnel again taking centre stage in the naval environment.[120] In 1938, the RN agreed to the transfer of HMS *Apollo* (HMAS *Hobart*) to the Australian fleet and that *Albatross* was to be accepted as part payment. She sailed for Britain in July where she was placed in reserve in December.[121]

The Japanese move against Manchuria and China caused Britain unease and they were aware that any withdrawal of their limited Asian-based forces would be seen as a 'gift of enormous value to the Japanese navy.'[122] Concerned with the rise of Nazism in Europe and Japanese advances in the East, the Australian government increased the military budget exponentially. The successful defence of Australian shores was seen to be beyond the ability of the RAAF and the Navy was tasked with providing a first line of defence. Any aggressive overtures towards Australia were best fought beyond our boundaries and the only way to accomplish that was to provide the navy with the wherewithal.[123] Apportioned 15 million pounds towards rebuilding, the Chief of Naval Staff put forward a plan in 1936 for HMA ships

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[116] Lind, p. 82.
[117] Odgers, p. 74.
[118] Stevens, *Australian Centenary,* p. 93.
[119] Jason Sears, cited in Stevens, *Australian Centenary,* pp. 97-98.
[120] Gillett, *Wings,* p. 41.
[121] Gillett, *Wings,* p. 32.
[122] Odgers, p. 75.
[123] Gillett, *Wings,* p. 41.

Australia and *Canberra* to increase the number of aircraft carriers to three. Implementing this plan would necessitate structural changes and while this plan was under consideration a suggestion was put forward to introduce flight capabilities to light cruisers. HMAS *Perth, Hobart* and *Sydney* were the ships under discussion and in 1936 they were fitted with catapults.[124]

With Germany and Japan rearming amidst the gathering clouds of war, the RN was still badly under strength in 1939. Naval aviation had been under the control of the RAF for the past 20 years with the navy only gaining control in 1937 following a protracted fight; hence they were under prepared for war.[125] Irrespective of the question of naval aviation control, the British had moved forward with the development of the aircraft carrier with specially constructed flight decks and in 1923 HMS *Hermes* had been commissioned.[126] The Americans commissioned their first carrier, the modified USS *Langley* a year earlier, but further modifications were needed to meet the standards set by the British.[127] While the United States commissioned *Lexington* and *Saratoga* in 1928, Japan was also making headway in fleet aviation.[128] Japan had a Naval Air Service before World War I and followed the British developments with great interest.[129] The Japanese carrier *Hosho* was the first of its kind completed and although not large, 'it was the keystone of the mighty Japanese carrier fleet that would range the Pacific in 1941.'[130]

The rise of the aircraft carrier in World War II displaced the battleship as the ultimate naval weapon while improvements in technology greatly enhanced the versatility of carrier-borne aircraft. The list of naval aviation achievements in the first years of World War II is quite extensive: Pearl Harbor, the Battle of Midway, the Battle of the Coral Sea and the raid on Taranto Harbour put the effectiveness of naval aviation beyond question. They are in fact 'compelling reasons for any navy worthy of the name to acquire an aviation capability'.[131]

While the above mentioned actions feature prominently in any World War II history, RAN ships and their aircraft also conducted smaller but no less important

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[124] Gillett, *Wings,* p. 38.
[125] Ireland, p. 20.
[126] Ireland, p. 20.
[127] Ireland, p. 21.
[128] Reynolds, *Epic Of Flight,* p. 33.
[129] Reynolds, *Epic Of Flight,* p. 36.
[130] Reynolds, *Epic Of Flight,* p. 24.
[131] *Flying stations,* p. 29.

operations throughout the conflict. In October 1939 Light Cruiser HMAS *Hobart* began patrol duties on the west coast of Sumatra and in the Sundra Strait while based in the East Indies Station. During this deployment *Hobart* launched her amphibian aircraft, a Supermarine Seagull V, on numerous successful reconnaissance missions. This aircraft was armed with two or three Vickers gas operated K guns or rapid fire machine guns which were produced for use on aircraft. A maximum load of 760 pounds in bombs was carried beneath the aircrafts wings which were put to use when the Seagull embarked on her first bombing mission in the Red Sea on June 17 1940 against the Italian wireless station at Centre Peak Island. In this instance the target was destroyed without the aircraft being challenged.[132] Also a Light Cruiser, HMAS *Canberra* began her convoy escort duties in the Indian Ocean in 1940 and also carried one Seagull aircraft and both ships' launched their aircraft in pursuit of reconnaissance, in enemy attacks and in defence of the merchantmen they escorted. February 1941 Canberra used both her ships armaments and her aircraft to successfully destroy the German raider supply ship *Coburg* and Norwegian supply tanker *Kitty Brovig*.[133] After many successful deployments which garnered her the respect of the nation, HMAS *Sydney*, sister ship to *Hobart*, was lost with all hands (645) on November 19, 1941 off the coast of Western Australia. The ship encountered the German raider *Kormoran* in the guise of a Dutch merchantman and closed to authenticate her nationality. There has been enormous speculation as to why her very experienced Captain, Joseph Burnett, allowed *Sydney* to lose the advantage of her superior fire power by permitting the two ships to close within an estimated one mile of each other. In doing so any tactical advantage was lost. The raider opened fire and inflicted mortal wounds immediately while *Sydney's* position relative to *Kormoran* enormously limited the firepower she could bring to bear. Coupled with a slow rate of fire, which, according to the German survivors, lacked accuracy, it has been concluded that *Sydney's* bridge and gunnery centre were destroyed in the opening salvos, thus sealing her fate. *Sydney's* guns did inflict enough damage on *Kormoran* that the ship had to be scuttled after which 317 members of her crew survived. On rescue the German crew reported that *Sydney's* amphibious Seagull V aircraft was on the catapult with her engine running when the two ships commenced action but perhaps Captain Burnett and his bridge crew were either

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[132] Commonwealth of Australia, *Navy*, 'HMAS Hobart (I)' (2015).
   http://www.navy.gov.au/hmas-hobart-i [accessed 10 August 2015].
[133] Commonwealth of Australia, *Navy*, 'HMAS Canberra (I)' (2013).
   http://www.navy.gov.au/hmas-canberra-i [accessed 10 August 2015].

killed or incapacitated in the opening minutes and the chance to launch was lost.[134] As the above examples of Australia's World War II naval aviation contribution were prior to the establishment of the Australian Fleet Air Arm the aviators concerned were largely members of the RAAF.

Post-World War II the Australian Navy acknowledged its inadequacies in not previously establishing an independent Fleet Air Arm. The role played by naval aviation in the eventual routing of enemy forces, particularly in the Pacific, cemented the role of naval aviation in the military lexicon.[135] The RAN had firmly established their presence in the Asian region during the war and the shift in focus from battleships to aircraft carriers had been completed. The relevance of naval aviation in the RAN had been firmly established. Frank Doak, author of *Royal Australian Navy – A Brief History*, states:

> The decision to operate aircraft carriers was of enormous significance to the RAN as it opened up a new arm of Australian defence. It also changed the whole concept of naval operations, with the Fleet centered upon the carrier rather than the traditional battle ship. The carrier gave new status to the RAN for it meant that Australia was the only country in South East Asia with a Fleet Air Arm. It meant, also, that the RAN could take on the status of 'fleet' rather than 'Squadron' and the title was officially bestowed as from 1 January 1949.[136]

The Australian government acknowledged the advantages of developing aviation capabilities within the RAN and the procurement of aircraft carriers followed. The Chief of the Naval Staff (CNS) Admiral Sir Guy Royle, KBE, is considered to have played a significant role in the discussions between politicians and the military hierarchy.[137] It was generally understood in military circles that a naval aviation component would be relevant to the defence of Australia. Naval aviation was a proven counter to the threat presented by submarines and reduced the reliance on capital ships and their firepower.[138] These practical applications were not necessarily as clear to all levels of the Australian Navy, and clarifying the precise and practical capabilities of the new branch fell to Royle.[139]

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[134] Commonwealth of Australia, *Navy*, 'HMAS Sydney (II)' (2015). http://www.navy.gov.au/hmas-sydney-ii [accessed 10 August 2015].

[135] Frank Doak, *Royal Australian Navy: A Brief History* (Canberra: Australian Government Publishing Service, 1986), p. 36.

[136] Doak, p. 36.

[137] *Flying Stations,* p. 29.

[138] *Flying Stations,* p. 29.

[139] *Flying Stations,* p. 29.

Royle had begun his appointment to Australia in 1941 after a long career in the RN. Royle was commanding officer of the British aircraft carrier HMS *Glorious* during the 1930s, followed by his promotion to secretary to the First Lord of the Admiralty. Further promotion saw him take up the position of Vice Admiral of Aircraft Carriers; he then served as Fifth Sea Lord and, previous to his Australian appointment, was the Chief of Naval Air Services.[140] The 1930s saw the RN wrest control of naval aviation from the RAF in the success of which Royle played a substantial part, thereby making him qualified to guide the RAN to the same conclusion.[141]

The initial steps towards establishing an Australian Fleet Air Arm in the post-war period were taken in 1941 by the Minister for External Affairs.[142] H.V. (Doc) Evatt requested British assistance in establishing naval aviation within the RAN, the result of which was the offer of HMS *Hermes*, commissioned in 1923. Unfortunately this plan did not come to fruition as *Hermes* was sunk by the Japanese in 1942.[143] The war established a growing reliance on aircraft carriers and Britain considered them far too valuable an asset for the Admiralty to re-consider Australia's request again until at least 1944, by which time the allies had turned the tide of the war. In that year Australia once again requested the acquisition of a British carrier, this time the soon to be completed HMS *Ocean*.[144] Complex negotiations began between Royle and the RN to secure two cruisers and a light fleet carrier without cost to the Australian tax payer. These negotiations proceeded without the knowledge of the Secretary of the Defence Committee or the appropriate chiefs of staff, circumventing parliamentary procedure.[145] With the success of the scheme hanging in the balance, Australian Prime Minister, John Curtin, met with his British counterpart, Winston Churchill, in London to discuss the matter.[146] Curtin was aware that the British were reluctant to supply Australia with aircraft carriers as the men required to man them would result in the substantial loss of Australian seamen from RN service.[147] Churchill eventually offered HMS *Venerable,* along with *Ocean,* both of which were *Colossus*-class carriers*.* Curtin ruminated on the offer until 1945

[140] *Flying Stations,* p. 29.
[141] *Flying Stations,* p. 29.
[142] *Flying Stations,* p. 29.
[143] Wilson, *Military Aircraft,* p. 17.
[144] Wilson, *Military Aircraft,* p. 17.
[145] *The Navy and the Nation: The Influence of the Navy on Modern Australia,* ed. by David Stevens and John Reeve (Crows Nest, N.S.W.: Allen & Unwin, 2005), p. 212.
[146] Stevens & Reeve, *Navy and the Nation*, p. 212.
[147] Stevens & Reeve, *Navy and the Nation*, p. 212.

when formal agreement was reached for Australia to take possession of the two ships.[148] Although a consensus had finally been reached on the necessity of adding aviation capability to the RAN, the acquisition of the two ships was further delayed.[149] There was no question that financial and logistical support for *Venerable* and *Ocean* would fall to Australia and these ongoing difficulties proved insurmountable and the scheme was shelved for the duration of hostilities.[150]

With the end of the war Britain entered a phase of military downsizing which included its large carrier fleet. Still under construction in 1945 were ten *Majestic* and *Hermes*-class carriers, being far in excess of British peacetime needs.[151] With the war over the question of adding an aircraft carrier to the RAN was again raised and negotiations entered into.[152] Once again Sir Guy Royle accepted the challenge and approached a terminally ill John Curtin with his RN approved plan to buy a British carrier outright, or in exchange for Australian labour for the British Pacific Fleet.[153]

By February 1945 the question of Australian expertise and recruitment ability was once again brought to the forefront of negotiations. Incoming Australian Prime Minister Joseph Benedict (Ben) Chifley remained skeptical of the navy's ability to recruit and train the required personnel and declined Churchill's offer.[154] In October 1945 another tentative step forward was taken when agreement was reached between the Minister of the Navy and the Deputy Director of Plans RAN, to send experienced naval aviator Lieutenant-Commander (later Admiral Sir) V. A.T. Smith[155] to London to facilitate the eventual introduction of an Australian Fleet Air Arm. Smith noted in his memoirs that the part he played in the addition of a Fleet Air Arm to the RAN began inauspiciously:

> When VJ Day seemed to be in the offing the Director of Plans at Navy Office, Commodore G.G. O. Gatacre, told me that they had been working on post-war plans for the RAN and these included two carriers, two carrier air groups plus the shore organisation and facilities required. I was asked to produce a draft plan. It could only be a first draft as so many details were not available and, in any event, well beyond the ability of one planner. The plan was drawn up and passed to Navy

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148 Stevens & Reeve, *Navy and the Nation*, p. 213.
149 Wilson, p. 17.
150 Wilson, p. 17.
151 Fazio, p. 4.
152 Fazio, p. 5.
153 Hyslop, p. 84.
154 Hyslop, p. 84.
155 See appendix A for all aircraft carrier Commanding Officers, Fleet Commanders, Flag Officers.

Office. The next thing that happened to me was that my appointment to VA(Q)'s staff ended on 20 October 1945. In a way this really was the first step towards the creation of the RAN Fleet Air Arm.[156]

Smith attained his wings as an observer in 1937 after which he served in HMS *Glorious, Ark Royal, Shropshire* and in 1943 transferred to aircraft carrier *Tracker* during her deployment as escort for Atlantic and Russian convoys. When stationed at the British Air Station *Sparrowhawk* Smith was responsible for an attack on the German battleship *Scharnhorst* for which he was awarded the Distinguished Service Cross (DSC). After surviving the sinking of cruiser HMAS *Canberra* during the battle of Savo Island, Smith went on to serve as the Air Planning Officer for the Normandy invasion in 1944. Countryman and fellow naval aviator Peter Howson, who went on to become the Minister for Air and Acting Minister for the Navy, was also a member of this planning team.[157] Greatly encouraged in their endeavors by the Deputy Chief of Naval Staff, Vice Admiral (RAN) Sir Henry Burrell,[158] detailed plans, submitted in 1945 and 1946, paved the way for Admiral Sir Louis Hamilton, Royle's replacement, and the Admiralty to open discussions with the result that agreement was reached in late 1946 for the transfer of two carriers.[159] Smith's distinguished career includes service in the Korean War as he served as HMAS *Sydney's* Executive Officer. This highly respected RAN officer is known as the 'Father of the FAA' as his contribution to the formation of the Fleet Air Arm was instrumental.

The agreed price of 3.4 million pounds for the transfer of two light fleet carriers was considered more than reasonable, although it did not include the costs of bringing the ships up to modern standards.[160] While agreement had finally been reached on procuring these two aircraft carriers, the matter of which service would be responsible for the aviation component was not. Lieutenant Commander Smith noted; 'I think it would be fair to say that the RAAF generally was strongly against the RAN having a Fleet Air Arm.'[161] In 1946 permission was granted by the Admiralty for the loan of three RN officers, experienced in naval aviation, to join

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[156] Sir Victor Smith, *A Few Memories of Sir Victor Smith* (Canberra: Australian Naval Institute, 1992), p. 41. Note: VA(Q)'s – Vice Admiral, logistics in all its aspects.

[157] *Soldier, Politician and Keen Diarist Peter Howsen 1919-2009.* The Sydney Morning Herald, February 9 2009. www.smh.au/comment/obituaries/soldier-politician-keen-diarist-20090208-80wzhtml. [accessed 3 August 2016].

[158] *Vice Admiral Sir Henry Mackay Burrell.* Navy. www.navy.gov.au/biography/vice-admiral-sir-henry-mackay-burrell. [accessed 3 August 2016].

[159] Hyslop, p. 85.

[160] Stevens, *Royal Australian Navy,* p. 164.

[161] Smith, p. 42.

Lieutenant-Commander Smith on the Fleet Air Arm planning staff. The purpose of this planning staff was twofold: to produce a workable plan for the construction of the fleet air arm, and to liaise with the RAAF.[162]

Following in the footsteps of the RN, control of naval aviation in Australia also had to be won from the RAAF. David Stevens states:

> Convinced that effective air power required unity of effort and maximum flexibility of employment, the RAAF firmly believed that it should maintain overall command of both land-based and ship-borne aircraft. The RAN, in contrast, feared the withdrawal of operational control in national emergency and stressed the uniqueness of naval service and the need to weld a ship's company – including its embarked aircrew - into a cohesive unit. The CAS, Air Marshal George Jones, recorded his strong dissent, but the Council of Defence accepted the naval arguments. On 15 August 1947, Cabinet endorsed the decision to create a separate Naval (later Fleet) Air Arm.[163]

The 1946 agreement between Britain and Australia on the transfer of two aircraft carriers culminated in April 1948 with the announcement to Parliament of HMS *Terrible's* transfer to the RAN, as HMAS *Sydney III.*[164] The construction of *Terrible* had begun in 1943 but the building program was suspended in the post-war period and construction was not completed until she was sold to Australia.[165]

The loss of Australia's first aircraft carrier HMAS *Albatross* in 1933 had been a major blow for naval aviation within the RAN. The acquisition of HMAS *Sydney* in 1948 reintroduced the title of 'fleet' and cemented the future of Australian Naval Aviation. *Sydney* arrived in Australia in 1949 and took up her position as flagship of the Australian Fleet. There followed the intense flight training period, or work up, with the men and aircraft that comprised the 20th Carrier Air Group (20th CAG).[166] *Sydney* toured Australia and New Zealand before returning to the United Kingdom to embark the Squadrons of 21st CAG in 1950.

It was during this trip that the conflict between North and South Korea escalated and on her return to Australia, HMAS *Sydney* prepared to deploy to Korea. Deployed as an addition to Commonwealth forces under the auspices of the United

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162 Smith, p. 42.
163 Stevens, *Royal Australian Navy,* p. 164.
164 Hyslop, p. 86.
165 Stevens, *Royal Australian Navy,* pp. 160-161.
166 Fazio, p. 23.

Nations, the ship and her embarked Squadrons of Sea Fury and Firefly aircraft flew in both defensive and offensive operations.[167] As a consequence of the Korean War and the versatility shown by a borrowed United States Navy helicopter, the Australian government ordered the first three helicopters for operations in the RAN.[168] Helicopters ensured the successful search and rescue of downed aviators, evacuated wounded personnel in a timely manner and re-armed the troops on the ground. Combat operations and other aspects of *Sydney's* service in Korea are covered in more detail in chapter five of this thesis.

Australia's second Majestic class aircraft carrier HMAS *Melbourne*, also built in Britain, underwent significant modernisation before her commissioning in 1955. Due to these extensive modifications there was a considerable time lapse between the commissioning of *Sydney* and *Melbourne,* and the Australian government considered it prudent in the interim to accept the British offer of Colossus-class aircraft carrier, HMS *Vengeance* from 1952.[169] The ship carried Firefly and Sea Fury aircraft, along with Sycamore helicopters and together with *Sydney*, they conducted training exercises prior to *Sydney's* second deployment to Korea. Lieutenant Vince Fazio, author of *RAN Aircraft Carriers* records this training operation as 'the first and probably the last time, the Royal Australian Navy had two operational aircraft carriers working together'.[170] From this statement we can deduce that Australian aircraft carriers operated independently, both on deployments and during periods of intense training. *Vengeance* was returned to the Royal Navy in 1955 when the RAN commissioned HMAS *Melbourne.*

During her 25 years of service, *Melbourne* operated an array of aircraft, including the first carrier-borne jet, the Sea Venom. The ship also operated helicopters; the Sycamore from her commissioning, with the Wessex being introduced in 1963. New fighter bomber aircraft, the Skyhawk was deployed from 1968 as was the anti-submarine aircraft, the Grumman Tracker. The versatile Westland Sea King helicopter operated from 1975 and was capable of anti-submarine, general purpose and search and rescue operations.[171] The Australian Navy had acquired the

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[167] 'Korea The Forgotten War', *Gun Plot: Royal Australian Navy*, (n.d.) http://www.gunplot.net/main/content/korea-forgotten-war (accessed 12 October 2011).

[168] *Gun Plot,* n.d.

[169] Fazio, p. 59.

[170] Fazio, p. 7.

[171] Ross Gillett, *HMAS Melbourne, 25 Years* (Sydney: Nautical Press, 1980), pp. 107-117.

region's most versatile and capable military asset with the commissioning of HMAS *Melbourne*, a situation that generated a great deal of pride in her crew.[172]

Albatross, Vengeance, Sydney and *Melbourne* served the Australian Navy well and made a valid contribution during times of conflict and in peace. The stories of aircraft carrier service are the focus of chapter four where the men of the FAA share their memories of a totally unique service in a period of political, economic and diplomatic uncertainty.

The Korean armistice shifted Australian military focus from international service under the banner of the United Nations to its regional commitments to the Far East Strategic Reserve (FESR), under which the defence of Singapore and Malaya came.[173] FESR, a joint agreement between Australia, New Zealand and Britain, was charged with restraining and meeting any communist hostility within the area and countering any internal threats to Malayan security from communist rebels.[174] All three branches of the Australian military were deployed to the region with the Australian naval commitment involving fourteen ships, with approximately four deployed at any one time. *Melbourne* or *Sydney* and their embarked air crews were committed to the region on an annual basis in an additional show of force.[175] It was considered essential to Australian interests that Malaya and Indonesia stood fast against communism and this commitment was tested between 1956 and 1960, during the Malaysian-Indonesian Confrontation and the Malaysian Emergency.[176] While the RAN maintained a presence in South East Asian waters, neither of these situations escalated to include an FAA combat contribution. The destabilisation of the Asian region which would culminate in the Vietnam War was the catalyst for the FAA to intensify its training. To that end the RAN participated in multifaceted exercises with Commonwealth, United States, Thai, Pakistan and French navies within the alliance of the South East Asian Treaty Organisation (SEATO). *Sydney's* FAA personnel had gained invaluable operational experience while serving with NATO forces during the Korean War and any future conflict would see Australian forces deployed within such a multinational force. The success of any international naval force was heavily dependent on the level of compatibility within that force and

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[172] Fazio, p. 79.
[173] Stevens, *Royal Australian Navy,* p. 182.
[174] Stevens, *Royal Australian Navy,* p. 182.
[175] Commonwealth of Australia, *Navy,* 'HMAS Melbourne (II)' (2013).
    http://www.navy.gov.au/hmas-melbourne-ii [accessed 4 July 2010].
[176] 'HMAS Melbourne (II)', (2013) .

if the RAN was to make a valid contribution, multinational training was essential. Asia and Pacific regions therefore were major and frequent areas of deployment during the 1950s and 1960s.[177]

Australia's naval commitment within the South East Asian region was undoubtedly a costly one and was set to become far more so. *Melbourne's* aging Gannet and Sea Venom aircraft together with *Sydney's* Sea Fury and Fireflys, had reached the end of their service life and their replacement would prove to be prohibitively expensive. In an effort to increase Australian trade and industry the government was intent on reducing the defence budget. *Sydney* had been built in the 1940s and had not undergone the modernisation of *Melbourne* and had become little more than a training ship and therefore an expensive liability.[178] Various options put forth by the RN and the United States navy for a replacement aircraft carrier met with failure due to financial constraints and in 1959 the Minister for Defence announced that the FAA would cease carrier operations in 1963. The FAA had served as an aircraft carrier force for a scant 11 years and this was considered a blow of monumental proportions for the Australian Navy. At *Melbourne's* next refit, scheduled for 1963, the ship's aviation capabilities would not receive the modernisation needed for fixed-wing aircraft operations.[179] This decision would see all FAA personnel face a very uncertain future; but more importantly the loss of fixed-wing aircraft would greatly reduce the RAN's anti-submarine warfare capability and severely limit any valid role in multinational forces during a period of growing Soviet threat.

A much needed and welcome reprieve came in the form of the newly elected Minister for the Navy, Senator John Gorton. It was his recollection of being rescued by the RAN as an Air Force pilot in World War II, that prompted his 'sincere and active interest in his department'.[180] In the words of David Stevens:

> By the time Gorton completed his five-year tenure, the decline of the RAN had been arrested and it was preparing for an enhanced role in regional security affairs.[181]

[177] *Aircraft Carriers and Squadrons of the Royal Australian Navy,* ed. by Jonathon Nally (Sydney: Topmill, 2011), p. 50.

[178] Stevens, *Royal Australian Navy,* p. 187.

[179] Stevens, *Royal Australian Navy,* p. 187.

[180] Stevens, *Royal Australian Navy,* p. 192.

[181] Stevens, *Royal Australian Navy,* p. 193.

As a result of the combined machinations of the RAN and Senator Gorton, *Melbourne* underwent a major refit in 1969 and embarked a further 16 Anti-submarine Warfare capable Tracker aircraft and 10 Skyhawks which provided both strike and defensive capabilities.[182] Added to this arsenal were Wessex, Sycamore, Iroquois and Scout helicopters during the 1960s which were followed by Squirrel, Sea King and Kiowa in the 1970s.[183]

While *Melbourne* retained her fixed-wing capacity the above list of rotary aircraft is evidence that while fixed-wing aircraft carrier operations continued in a reduced capacity, the use of helicopters was the way forward. The Vietnam War was the coming of age of the helicopter and between 1967 and 1971 the men of the FAA played a significant and valuable role in this page of Australia's military history. This unique deployment is the focus of chapter six.

Throughout the latter half of the 1970s the RAN worked towards replacing the aging *Melbourne* and in 1977 the Defence Force Development Committee (DFDC) agreed to fund an investigation into a new carrier design. The $1 million budget examined the feasibility of using a Short Take-Off and Vertical Landing (STOVL) carrier using rotor wing aircraft as the conventional model but economic factors again stymied this project.[184] In 1979 the Multinational Force of Observers (MFO) was formed which included Australian naval aviators in a peacekeeping force deployed in the Sinai. The operation included FAA air and support crews from 1982 until 1986.[185] In operations closer to home the RAN's Anti Submarine Warfare (ASW) Tracker aircraft were utilised, prior to the instigation of a formal plan, from 1980 to patrol the Bass Strait oil rigs in an anti-terrorism role.[186]

Minor conflict in the Asian region, continuing tension between communists and democrats, unrest in the Middle East, along with the oil crisis, again shifted government focus and stalled replacement discussion over the following three years.[187] This rapidly escalating international tension prompted Prime Minister Malcolm Fraser to call on the Australian Parliament to increase the defence budget in 1980 in response to what he saw as 'the world facing its most dangerous

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[182] Stevens, *Royal Australian Navy,* pp. 193-194.
[183] Fleet Air Arm Association of Australia, *Aircraft (Helicopters),* http://www.faaaa.asn.au/photos-faaaa/aircraft-helicopters/ [accessed 30 December 2015] .
[184] Stevens, *Royal Australian Navy,* p. 225.
[185] *Flying Stations,* p. 247.
[186] *Flying Stations,* p. 248.
[187] Stevens, *Royal Australian Navy,* p. 226.

international crisis since World War II'.[188] One of *Flying Stations* authors Bob Nicholls elaborates on Australia's involvement:

> In the Middle East, fighting between Iran and Iraq intensified in 1980. Initially this led to the Australian government deploying a Task Group based around the carrier to the north-west Indian Ocean. The air group did not include Skyhawks because of problems with the ship's arrester gear. This deployment which was followed by the stationing of individual DDGs in the area, had as its purpose, the demonstration of Australia's interest in the area.[189]

As this statement demonstrates, the need to replace the outdated *Melbourne* was reaching crisis point. Guided Missile Destroyers (DDG) were deployed to support the aging carrier in a show of strength during Russia's occupation of Afghanistan.[190] The RAN remained committed to fulfilling their obligations to international peacekeeping deployments and in addition the FAA also established the Bass Strait counter-terrorism plan in 1982. This involved the FAA 723 Squadron ferrying SAS (Special Air Service) troops to and from oil platforms in Bass Strait. Estimated to produce approximately 80% of Australia's petroleum needs, these rigs were considered paramount to the country's sustainability and the Fraser government took a pro-active measure to ensure their safety. OAT, the Offshore Installation Assault team, as it was known within the defence force, was established without any public awareness and with the complete co-operation of the national media. In the event of a terrorist attack 723 Squadron, RAN ships and the SAS would work together to secure any hostages and prevent the destruction or capture of the rigs.[191]

As can be seen, the FAA was heavily involved in Australia's defence during this turbulent period of the 1980s and utilised all available assets to meet their various responsibilities. With the smaller aircraft capable ships taking on a greater aviation commitment, *Melbourne* was placed in reserve on 30 June 1982.[192] Two days following this decision, the RANs Tracker and Skyhawk Squadrons, the navy's front line Squadrons, decommissioned.[193]

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[188] Stevens, *Royal Australian Navy,* p. 226.
[189] *Flying Stations,* p. 247.
[190] Stevens, *Royal Australian Navy,* p. 226.
[191] Brendan Nicholson, 'Fraser's Anti-Terror Squad Created to Recapture Bass Strait Rigs, Rescue Hostages', *The Australian,* 4 November 2011 http://www.theaustralian.com.au/national-affairs/frasers-anti-terror-squad-created-to-recapture-bass-strait-rigs-rescue-hostages/story-fn59niix-1226194004059 [accessed 3 June 2014].
[192] Stevens, *Royal Australian Navy,* p. 227.
[193] Stevens, *Royal Australian Navy,* p. 227.

Due to the spiralling costs of building a new carrier, Cabinet informed the navy that the STOVL project would be postponed until at least 1983.[194] An agreement had been reached with Britain in 1982 that the Harrier Carrier HMS *Invincible* would be sold to the RAN to replace the *Melbourne* but, unfortunately, the Falklands War intervened.[195] Prime Minister Malcolm Fraser cancelled the agreement between Britain and Australia when the previously considered surplus to requirements *Invincible,* was retained by the British, a crucial component of the war with Argentina.[196] In a move that generated bitter disappointment within the RAN, the Australian government announced in March 1983 that the aircraft carrier HMAS *Melbourne* would not in fact be replaced.[197] *RAN Aircraft Carriers* author Vince Fazio states that:

> A newspaper report about the same time indicated that the US navy was prepared to make a gift of two ESSEX class carriers, USS Hancock and USS Bonne Homme Richard. Both carriers would probably have been in good repair. Nevertheless acceptance of this offer would have posed serious manning problems, as well as other aspects, and although there was no public discussion on the matter, the offer was politely declined.[198]

Following the loss of HMAS *Melbourne* and her fixed-wing capacity the RAN faced a period of uncertainty, upheaval and low morale, although the situation aroused little interest in the general public. The Labor government held resolutely to their policy of tightening fiscal control in the interests of budgetary surplus, a situation that saw the RAN suffer severe financial cuts. Plans to acquire an aircraft carrier and upgrade the existing fixed-wing component were cancelled in 1983 and any hopes of revival were dashed.[199] The fate of HMAS *Melbourne* was settled in June 1984 when she was sold to Korea for 1.7 million dollars, to be used as scrap metal.[200] Toz Dadswell was the commanding officer at the FAA Naval Air Station, HMAS *Albatross* in 1983 and recalls:

> The next few months were a nightmare for Albatross…there were many emotional scenes acted out in Nowra in the months that followed, as officers and sailors, together with their wives came to grips with the way

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[194] Stevens, *Royal Australian Navy,* p. 226.
[195] Doak, p. 44.
[196] Doak, p. 45.
[197] Doak, p. 44.
[198] Fazio, p. 4.
[199] Stevens, *Royal Australian Navy,* p. 239.
[200] Lind, p. 302.

ahead. What didn't help was the fact that we knew that the RAAF could not provide the necessary aviation fleet support. The men and women of Albatross in those days of 1983-1984 showed great spirit and esprit de corps. Although most felt let down and betrayed, and there were many sad departures as people left to find a new career, there were no incidents, no outward signs of their anger. As I said in my farewell speech in April 1984: 'Never has a Commanding Officer been given so much loyal support and had so little to give in return'.[201]

'The once very proud arm of the navy was in shock' was how Fleet Commander, Rear Admiral Mike Hudson, described the loss of a naval fixed-wing capability.[202] With morale at an all time low in the FAA during the early 1980s, the establishment of an inter-service unit illustrated the adaptability of naval aviation and was the first step in ensuring its survival. This era of insecurity saw the FAA morph from the previous fixed-wing aircraft and aircraft carriers to that of a rotary-wing helicopter force operating from smaller RAN ships. Mike Lehan makes the point:

> The success of the Wessex and their crews should not be under-estimated. In some ways, the National Task proved a savior for the Fleet Air Arm. It gave a purpose for existence in the year following the demise of the carrier, giving Naval crews a chance to develop and maintain new skills in support of another service. The professionalism displayed by the Squadron and its ability to achieve such an important task using old machinery, set standards and expectations that even the more sophisticated Sea King and its crews found a challenge to achieve in later years. Without radar or night vision devices, the Wessex crews developed new skills including, night tactical formation flying, day and night rappelling. They flew night approaches to Tianjara, Beecroft Rand and various ships as well to the oilrigs in Bass Strait. The only modification they made to the helicopters for the night operations was the taping of cyalume sticks to the fuselages so the crews could maintain formation positions![203]

While the situation looked dire for naval aviation within the RAN, Peter Jones retired RAN Captain, author and inaugural Director of Naval Strategy and Futures, states that by 1986 the situation was more promising:

> The development of the International Law of the Sea, and the expected extension of maritime sovereignty into the 200-mile Exclusion Zone - which took place in August 1994 – the navy's immediate responsibilities were becoming ever more vast. Nevertheless, personnel were faced with considerable change and a seemingly endless flow of bad news. When Vice Admiral (later Admiral) Michael Hudson became CNS in 1985 he faced a daunting task. High on his agenda was the effort to

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[201] Lehan, *HMAS Albatross,* p. 190.
[202] Lehan, *HMAS Albatross,* p. 198.
[203] Lehan, *HMAS Albatross,* p. 194.

rebuild the navy's morale and fortunes – specifically, restoring a sense of purpose; regaining some control over the navy's destiny; and accelerating the reequipping of the fleet…by 1986 there were definite signs of improvement.[204]

Adapting to the post-aircraft carrier age, the FAA adopted a policy of 'small ship's flights'[205] and was reduced to three helicopter Squadrons. HMAS *Stalwart*, *Tobruk* and *Moresby* were the only RAN ships helicopter capable, although they were unable to provide facilities for either maintenance or storage of the larger Sea King aircraft.[206] The acquisition of aircraft-carrying Guided Missile Frigates (FFGs) in the RAN began in the 1980s and of the six commissioned, four remain in active service today.[207] The addition of these highly adaptable, capable ships to the RAN weapons system was the bridge to the future the FAA required. The successful integration of the rotary aircraft capable FFGs into the maritime aviation paradigm greatly extended their field of operations, a point made succinctly on the RAN website:

> Each FFG ship is a long-range escort ship with roles including air defence, anti-submarine warfare, surveillance, interdiction and reconnaissance. The ship is capable of countering simultaneous threats from the air, surface and sub-surface.[208]

While FFGs *Adelaide, Canberra, Sydney, Darwin, Melbourne and Newcastle* along with Destroyer Escort *Torrens,* provided a base from which the larger Sea King aircraft engaged in training exercises and transport of troops, the machines were too large to be hangared aboard.[209] Introduced in 1984, the smaller Squirrel helicopter met the needs of the new FAA until being replaced by the Seahawk in 1998.[210]

In 1990 these ships, their embarked aircraft and aircrew, were deployed as part of Operation Damask in the Persian Gulf. Damask ran from August 1990 until January 1991 when the situation escalated and Operation Desert Storm began. Naval

204 Stevens, *Royal Australian Navy,* p. 240.
205 Lehan, *HMAS Albatross,* p. 202.
206 Stevens, *Royal Australian Navy,* p. 247.
207 Peter Jones, '1972–1983: Towards Self-Reliance' in Stevens, *Royal Australian Navy,* p. 220.
208 Commonwealth of Australia, *Navy,* 'Guided Missile Frigates (FFG)' (2013) http://www.navy.gov.au/fleet/ships-boats-craft/ffg [accessed 6 June 2014]
209 'Amphibious Manoeuvre Operations*' Semaphore,* 11 (August 2009) http://www.navy.gov.au/spc/publications/semaphore/semaphore-2009-issue-11 [accessed 6 June 2014].
210 Commonwealth of Australia, *Navy,* 'S-70B-2 Seahawk' (2013) http://www.navy.gov.au/aircraft/s-70b-2-seahawk [accessed 6 June 2014].

aviators delivered boarding parties to intercepted ships, were on standby for search and rescue operations and extended the air and sea search area of coalition ships. In an article appearing in *Navy,* titled '*The RAN in the Gulf- Two Years On'*, David Stevens and John Perryman state that the RAN withdrew the last of her maritime assets in 1993 having achieved an 'outstanding contribution' to Middle East Forces.[211]

Into the twenty-first century the FAA continues to evolve and adapt to an ever changing military environment. Naval aviation has not only survived the demise of the aircraft carrier but continues to be an integral component of the Australian Defence Force. According to navy pilot and the former head of the FAA, Rear Admiral Tony Dalton,[212] who is now part of the Department of Defence's Capability Acquisition and Sustainment Group (CASG), and is Head of the Joint Systems Division:

> I was the aviation representative on the seminal Naval Aviation Force Management Review in 1997. This review reset the budget and structure for Navy Aviation and survives as the baseline for the modern organisation today. Obviously from my perspective as head of the Fleet Air Arm, I see a strong future for Naval Aviation. We provide an essential force multiplying effect to Navy's surface fleet and this capability will grow over the next 10 to 20 years. In the immediate future, the case for a manned aviation capability remains strong and will continue to be championed at the highest levels within defence.[213]

Rear Admiral Dalton's assertions of a bright future for the FAA have come to realisation with the acquisition of two new aircraft carrying ships that are larger and more sophisticated than any previous RAN asset. Together with the latest Seahawk helicopters the foreseeable future of FAA operations is guaranteed, ensuring that naval aviation in Australia remains what it has always been; a valuable efficient, effective and flexible weapon in the RAN arsenal.

This chapter has documented the instigation and development of Australian Naval Aviation in the face of considerable and often hostile opposition. It can be clearly seen that the reorganisation of the FAA, the shift in operational mode from fixed-

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[211] David Stevens and John Perryman, 'The RAN in the Gulf – Two Years On', *Navy,* (Commonwealth of Australia, July 2014) http://www.navy.gov.au/history/feature-histories/ran-gulf-two-years [accessed 7 May 2015].

[212] Commonwealth of Australia, Department of Defence, *CASG Leadership Team* http://www.defence.gov.au/dmo/aboutcasg/ourleadership/ [accessed 29 December 2015].

[213] Tony Dalton, completed questionnaire, (June 2008), pp. 2-3.

wing to rotary aircraft in the 1980s, had an immense impact on morale and staff retention. Initially an atmosphere of doubt and uncertainty permeated all levels of the organisation before the realisation that their ability to survive and flourish against substantial odds is inherent in the FAA's qualities of resilience, ability, courage and integrity. These collective qualities are the foundation on which the modern FAA operates and it is in the following chapter, in which naval aviation veterans look back on joining and training, that these qualities are first seen.

3. Recruitment and Training

> Once the wings go on, they never come off, whether they can be
> seen, or not. It fuses to the soul through adversity, fear and
> adrenaline and no one who has ever worn them with pride, integrity
> and guts, can ever sleep through the 'call of the wild' that wafts
> through bedroom windows in the deep of the night.[1]

The advent of the modern aircraft carrier elevated the status of the Australian Navy
and extended its ability to protect and defend Australian interests and sovereignty.
This chapter examines what part, if any, this operational ability played in
recruitment in the aircraft carrier era and in the age of rotary aircraft. Quality
training was, and remains, of paramount importance in the FAA, and is also
addressed in this chapter which encompasses carrier operational mode and post-
carrier years.

One previously noted stumbling block to the successful formation of an FAA was
the perceived lack of suitable manpower. The Australian Navy has commissioned
approximately 284 craft serving various applications since 1911 and a conservative
estimate of those in service in 1947 is 49.[2] In *Ships Histories*, the Australian Navy
website lists 109 ships that were either decommissioned or lost between 1940 and
1946 and for this reason it is logical to assume that recruitment for general service
on the two aircraft carriers was not as problematic as that for the air branch.[3]
Therefore the 1947 recruitment drive was principally focused on the Air Arm. The
intended target audience was healthy young Australian civilians together with those
in general service interested in transferring to the new branch. According to Mike
Lehan, men of the Australian fleet were approached to transfer to the FAA:

> In a signal to the Fleet on 13 June 1947, ACNB [Australian
> Commonwealth Naval Board] outlined the post-war manning plan that
> included the formation of the Fleet Air Arm and a naval Aviation Branch.
> The plan stated that the following categories of ratings will be eligible to
> transfer:
> Seaman –to become aircraft handlers, safety equipment maintainers,
> Meteorological observers, photographers, ordnance and air traffic
> control ratings. Stokers and motor mechanics- to become aircraft

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[1]   Unknown author, provided by John Champion via e-mail 15 August 2011.
[2]   Commonwealth of Australia, 'Ships Histories', *Royal Australian Navy,*
      http://www.navy.gov.au/fleet/ships-boats-craft/available-ship-histories [accessed 3 September
      2015].
[3]   'Ships Histories', n.d.

mechanics and skilled aircraft mechanics. ERAs (fitters and turners) – to become aircraft artificers.[4]

The drive to recruit suitable personnel included appeals to experienced seamen serving in the New Zealand and British navies, together with advertisements in the popular press. Australian newspapers carried enticing advertisements that proclaimed 'there's a future for you in Naval Aviation with the Royal Australian Navy'.[5] Civilian J.J. Harrison recalls seeing one such advertisement in August 1947:

> The first indication of a fleet air arm being started in the Royal Australian Navy appears as a result of a big half page ad in the West Australian, in those days it was a broadsheet. Headline – Be among the first! Join the Navy's Fleet Air Arm. I thought, my God, this looks good! Here was this picture of waving palms, a few sailors standing, talking, good looking young fellows of course, in the background standing in admiring groups, clutching their hands, grass skirt clad maidens with flowers over their ear, gorgeous looking creatures and I thought…Jesus this is for me![6]

In *Flying Stations*, Lehan notes the successful outcome of this recruitment drive:

> The first intake of four serving sailors plus ten direct-entry rating pilots (as they were called then) joined the main recruit training depot in HMAS CERBERUS on 7 December 1947 and then RAAF Point Cook on 23 February 1948 for the first post-war RAAF flying training course. Competition was strong; for instance only two of 1109 otherwise eligible applicants to the Melbourne Naval Recruiting Officer were selected. Seven of the fourteen graduated from Point Cook in July 1949 and joined nineteen other pilots from the RN and RCN for their operational flying School (OFS) in the United Kingdom.[7]

Acceptance into the Australian Navy in general, and the air branch in particular, was dependent on age, health and education and promised expert training, unique overseas travel and cultural opportunities across 12 years of healthy activity. This opportunity was open to young men aged between 17½ and 21 years and according to one young Australian naval recruit who fitted the criteria, Les Matterson, he grasped the once in a lifetime opportunity which, in 1947, could hardly be beaten.[8]

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[4] *Flying Stations,* p. 48.
[5] Trove Digitised Newspapers and More, *The Sydney Morning Herald* (N.S.W. 1842-1954), 17 September 1947, p. 4. http://trove.nla.gov.au/ndp/del/page/1009296? [accessed 21 June 2014].
[6] J.J. Harrison, transcript of recorded interview, (25 October 2008).
[7] *Flying Stations,* p. 49.
[8] Leslie David Matterson, *Naval Airmen Recruits 1948: January February March,* April 2007, p. 1. (unpublished memoir).

The obvious lack of trained Australian personnel necessitated significant reliance on experienced Royal Navy (RN) officers in both operational and training capacities.[9] The fledgling aviation branch was estimated to require in excess of 4,000 personnel,[10] with the young Australian men who responded coming from many backgrounds; there were inexperienced school leavers, those coming into the navy from various civilian jobs as well as experienced men requesting transfers from other branches of the navy. The reasons that naval aviation appealed to so many varied enormously, although the vast majority of reasons are recalled as personal rather than idealistic or politically motivated; some men were fulfilling a childhood aviation dream while for others it seemed to be a matter of fate. Many young civilian men, like Colin Bushe-Jones, joined the RAN and ended up in the FAA with little idea of how it happened or where the service would take them. Bushe-Jones recollects that the choice to join was not one he had any control over:

> How did I end up in the FAA? They just said there are ships and air and you're going to do aircraft. No one volunteers. All those who want to be in the FAA take one step back! Everyone steps forward and they say fine, you're all going. Step forward or back, it doesn't matter, you're in the FAA. I was an aircraft electrician, it didn't make any difference whether I liked it or not. I just switched off and did my job, for 18 years![11]

Sixty civilians enlisted in the FAA during January, February and March of 1948 and they represented training course entries two, three and four. The air branches they joined included Air Ordnance, Electrical Artificer, Air Mechanics and Aircraft Artificers.[12] All RAN enlistment was for an initial period of 12 years and if recruits were aged under 20 they served what was known as 'boy time' which was not counted towards their adult 12 year service.[13] Irrespective of their ages, these recruits came together from all Australian states, some had just completed their education and others had been employed in various positions and trades. Ron Tate, like Bushe-Jones, was a young man who joined the navy never expecting to work with aircraft. He comments on how he became a member of the FAA:

> I was working in a state government job and it gave me the Tom Titts so I joined the navy. When you joined you joined as a serviceman and did your training and then they just told you what you were going to be;

9   Matterson, p. 1.
10   *Flying Stations,* p. 49.
11   Colin Bushe-Jones, transcript of recorded interview (21 July 2008), p. 11.
12   Matterson, p. 1.
13   Matterson, p.1.

the air arm or a sailor. They picked me to go into the air arm and they said I was going into the electrical branch and I did.[14]

Like Tate, Andrew Powell was dissatisfied with his civilian position, and joining the FAA appealed simply because it offered him a secure wage and the opportunity to further his education. Powell recalls that he was looking for a better start in life and enlisting in the FAA offered him freedom from his financial restraints and the chance to make a difference:

> I was walking down Forrest Place when a poster in the window of Navy recruiting caught my eye. In general terms it offered males between 17 and 24 years of age a chance to apply to learn to fly aircraft in the Navy's newly formed Fleet Air Arm and a chance to have an exciting life. I knew nothing about the navy; a lot less about aircraft, I'd never been near one, and even less about flying. Given my frugal lifestyle, working by day and studying by night to pass the leaving certificate and matriculate, no hope of having the money to go to university and the patriotism of my father's family, it seemed like a good offer to accept.[15]

In the FAA Powell extended his education and went on to carve a naval career as an aviator, achieving his dream of living a life of excitement. For Powell and many other young men of this era naval aviation offered career opportunities not previously dreamed of as aviation experiences were not readily available. For those who had been exposed to flying at an early age, the experience fostered a love of aeroplanes that proved to be strongly influential when the opportunity presented itself. Fellow FAA pilot Noel Knappstein found himself in that position in 1948. Aged just seventeen when accepted for pilot training, his new skills were put to the test as a 20 year old when he deployed on HMAS *Sydney* to the Korean War in 1950. His continuing passion for flight saw Knappstein enjoy a long and distinguished career as a commercial pilot following his discharge from the FAA in 1955.[16] Pilot James Buchanan came to share Knappstein's enthusiasm for flight although he joined the FAA in quite different circumstances from that of either of the other pilots. Education, dreams of flying or financial security played no part in his decision to join; it was fate alone that decreed the direction of Buchanan life, as he explains here:

> 1962 was a momentous year for me. It was the year I first fell in love and the year I joined the Royal Australian Navy. There may seem no direct connection between these two events but they followed along,

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[14] Ron Tate, transcript of recorded interview, (3 April 2008), p. 1.
[15] Andy Powell, completed questionnaire, (6 April 2009), p. 1.
[16] Noel Knappstein, completed questionnaire (2010), p. 2.

quite naturally, as a story of; 'Boy meets girl…They fall in love…Girl runs off with someone else…Boy joins the French Foreign Legion!' In this case the French Foreign Legion was replaced by the Royal Australian Navy which seemed to be the only service recruiting at the precise moment I needed a sanctuary.[17]

When asked their reasons for joining the FAA veterans offered diverse explanations but they fall in to very clear categories; they were either 'volunteered' as was often the case in the early years of the FAA when recruiting personnel was paramount; or they had a passion for flight. A life that included excitement and travel were also inducements to join as was the opportunity to serve in the Anzac tradition. James Buchanan is that one exception; he was looking for a 'sanctuary' and by chance an FAA recruitment notice caught his attention. These advertisements appealed to young men to enrich their lives with travel and unique opportunities and experiences while the context of Australian security and maritime protection did not form part of the inducement.

In not dissimilar circumstances Jack Herbert found himself in the FAA without any clear reason for doing so. He was neither passionate about the navy nor flying but found himself in the FAA simply because he was unlucky in love. Herbert was working as a storeman in Brisbane and recalls the circumstances:

> My mate Len said 'I'm going to join, will you come with me'? He failed the medical. We were both vying for the same girl at the time so oh yeah, that was accidental. Len got the girl. They were pushing the FAA at the time and I probably just signed where they told me to.[18]

For Aircraft Handler Robert Gilmour, it was his civilian job as a telegram boy in Brisbane which sparked his interest in the navy. It was 1959 and he had grown up seeing men in military uniforms and many of his work colleagues were ex-servicemen:

> The navy sounded pretty good but I didn't know if I'd be much good as a sailor so when I applied to join the navy they mentioned this fleet air arm and I thought I could see myself flying airplanes. When I went to the recruiting office I got all the information on the Fleet Air Arm and decided to join as a naval airman, non-flying, which meant that it would be one of the 11 lower deck categories. The choices were Airframes, Engines, Ordinance, Meteorology, Safety Equipment, Aircraft Handling,

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[17] James Buchanan, 'Early Aviation Memories' in *Slipstream,* p. 13.
[18] Jack Herbert, transcript of recorded interview, (26 November 2008).

> Air Electrics, Air Communications, Air Traffic Control, Fire Fighting and Motor Transport. I joined as an aircraft handler.[19]

Aged just over 15, Barry Todd joined the Australian Navy simply because he recalled seeing a newspaper advertisement and thought it would be something he would like to do. Beginning his training at HMAS *Leeuwin*, Todd recalls that the reality had little in common with his expectations; in the early days life was pretty grim:

> It was a bit of a shock. We were all around 15 years old and our first time away from home. They took all our clothes and we were given our uniforms, had our hair cut, had our first injections and learned to march. Early mornings, PT [physical training] breakfast and rifle drill, seamanship training as well as academic study. I got used to it but it took a long time to settle in and coming to terms with the fact that this was the way it was going to be. The Fleet Air Arm? I guess I had some interest in aircraft and positions were available in ordinance so I became an aircraft armourer, a decision which I have never regretted.[20]

Aircraft Radio Mechanic Keith Taylor calls his entry into the navy 'a quirk of fate' as his working life began as a technician in training for the Post Master General's Department. His dedication to study did not reach the level of his practical ability which led to a position as clerk in the engineering branch. This side ways move caused Taylor to consider his options as he explains:

> I don't think I had ever considered the services. It was a just an off the cuff decision and I joined as an electrical rate and became an aircraft radio mechanic. If I had my time over again I'd join the Air Force as it's much easier! You don't go away anywhere and they don't send you out to get shot at! It's the reverse of every other service where the officers stay behind the lines and the men get shot at but in the Air Force; they send their officers out in the aircraft and the men stay behind the action. The decision was like a lot of others in life; I could go this way or that way. I chose this way.[21]

The toss of a coin could easily have determined Taylor's fate but Doug Rasmussen followed his father's advice when he chose the navy as his first choice, the merchant navy, was met with an emphatic parental 'no'. Aged just 16 Rasmussen entered junior seaman training at HMAS *Leeuwin* a scant five weeks after making the decision. 'I was in a dead end job and I thought; a little bit of adventure is a good thing'. Having began his training, Rasmussen remembers:

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[19] Robert (Bob) Gilmour, transcript of recorded interview, (13 August 2008), p. 1.
[20] Barry Todd, transcript of recorded interview, (2 May 2008), pp. 1-2.
[21] Keith Taylor, transcript of recorded interview, (20 June 2008), p. 2.

> Towards the six week mark I remember about 4 or 5 of us standing around in a group whingeing as sailors do and in the end all of us said the same thing; we signed on the dotted line, we're here, we'll see it out and that's pretty much what we did.[22]

It was an accident which propelled John Arnold in to the FAA as a 20 year old. Arriving in Australia for a holiday, Englishman Arnold has never left, as he explains here:

> I just got a motor bike in Western Australia then travelled around and I crashed on the Nullabor Plain, which was a non-existent road in those days and I finished up in Coolgardie hospital for about six weeks. One day I saw this ad for the Fleet Air Arm and I just thought it sounded interesting and that it would give me the opportunity to see more of Australia. I signed up for six years and during that time I got married and we had two kids and I needed income continuity so I re-signed for nine years and ended up staying until pension time, 20 years. As a young man it was a very, very good part of my life, I would have hated to have missed it.[23]

In juxtaposition to those who entered the FAA by chance, Australian RAN Pilot Anthony Adams explains how his service was a consequence of a conscious decision to join the FAA:

> I had wanted to be a pilot ever since I could say airplane and look at them and the navy sounded like a better idea than the Air Force, you got to see places, you got on a ship and went around the world and you could fly at the same time. I saw more potential to get things out of life in the navy than in the Air Force, so I went for the navy.[24]

Adams had actively pursued a career in aviation and clearly considered his options with the opportunities to travel and the inherent advantages they created, tipping the scales in favour of naval aviation. Sharing Adams' love of aviation, Charlie Cifala used his natural mechanical aptitude to great advantage when he was accepted into the navy in 1968. Leaving his Storeman's Assistant job for four years as an aircraft mechanic, which included deployment on aircraft carrier *Melbourne*, Cifala recounts his initial introduction to life in the navy:

> I loved mechanics, fixing things. By the time I was 12 I could rebuild a Holden car motor. People would pay me to fix their cars. I loved aircraft

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[22] Doug Rasmussen, transcript of recorded interview, (8 July 2008), pp. 1-2.
[23] John Arnold, transcript of recorded interview, (23 October 2008), pp. 1, 16.
[24] Anthony (Peter) Adams, transcript of recorded interview (4 August 2008), p. 1.

so I combined the two and it was fantastic! I went to Leeuwin for 12 months where I was taught what it was like to be a sailor; romance gone! Then on to Albatross for maintenance training of 12 weeks, and aircraft type training for four weeks, then on to Squadron practical training. I was 'Qualified to Sign' in August 1969, being the youngest to do so at 17. I don't know if anyone else younger than me had that honour.[25]

Naval Airman Recruit Ron Davis went on to serve as an aircraft handler and traces his interest in aircraft back to living near Mascot airport in his formative years. Coupled with a favorable chance meeting with an officer in the naval cadets, at 12 years old Davis joined the sea cadets and from there, he served in the FAA for four years. Davis recounts that he loved every minute of his time in naval aviation and his discharge in 1959, to support his family after his father's death, remains 'the hardest thing I ever had to do'.[26]

Another who began his naval career at a very young age was junior recruit Dennis Nixon. In his 15th year Nixon was dissatisfied with school and an interest in aircraft prompted his service which he remembers as being an adjustment:

It was hard, the first couple of months were hard but once I got into it, it was alright. My school work improved, I was actually passing things. My science teacher at school said 'he'll never do any good' but I was third in the class in just about all subjects, which included physics which I hadn't done before. I did five weeks at Albatross as an aircraft handler and then on to the Melbourne for two years after that with the first trip taking in Hawaii, Japan, the Philippines, and Singapore.[27]

Clearly in Nixon's case, education for education's sake did not inspire diligence but working towards a particular goal proved to be the motivating factor. Although the route taken to service in the FAA is not always clearly recalled today, one thing that remains prominent in a significant number of veterans' memories is the fascination with flight. In very similar circumstances to Adams, fellow flight enthusiast and FAA veteran pilot Brian Poole remarks that a chance sighting of an advertisement culminated in him reaching his dream of a life in aviation that favored the navy over the Air Force:

Ever since I can remember I wanted to fly airplanes and I had a terrible job convincing my parents that that was what I wanted to do, they didn't see much future in it at all. Why I joined the navy? I can't recall quite

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[25] Cifala, questionnaire, p. 2.
[26] Ron Davis, transcript of recorded interview, (15 October 2008), p. 1.
[27] Dennis Nixon, transcript of recorded interview (5 September 2008), pp. 1-2.

honestly although I did spend a lot of time on the water, I had my own little yacht and I guess that led me to the navy. It was also the first ad I saw in the paper after I'd left school.[28]

Years before Poole began his pilot training, Nat Gould's dream of an aviation career began in earnest when, at the age of 18, he was awarded his private pilot's licence. Gould was a member of the Army at the outbreak of the Second World War and was approached by the RAAF and invited to join.[29] He was one of many privately trained pilots who began their military training in Tiger Moths at Archerfield in Victoria. Training continued at Wagga Wagga before he was shipped to England to obtain his wings, after which he flew Hurricanes in Britain throughout 1941. Gould went on to fly Spitfires in England, Hurricanes in Russia and Kittyhawks in Milne Bay, Papua New Guinea. He flew with the RAAF until being persuaded to join the Royal Navy FAA after which he flew off HMS *Implacable* and *Indomitable* before being traded to the RAN in late 1944. 'One day I was a Flight Lieutenant with a big moustache, the next I was a Lieutenant RNVR, without a moustache!'[30] With the forming of the FAA in 1948, Gould found his way back to Australia and the RAN where he completed his unique aviation career.[31] Like many others who joined the FAA, Gould's childhood passion for flight never diminished and his record shows that he certainly accomplished his dream.

For civilian recruit Kim Ferguson his introduction to flight is still very clear in his memory and it was one chance sighting which led him to the FAA and fulfilled his dreams of excitement. Ferguson explains how as an impressionable child, one thrilling incident was the catalyst for his lifelong enthusiasm for flight:

> When I was about 12 years old I was standing outside the Cummins area high school and a Sky Hawk jet did a great big dive on the school and of course all our dreams were set alight by that. Me and all my friends looked around and watched this jet climb and twist and go through the sky. That started the fascination with airplanes.[32]

Brett Dowsing had dreamed of a life that included aviation, having been influenced by the stories of men like Gould whose service in World War II must have fired any young boy's imagination. Dowsing joined the RAN as a young seaman recruit in

[28] Brian Poole, transcript of recorded interview, (8 July 2008), p. 1.
[29] Nat Gould, 'A transcript of the Key Note Address given by Commander Nat Gould (Rtd) F.A.A.A. AGM', *Headmark,* 132 (June 2009), p. 23. http://navalinstitute.com.au/wp-content/uploads/2014/04/headmark-132.pdf [accessed 31 December 2015].
[30] Gould, p. 27.
[31] Gould, p. 28.
[32] Kim Ferguson, transcript of recorded interview, (12 September 2008), p. 1.

1969, beginning a career which has so far spanned 43 years, much of it as a naval aviator. Possessed of a fierce sense of adventure and a thirst for excitement, where else but the FAA could these dreams be met? Here he states the circumstances which led him to becoming a pilot in the navy:

> I always wanted to be a naval aviator, since understanding the history of World War II. I lived in Rabaul, Papua New Guinea between 1962 and 1964 and there was a strong World War II naval element attached to that, it was the headquarters for the Japanese forces in the south west Pacific. There were a lot of people around us who were World War II veterans. I think it was the romance of it, the isolation, operating at sea you're isolated, naval aviation just stuck out by far as probably the most exciting.[33]

The aircraft carrier era enjoyed by Gould, Buchanan, Knappstein, Dowsing and many others ended in 1982 when HMAS *Melbourne* was decommissioned. As the previous chapter chronicled, without the means to operate fixed-wing aircraft, the FAA became a wholly rotary-wing operation which attracted would be aviators whose passion for flight centered on the helicopter. For pilot Jack Sevier, his dream of flight never encompassed fixed-wing aircraft, he was always focused on helicopters; 'I joined solely to fly helicopters'. For Sevier the opportunities offered by the FAA are unrivaled; 'training in the FAA is very efficient, professional and is second to none which will benefit future job applications'.[34] Tony Dalton, like Sevier, was intent on a career in military aviation in an age that no longer included aircraft carriers and fixed-wing aircraft. Focused on aviation from a young age, helicopters represented the means to fly with the navy and although other options presented themselves, he was persuaded to join the FAA by the opportunity to travel:

> I had a choice to join either the Air Force or the Navy as I had been accepted by both for the same pilot's course. In the end it was the opportunity to fly and see the world that persuaded me to accept the navy offer. My primary interest was aviation; it was a boyhood thing that I still haven't grown out of. I would not have joined the navy or any other service, to be anything other than an aviator. My 28 years of service has been good to me. I flew for the first 17 years of my military career, amassing over 5500 flying hours on a variety of types.[35]

A shared fascination for helicopter flight also attracted Pilot Chad Summers to the FAA as the opportunities offered met all his aspirations for an aviation career. Once

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[33] Brett Dowsing, transcript of recorded interview, (16 March 2011), p. 1.
[34] Jack Sevier, completed questionnaire, (10 October 2008), p. 2.
[35] Tony Dalton, completed questionnaire, (11 October 2008), p. 2.

again, the inducement of travel played a substantial part in his decision although the excellent reputation which surrounds naval aviation training also influenced Summers' choice of service:

> I joined for the adventure and I had a keen interest in aviation. I expected it to be challenging and rewarding career and for the past 14 years it has been. The opportunities afforded to its members are only limited by the person's drive and ambition. I've served in Bougainville, East Timor, South East Asia, Korea, Japan and spent six months in the UK. I expect to serve for another 15 years.[36]

We can see that for many young men the prospect of overseas travel often tipped the scales in favour of the navy when considering a career in military aviation. The perception of excitement that is intrinsically inherent in practicing aviation in the maritime environment was further inducement for flight enthusiasts, but for others excitement was the catalyst. As one who was not driven by the need to fly, entry into the FAA was a simple choice for Mike Keogh; life in the navy or something that offered a little more excitement. Keogh opted for the FAA and the chance to do something different. Young recruits were presented with three basic options in which to specialise within the air branch and although Safety/Survival Equipment was not Keogh's first choice, on reflection it was the correct option. Here Keogh explains why this branch of naval aviation more than lived up to expectations:

> When we were at Cerberus as junior recruits in the latter part of it they told us that we would have an opportunity to say what you wanted to do in the navy and I guess we looked at different aspects and the Fleet Air Arm was, I guess, an elitist type of thing and it was a mixture of being at sea and also with aircraft. It was interesting to me. I wanted to be a photographer as my first choice then in safety equipment followed by an aircraft handler because they were the three basic ones in the naval airman category. I got into safety equipment which I really enjoyed because it was a very responsible role as part of the job was servicing and packing parachutes. We had the opportunity to teach the aircrews about life saving and survival techniques. Things like being winched out of the ocean by a helicopter and how to use the life saving equipment in the aircraft when they ditched. We gave lectures to the ship's company on life saving and that sort of thing which gave you the ability and confidence to talk to large groups of people. Everyone in the service is an expert in their field but it's all these pieces of expertise that make the service what it is. The safety equipment guys, the aircraft engineers, armory and weapons guys, radio guys are all experts. Together they make up that lot that gets the aircraft off the ground, keeps it flying and

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[36] Chad Summers, completed questionnaire (14 July 2008), p. 1.

if it doesn't, well then somebody saves their lives. It was a good life and I enjoyed it.[37]

In the above quotations, veterans of the earliest days of the fledgling FAA who operated on aircraft carriers, along with those who joined in the age of helicopters, offer a variety of explanations regarding their enlistment in the FAA. These young men had no previous experience of the navy; they had come from civilian jobs or had just completed their education. Serving beside these recruits in the earliest days of the FAA were members of the RAN, the New Zealand Navy and the Royal Navy who transferred from various branches in answer to the initial drive to recruit personnel. Although in the modern age FAA personnel are predominantly recruits to the air branch, this has not always been the case. In the following examples a number of those men who transferred within the navy offer their explanations for doing so.

In the first instance Royal Navy Chief Petty Officer Gordon Evans recalls what prompted his move to the Australian Navy, his service with the FAA, and life as a Birdie in the early years of carrier operations:

> My selection for loan to the RAN was partly due to the boredom of post-war naval life and the Tot [rum issue]. Lounging around in the PO's Mess after 'up spirits', somebody mentioned a notice on the board about volunteers wanted. Hardly reading what it was all about, especially through a soothing rum haze, I signed it…two months later, a pier head jump to join the future HMAS Sydney at Devonport, and be attached to the 20th CAG.[38]

While Evans came to the FAA via the Royal Navy, Australian Harry Webster was serving in the RAN as a General Stores Rating in 1947. Unlike his RN counterpart, Webster was influenced to transfer to the newly formed aviation branch by his service in the general navy. One incident in particular was the catalyst for Webster to transfer:

> I was a Supply Assistant serving on the Corvette HMAS Echuca carrying out minesweeping operations in New Guinea and North Queensland when a signal was received to the effect the Australian Government was going to obtain an aircraft carrier and required 5 Supply Assistants and 1 Supply Petty Officer to be seconded to the Royal Navy for training in Air Supply. Being a 19 year old brave young sailor who had recently witnessed the sinking of HMAS Warnambool after having struck a mine I thought "Bugger this I will volunteer". To my

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[37] Mike Keogh, transcript of recorded interview, (18 July 2008), p. 2.
[38] *Flying Stations*, pp. 52-53.

surprise I was selected and drafted to HMAS Penquin for secondment to the Royal Navy. On arrival in the UK we were briefed on the way we were to be trained in Naval Air Stores.[39]

For Bill Barry the inducement to transfer to the air branch was far less dramatic. Barry had been apprenticed as an electrician when he joined the navy in 1946 and served for two years on the destroyer HMAS *Bataan.* When the signal regarding the new Air Branch reached them, Barry and other crew members were eager to transfer, 'the carrot being that we would be trained in the UK.' For young Australian men in the post-World War II era the opportunity to travel was uncommon and expensive and the offer of overseas training was a common and ever popular inducement to Australian naval service.[40] This carrot also spurred young RAN seaman Don Lorimer to embrace the FAA and life as a Birdie. While serving on HMAS *Melbourne,* Lorimer had the opportunity to observe life in the aviation branch and was soon won over by the opportunities available in the FAA. He went on to serve as a Birdie for 20 years in the Safety/Survival Equipment branch and comments on how it all began:

> I joined at 16 and a half. I don't know why, I just fancied it. Once you finish at Leeuwin they send you to Albatross for a fortnight to show us what the fleet air arm is all about before they send you to the Melbourne as an ordinary seaman. In those days you used to do up to six months training on a ship before you did your course and that six months on the Melbourne, a trip to Hawaii! Oh this is great![41]

As a young man Ross Sarti joined the navy to be a sailor and had no intention to join the aviation branch, or had any particular interest in aircraft, but fate took him on an unforeseen journey. A culmination of circumstances saw him serve in the FAA, a situation he accepted with equanimity. He provides insight into the unusual route he took to serve as a Birdie in the FAA:

> I wanted to be a navigator's yeoman initially although I didn't have the maths and that sort of thing. Then they asked me how I would feel about taking bits and pieces off things and putting them back together again and I told them that I wasn't good at that sort of thing, failed woodwork and metalwork. At Cerberus they did the final counselling and I told them I wanted to be in the fleet air arm. They of course said well you'll be a stoker. I said fine with me. Then they decided to send me to Albatross to see how things went. The navy is very good at giving

39 Ernest Harry (Blue) Webster, *Royal Australian Navy 1945 to 1957,* (Nowra, Australian Aviation Museum, n.d.) (unpublished written memoir).
40 Bill Barry, 'May the Memories Sail on Forever', *Flying Stations,* 4;2 (April/June 2006), p. 1.
41 Don Lorimer, transcript of interview (16 September 2008), p. 1.

you the opposite of what they think you want, reverse psychology. I ended up in the fleet air arm. I knew the next step would be an aircraft handler. Which I was not impressed with, it's sort of funny but it's one of those thing that you're pushed into and I thought what else am I going to do? You've got to live with it, don't bother about it, you're in the fleet air arm.[42]

While Sarti was initially ambiguous regarding his service as a Birdie, the same can not be said of Sonar Operator John Bolton. When the opportunity arose to widen his naval experience in a way he never dreamed of, Bolton embraced his new life and lived it with gusto. In the following quotation Bolton notes how this change in his career came about:

I think I was one of those people who saw the romance of the sea, the navy was the life I wanted. After Flinders I went to HMAS Watson in Sydney to the torpedo, anti-submarine and under water control school where I became an asdic operator, known today as sonar. So I learned how to operate an asdic and chase submarines which was a lovely little game. I served on Queenborough and Vendetta and was drafted for one day to Voyager. I had just finished draft in when I was told to report to Vampire. While the Vampire was between Singapore and Sydney a signal came out advertising a course for experienced UC's to become sonar operators on Wessex helicopters so I thought boy, how good is this, I'm in the navy but you can go flying. So I applied for it and we were anchored in Manila and I got called to the divisional officer's cabin and told I'd been selected. So I went to Albatross and discovered a whole new world, aviation, and fell in love with it. I was just smitten with flying and probably because it opened up a world where you became an independent person rather than a number in a machine. You were solely responsible for an operation and responsible to provide a result and I quite like that, when I started flying I suddenly wanted to be the best at whatever I did.[43]

Bolton had clearly found his niche in the FAA and his transfer led to a fulfilling career beyond anything he had envisaged. Observer Geoff Vickridge followed his father's example when he joined the service in 1958 and was a Sonar operator and ship's diver before serving as Commander's Writer in 1963. From there Vickridge served as Captain's driver during which time he qualified as an officer and he recalls his decision to change branch to the FAA:

When I went up for the interview and they said what do you want to be, seaman officer or aircrew officer, this was late 1963 or early 1964, and as a joke I asked which one paid more. The answer was aircrew. At this

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42   Ross Sarti, transcript of recorded interview (23 August 2008), p. 3.
43   John Bolton, transcript of recorded interview, (26 June 2008), p. 2.

stage I'd never even been in an aeroplane so about 8 weeks later I found myself down at Cerberus in a basic aircrew training course.[44]

When he joined the navy as a 15 year old in 1955, David Farthing had also decided on a life at sea but, once again, fate stepped in and changed his career path and his life. Farthing went on to have a long and distinguished career as a FAA pilot with at least 20 deployments to the Far East and the Pacific. His service included various courses conducted overseas and he served as a helicopter pilot in the FAA during which time he was deployed to the Vietnam War.[45] While Farthing was joining the RAN in 1955, Toz Dadswell's career was entering its second phase; he transferred to the FAA as a naval aviator. Having had an amazingly diverse career that has spanned 42 years of service, Dadswell's naval journey began in 1946, primarily to escape what he saw as an uninspiring future spent in long hard hours on the land:

> One day a cow slapped me across the face with a wet tail and I decided that there must be a better life for me than milking cows. There was an advertisement for the naval college in the paper a couple of weeks later and I asked dad if I could apply. He said I wouldn't get in because of my background, being a country boy as opposed to a private school education but to my delight, I was accepted. I got to go to sea and it was magic! I started flying in 1955 because they wanted two college officers to go flying and one of them failed his medical so I got in. I hadn't wanted to fly, I wanted to be a navigator, but as soon as I went solo in a tiger moth I knew where I should be. I had a wonderful life.[46]

As this and other quotations clearly demonstrate, service in the FAA was not always the fulfillment of an aviation dream but a matter of being in the right place at the right time. Fate, chance or circumstances led many to the FAA and if enthusiasm and passion were not the initial driving forces, then they quickly became the prevailing ones.

Going on to serve in the FAA as an Aircraft Mechanic, Brian (Joe) Jost also began his naval career as a seaman. His reasons for transferring to the aviation branch were different to most in that he was anxious to be part of HMAS *Sydney's* air crew when she deployed to Korean waters to take part in combat operations. Jost explains:

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[44]   Geoff Vickridge, transcript of recorded interview, (8 August 2008), p. 1.
[45]   David Farthing, completed questionnaire, (9 October 2010), p. 1.
[46]   Toz Dadswell, transcript of recorded interview (14 October 2010), p. 1.

> I transferred from the seaman branch of the navy to the fleet air arm and I was an air mechanic; airframes, engines and ordinance in those days. I joined mainly to go to Korea but regulations were that if you were under 21 we had to get permission from your parents and I found it hard enough to get permission to join let alone go to a war zone.[47]

Memories of how these veterans' service in the FAA was set in motion fulfill the criteria for what the Hoffmans term 'physiologically archival'[48] in so much as their decisions to join constitute a momentous event in their lives. We can see that the interviewees decisions to change the course of their lives for the foreseeable future were wholly individual and were driven by emotions as often as they were by a well defined plan. For all of them the memory remains a pivotal one.

Whilst Jost, Dadswell, Farthing, Bolton and the many other naval personnel transferring into the FAA from various naval branches were fully conversant with the naval way of life, new civilian recruits needed to be trained. All initial naval training in Australia begins at HMAS *Cerberus* in Victoria where civilians begin the process of assimilation.

These young civilian men with stars in their eyes joined the navy knowing nothing that awaited them which, for most, was just as well. The Australian Naval Board ordered each recruit to board a designated train for the journey to Melbourne where all recruits began their training. As a young Western Australian recruit, Colin Bushe-Jones joined many others on this momentous first step in his aviation career and his memories of that journey have remained clear. Conditions were indicative of the tough reality of life in the RAN in the 1950s as Bushe-Jones relates:

> I joined from W.A. so there were six of us heading to Melbourne by train. They told us not to bring anything because they would be giving us a uniform when we go there so just bring enough for one night. So I had this turtle neck thing, a jumper, a pair of pants and about two pairs of underpants and socks and that was it. They gave us a horse hair blanket, it was so rough you wouldn't believe it, two tin plates, a knife and fork and a tin mug. It took us a day and a night to get to Kalgoorlie and then we joined this old troop train that had a cook wagon on the back. Some compartments didn't even have windows and they had four bunks and they all had five blokes in it. Well, we thought, we won't be here for long so we'll make the best of it. Ten days later!! We finally got into Melbourne, still in the same clothes, there was no shower. On the end of the train there was this big water bag they used to put the beer bottles in to keep them cold and when the labels all fell off them they

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[47] Hoffman, p. 39.
[48] Brian (Joe) Jost, transcript of recorded interview (8 September 2008), p. 2.

blocked the hole so we couldn't get to any water. God it was bloody awful![49]

Although Roy Coulter does not recall his journey being quite so long or arduous, he does have vivid memories of leaving Brisbane to begin his training. For Coulter, who had spent his formative years in boarding schools and his short working life in jobs that took him far from home, the parting from all that was familiar was hardly momentous. For many of the other young recruits who were not so independent, he recalls, it was a different matter:

> In those days everybody used to catch the train and here's all 122 of us in the intake from Queensland. We were all standing ready to get on the train and there were all these mothers weeping, gnashing teeth and crying, real sack cloth and ashes stuff. I just kissed mum on the cheek and said I'll see you later and she said, yeah, I'll catch you. I was just going away to do another job, that was it.[50]

If the parting from family and all things familiar proved difficult for some of the new recruits, the reality of their new lives sometimes proved too much to endure. Toz Dadswell looks back on his first few months in the navy and remembers the harsh and often cruel treatment young recruits endured in the 1940s:

> In those days, 1946 as a 14-year-old midshipman, you got people like us who absolutely unswervingly never questioned anything, you did what you were told and you did it as quickly and as efficiently as you could. After about three days I wanted to go back milking sheep, it was tough, it was meant to be tough, we got beaten and all sorts of horrible things done. If your shoe lace was undone there was six on the backside for being untidy and a lot of boys cried themselves to sleep.[51]

The barbarity of navy life, sadly experienced by Dadswell and many other young boys, is a difficult fact of life in military training establishments of that era. Thankfully by the time Ross Sarti joined the navy in 1967 the recruits experienced a somewhat more civilised reality, although navy life was not without its idiosyncrasies. The navy catapulted you into another world, an adult world, as Sarti explains:

> I was seventeen and a half when I joined. There are people of all ages and the camaraderie was fantastic. The down side was your mixing with much older men and you can get led astray. It wasn't nasty, it was

[49] Colin Bushe-Jones, transcript of recorded interview, (21 July 2008), p. 9.
[50] Roy Coulter, transcript of recorded interview (6 June 2008), p. 2.
[51] Dadswell, interview, p. 1.

more a matter of learning the facts of life because you had to learn the facts of life very, very quickly when you're a sailor. If you went ashore with the wrong crowd you got into trouble so you chose your shipmates very wisely. But the camaraderie meant that if you found a shipmate in trouble you helped them out, you never leave a shipmate in trouble.[52]

Cerberus was the initial training facility for all RAN seamen in branches that included medical, cooks, marine engineers, electrical, communications and supply.[53] Training included fitness, small arms, seamanship and naval traditions. When asked to recall his training at *Cerberus,* civilian recruit Les Matterson remembers a far lighter experience to those quoted above. One particular incident has stayed with him and he relates it here:

The process of converting a group of recruits into a disciplined squad with the ability to produce a reasonable performance on the parade ground in the course of a few weeks requires a unique type of person. Parade grounds come equipped with them and usually they become legends. Chief Petty Officer Otto Schmidt seemed born to square-bashing training and, while not of large stature, he was able to project an imposing - sometimes intimidating- presence, usually accompanied by wisecracks and a shower of spittle, making it difficult to look him in the eye at close quarters. While addressing one trainee this situation prompted Otto to remark, "Don't look up there son – He won't help you. He's not in charge of this parade ground – I am![54]

Naval trainee John Buchanan, who went on to serve as an FAA pilot, recalls the lectures he attended, with one in particular standing out. While the subject of Sir Laurence Olivier's address escapes him now, Buchanan recalls that Oliver served as an aviator in World War II and his talk was at least interesting, in juxtaposition to the monotony of other aspects of his training. Buchanan comments that:

There were lots of lectures – subjects like Hygiene, Dhobying (washing), Social Diseases, KR&AI (King's Regulations and Admiralty Instructions), Naval Traditions etc. Oh, and every day for weeks and weeks, Parade Ground – learning to walk carrying a gun in the summer sun. We had gas mark drill which included a dose of tear gas. Also painful were the weekly injections at the 'Bay'. At the end of it all was the big thrill. We boarded a REAL SHIP, the covette HMAS Latrobe, to experience the roughest of seas. Many found an alternative use for a bucket! I was lucky to find I don't get sea sick.[55]

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[52] Sarti, interview, p. 6.
[53] Commonwealth of Australia, 'HMAS Cerberus', *Royal Australian Navy,* http://www.navy.gov.au/establishments/hmas-cerberus (accessed 3 January 2016).
[54] Matterson, p. 4.
[55] *Flying Stations,* p. 50.

While as a training facility *Cerberus* met the needs of new recruits who served as seamen, those moving on to the FAA required specialist instruction not yet available in Australia. At the completion of basic training those men who had responded to the recruitment promise for overseas travel with the FAA, sailed for Britain. Aviation branch training for the newly formed FAA personnel was to be conducted by experienced Royal Navy FAA personnel. Various training establishments across Britain became home to many young Australians for months, and in some cases, years.[56]

There are many members of the FAA who have never-to-be forgotten memories of their time spent on British naval bases in the 1940's. Australian Naval artificer C.C. Price spent six months at HMS *Fulmar* in Lossiemouth, Scotland, then on to HMS *Sanderling* at Abbotsinch and HMS *Heron* at Yeovilton.[57] He remembers a wonderful experience as he tells us here:

> During my short stay at Heron I was employed acquiring a knowledge of the servicing requirements of Firefly aircraft fitted with Rolls Royce Griffon Mk12 and Mk 14 engines. I learned to love Somerset with those beautiful fields, villages and country lanes. The good country people will remain in my memory forever.[58]

Another FAA artificer who has very fond memories of his training in Yeovilton is Ian Ferguson, although his recollections centre more on the personalities of some of his instructors:

> One of our instructors was a RN Petty Officer, Jim Cleave, who was fond of Black and Tan (50/50 beer and stout). This caused him to have a very bad flatulence problem. Can you imagine being in a closed class room for a couple of hours each morning under these circumstances, after all it was at the end of the 47/48 winter, the coldest on record to that time, and no one dared open a window. One morning one of the Instructors came into our classroom asked who with the initials JH had scratched one of the training aircraft, he gave up and walked out in disgust when he learnt we had a Jim Hibbert, Jack Herbert, Jim Hallahan and John Harrison in the class.[59]

Having sailed from Australia, Ferguson and his fellow armourers began their specialist training in February 1948 at the RN Air Station in Yeovilton and

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[56] Ian James Ferguson, *A Short History of My Service in the Royal Australian Navy: A personal narrative,* (1994), p. 2. (Unpublished memoir).
[57] C.C. Price, 'A Tiffy's Odyssey', published in *Slipstream*, Volume 9, Number 1, January 1998, p. 22
[58] Price, 'A Tiffy's Odyssey'.
[59] Ferguson, *A Short History*, p. 5.

completed it seven months later. Ferguson reminisces that the range of weapons covered in training was quite extensive:

> The small arms covered were all models of .303 Lee Enfield rifles, .38 Calibre Webley and Enfield pistols, 9mm Lanchester Sub Machine gun, plus quite a few others I cannot recall. The aircraft guns were the .303 and .50 Cal Brownings, and both the Mk2 and Mk5* 20mm Hispano. The ammunition for all these weapons was also included. Aircraft Rockets were the 3-inch type, together with the various types of warhead and bombs from the 8 ½ pound Practice to 1000 pound High Explosive. We were also required to have knowledge of various types of high explosives used in all these weapons. The types of aircraft we worked on during the course were Seafires of various marks, Firefly MK1, Firebrand, and Barracuda.[60]

On successfully completing this course, Ferguson was posted in October to RNAS Eglington, HMS *Gannet* in Northern Ireland, where he joined the recently formed 20th Carrier Air Group (CAG).[61] The CAG is the name given to the Squadrons which form the aviation component on each aircraft carrier and HMAS *Sydney* housed the 20th CAG while HMAS *Melbourne* carried the 21st CAG.

HMAS *Kanimbla* left Australia in June 1948 taking the second group of naval airmen to Britain for further training.[62] *Kanimbla* reached Plymouth on 31 July and the new recruits disembarked on 2 August. From there it was a long trip to HMS *Gamecock,* RNAS Bramcote, Warwickshire where basic training began for the first 60 direct entry aircraft mechanic s.[63] The RN used and taught a General Purpose Naval Airmen Mechanics course that allowed training in four trades; Airframes, Engines, Electrics and Ordnance.[64] Classrooms were incorporated into aircraft hangars and students moved between the two in a mixture of theory and practical demonstration. A few months into the training the RN revised its General Purpose scheme and training was halted while permanent changes were instigated, as the newly joined naval airman Les Matterson explains:

> The RN had rescinded its GP training policy and introduced single trade courses for Airframes (A), Engines (E), Electrics (L) and Ordnance (O) categories. The RAN followed suit and A and E category courses were arranged for the Gamecock trainees. The method of dividing the group to provide an equal number of trainees in each category was interesting and typically "navy". The trainees were assembled in a drill hall with a

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[60] Ferguson, *A Short History,* p. 6.
[61] Ferguson, *A Short History,* p. 7.
[62] Matterson, p. 12.
[63] Matterson, p. 13.
[64] Matterson, p. 16.

line drawn to bisect the floor space. Preferences had been noted earlier and staff had prepared a list of each category, dividing the group equally. The lists were read out placing one half of the group in A category on one side of the line; the others in the E category on the other side. Ten minutes were allowed for those wanting to change category, provided they found someone from across the line willing to exchange places. After that time the numbers had to balance. Needless to say they did and the group departed to prepare for their revised courses.[65]

The single trade courses followed similar lines to the GP, although much more emphasis was put on the appropriate trade. Progress was assessed regularly with exams and nine months after their arrival the recruits were passed on to the next phase of training.[66] Naval air stations, with second line Squadrons operating various aircraft, presented the mechanics with practical training under the tutelage of experienced RN air mechanics. All recruits in Engines and Airframes were required to sit and pass the Qualified to Sign exam which signified the end of basic training. This qualification allowed the new Air Mechanics to inspect aircraft before they flew and either categorised it as unserviceable or safe to fly.[67] The next step was to expand their knowledge in Maintenance Units, scattered throughout Britain, where more complex repairs and maintenance were carried out.[68]

When invited to share his memories of his training in Britain that continue to resonate, Les Matterson notes that the focus was not always technical and the reality was not always comfortable:

> In addition to exercising the practical aspects of trade training and the application of responsible judgment, important human experiences were encountered also: adapting to different working environments at short notice; socialising with local communities; forming working relationships with air-crew, many of whom were Australians (also undergoing training), particularly when assisting to strap them into the cockpit before flight, directing them on the line and meeting them after flight. Regrettably, but fortunately very rarely, there were occasions when aircraft did not return, or crashed on or near the airfield with fatal results. Although not in the syllabus, these events were also part of the learning experience.[69]

Also travelling to Britain on *Kanimbla* was a group destined to become aircraft handlers. Ted Austin had signed on to the RAN in 1945 for a period of 12 years

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[65] Matterson, pp. 17-18.
[66] Matterson, p. 19.
[67] Matterson, p. 21.
[68] Matterson, p. 22.
[69] Matterson, p. 26.

and volunteered for the Air Branch in 1948. On arrival in England the aircraft handlers were posted to RNAS Siskin in Gosport to be trained in the movement and storage of all types of aircraft used in the RN and the RAN.[70] The aircraft handlers also completed courses in all aspects of motor transport, including motorbikes, and this course allowed them much more freedom to explore the surrounding districts.[71] HMS *Illustrious* was used by the handlers to further their practical knowledge and according to RAN trainee Bill Barry, the training was second to none.[72]

HMS *Ceres* in Yorkshire was the training establishment for those airmen in miscellaneous branches, in which Naval Air Stores was included. Harry Webster recalls that 'the course was full on with having to learn all the systems of the FAA, including forms, reference books, modification certificates etc.'[73] A three-month stint at RNAS *Vulture* in Cornwall introduced the airmen to Sea Fury and Firefly aircraft before they were posted to HMS *Implacable.* Webster has unforgettable memories of his first aircraft carrier experience which he shares here:

> *Implacable* was the largest carrier in the Royal Navy. Boy what an eye opener that was after being on a Corvette. There were 5 hangars on 2 levels and I must admit I got lost a few times. At the time they were trialing the first Jet Aircraft which was the fore-runner to the Sea Venom.[74]

It is understandable that the above related experiences have been preserved and remain unforgettable. The opportunity to travel to Britain in the 1940's was not readily available to any but the most prosperous so this was, for many veterans, a once in a lifetime chance and as such, reminiscences remain clear and precise.

Like the training schedule followed by ground and maintenance crews, the first intake of pilots began their training in Australia on training aircraft, Tiger Moths and Wirraways. Having mastered the more sophisticated RN-supplied Seafires and Fireflies, the first seven graduating pilots embarked for Britain.[75] The RAN graduates joined 19 others from the RN and the Royal Canadian Navy (RCN) in

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[70] Ted Austin, 'May the Memories Sail on Forever' *Flying Stations,* 4;4 (October 2006), p. 1.
[71] Barry, p. 1.
[72] Barry, p. 1.
[73] Webster, p. 1.
[74] Webster, p. 2.
[75] Jones, p. 28.

October 1949 at RNAS *Lossiemouth* in Scotland, then on to RNAS *Eglington* in Northern Ireland.[76] The graduates had amassed 140 hours in either Seafires or Fireflies and mastered deck landing aboard HMS *Illustrious* during the six months training.[77] According to Mike Lehan, the Australian aviators had much to prove to their RAF counterparts. Lehan explains:

> Initially, the 'colonials' were given little chance of surviving because they were competing with the 'hottest' group to come out of the RAF Flying Training School since World War II. The Australians achieved the first six places on the course.[78]

Many aviators who have flown aircraft off the decks of aircraft carriers will tell you that what they do is very competitive and striving to improve your performance is an intrinsic instinct. The above quotation demonstrates that this instinct is not only present in FAA aviators, but clearly needs little encouragement to bring it to the fore.

For these first FAA trainee pilots and the many who followed, the Royal Australian Air Force (RAAF) conducted the initial flight training until trainees reach a level of competence where they are awarded their 'wings'.[79] Following this milestone, FAA aircrew completed their training in a wholly maritime environment. The use of specialised aircraft and the utterly dissimilar technique of launch and retrieval demanded by naval aviation make it a unique environment and utterly dissimilar to land-based aviation.[80] All flight operations involve an element of risk. However, that element of risk increased exponentially when introduced into the maritime environment. Naval pilots' specialist training allowed them to reach a level of competence where the risk was considered a calculated one. The smooth synchronisation of communication and co ordination at all levels of the air and seamanship branches is of the utmost importance in successful aviation operations.[81] In the 1940s Australia did not possess either the trained instructors, facilities, ships or the aircraft to insure their naval aviators reached the required level of competency so once again, the Royal Navy and her Fleet Air Arm filled the breach.

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[76] *Flying Stations,* p. 53.
[77] *Flying Stations,* p. 53.
[78] *Flying Stations,* p. 53.
[79] Gillett, *Wings,* p. 54.
[80] Gillett, *Wings,* p. 54.
[81] Gillett, *Wings,* p. 54.

On the completion of flight training members of the FAA were directed to HMS *Daedalus* at Lee-On-Solent, the collection point for all RAN airmen heading back to Australia. Those members who were not drafted to HMAS *Sydney* were repatriated in civilian cruise liners. *Sydney* commissioned in August 1948, and embarked the 20th CAG on 15 February 1949 and her newly drafted personnel gathered at RNAS *Eglington*.[82] Les McCullock successfully completed his aircraft handling course at HMS *Siskin* and joined his crewmates aboard newly commissioned HMAS *Sydney* en route to Australia. Here McCullock recalls that the trip home was, in essence, a period of intense training with all branches of the FAA working together as a team for the first time:

> We eventually commissioned and embarked in Sydney and the work up for the ship began with the arrival of the Air Group. It was work because the heavy main wings had to be folded manually and it was hard going, especially in a heavy sea. Our RN training stood us in good stead and we very soon had the aircraft landing and stowing every thirty seconds.[83]

McCullock's statement regarding the first comprehensive aircraft carrier operations aboard *Sydney* is somewhat restrained considering it was such a significant and long awaited accomplishment. Aircraft carrier operations are exceedingly dangerous at any time and the success of *Sydney's* initial air group exercises was testament to the quality of their training.

Although the Royal Navy accepted responsibility for the training of FAA recruits in the early years, the ongoing responsibility was Australia's. Paramount to successful Air Arm operations was a facility to train and house the necessary personnel, together with the aircraft they operated. The search for a suitable permanent Naval Air Station ended with the discovery of a long abandoned airfield on the south coast of New South Wales. Situated outside the small town of Nowra it was considered the ideal location and became the home of the FAA.[84]

During World War II the airfield had been used by both United States and the Netherlands Navies for training purposes and from 1942 RAAF 100 Squadron and 7 Squadron trained for torpedo bombing. The Royal Navy used the base from 1944 as a Mobile Overseas Naval Air Base so some essential infrastructure was in

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82 Webster, p. 2.
83 *Flying Stations,* p. 50.
84 'Naval Air Station Albatross: A chronology', *Slipstream,* (August 1992), p. 7.

place.[85] In the post-war period control of the base passed to the RAAF and the maintenance of its runways and infrastructure was not maintained, resulting in the base quickly falling into disrepair.[86] The base was commissioned as Royal Australian Navy Air Station (RANAS) HMAS *Albatross* in 1948.[87]

Time and vandalism had taken their toll and the advanced party of the RAN faced a major challenge to bring the station to readiness.[88] Establishing electricity supplies and communications proved difficult during a period when coal and electrical unions frequently called for stoppages and strikes.[89] All obstacles were eventually overcome and the base was commissioned on 31 August, 'just three days after the 20th CAG commissioned half a world away in Northern Ireland'.[90]

The 20th CAG consisted of 805 Squadron Sea Furies and Fireflies of 816 Squadron, all leased from the Royal Navy (RN).[91] *Sydney* arrived in Australia in May 1949 under the command of Captain Roy R. Dowling DSO, RAN who later rose to the rank of Vice Admiral.[92]

Naval Historical researcher Bob Nicholls states in *Flying Stations* that Eglinton Northern Ireland saw the 20th CAG commissioned in August 1948:

> While all the CAG aircrew were experienced, some lacked recent practice, and a small number, such as the ex-RAAF pilots, had little prior deck landing experience. Typically, in those days, the work-up included conversion to a new type of aircraft for a number of pilots, as well as battle formation flying practice, instrument flying training, navigation exercises, interceptions, 'dogfights' (called aerial combat manoeuvres) and armament practice for the fighters. The Firefly aircrew, in addition, would include anti-submarine practice.[93]

Sydney successfully completed her sea trials during January 1949, although the exercise did not go smoothly as the borrowed RAF Mosquito crashed into the sea and the crew was lost before *Sydney's* rescue boat could reach them.[94] Commencement of flying trials in February saw nine aircraft sustain serious

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[85] (no author), *Slipstream,* 10;1 (January 1999).
[86] Commonwealth of Australia, 'HMAS Albatross', http://www.navy.gov.au/establishments/hmas-albatross (accessed 5 January 2016).
[87] 'HMAS Albatross', p. 31.
[88] 'HMAS Albatross', p. 31.
[89] 'HMAS Albatross', p. 31.
[90] 'HMAS Albatross', p. 35.
[91] Ferguson, *A Short History,* p. 7.
[92] Smith, p. 43.
[93] *Flying Stations*, p. 57.
[94] Fazio, p. 20.

damage in incidents that largely involved the crash barrier, a situation not entirely unexpected.[95] While it was acknowledged that aircraft would be lost during this initial training period, pilot Toz Dadswell recounts that estimates did not prove accurate. 'In the event we didn't suffer quite as many losses as expected although by today's standards, the toll in lives and aircraft was high'.[96] Losses were also very expensive with the cost of each Firefly being 25,000 pounds and 28,000 for each Sea Fury.[97] According to Dadswell, the flight deck was not the only area of concern:

> Fireflys were used during the early 60's as target towing aircraft and one young sub-lieutenant incurred the wrath of a destroyer captain during a gunnery serial when the puff of smoke seemed to be getting too close, by radioing to the ship – "if you hadn't noticed I'm pulling this bloody target not pushing it."[98]

On completion of trials the ship joined RN exercises at various points around Britain and Ireland before setting sail for Australia in April.[99]

During the trip, *Sydney's* hangars were used to store spare engines and other maintenance equipment on the journey back to Australia and all deck space was taken up with 46 new aircraft, so flight operations were suspended.[100] Having left Greenock in Scotland, the ship took on another 400 personnel in Plymouth, necessitating the after lift well being converted to a mess to accommodate junior sailors.[101] The 28-day trip was long and uneventful with only one stop in Aden to replenish water supplies. 'By the time we reached Fremantle we were living on rotten spuds and liver, and all on board were looking forward to a good Aussie meal'.[102] Some of those aboard had been away from Australia for periods up to 18 months and were eager to see and experience home again and Ian Ferguson was one on them:

> I had the morning watch the day we reached Fremantle and remember seeing the lights of the place about 0430. Of course we did not enter until 0900. Guess what, I was duty and we were to sail the next day, so no run ashore but at least the meal we had that night was something to

[95] Fazio, pp. 20-21.
[96] Toz Dadswell, transcript of unpublished presentation of the Australian FAA given by Toz Dadswell at various venues around Australia, p. 5.
[97] Dadswell, presentation, p. 5.
[98] Dadswell, presentation, p. 5.
[99] Fazio, p. 20.
[100] Ferguson, *A Short History,* p. 14.
[101] Ferguson, *A Short History,* p. 15.
[102] Ferguson, *A Short History,* p. 15.

remember. A fresh lobster each with the nicest salad and plenty of fresh milk. A mate Ernie Watkins (a stoker and forward lift driver) and I were sitting in the starboard forward ladder bay feeling pretty sad when a car came alongside and off loaded a few sailors. The driver asked had we been ashore, when told no he opened the boot and proceeded to toss up a half dozen long necks [750mls]cold bottles of beer. We told him to be careful as the Master at Arms cabin was just below. He then managed to place a few bottles through the scuttle onto Herby Scale's bunk. We then shot off to the forward lift machinery compartment and scoffed the lot.[103]

The ship made stops in Adelaide and Melbourne before reaching Jervis Bay in May 1949 where the aircraft were unloaded and transported the 30 kilometres to HMAS *Albatross* by road.[104] Australia's Naval Air Station was still under construction at this time, with Nissen huts used for messes and access to the station was precarious during the wetter months.[105] Air Storesman Ernest Harry (Blue) Webster recalls that conditions were primitive: 'we lived in tin igloos, used dirt roads and used coke fired boilers for occasional hot water'.[106] The crew were given leave, the first for some of *Sydney's* airmen for three years,[107] and although Nowra was a small town offering little entertainment, the airmen managed to improvise. A favourite occupation for many was one that involved 'jousting on motor bikes with water pistols' in the mess.[108] While some enjoyed a long awaited rest period, all pilots from *Sydney's* Squadrons were required to practice deck landing on the airfield at Jervis Bay. According to artificer (Airframes and Engines) Charlie Price, many pilots became irritable and put pressure on the ground staff by tagging aircraft as unserviceable with the slightest provocation. Ground crews were not above retaliation:

Amongst our aircrew were a sprinkling of RN pilots ignorant of the Australian humour. One day the aircraft servicing crew had killed a red-bellied black snake and wrapped it around the control column of an aircraft. With the servicing crew watching from a safe distance I was told the pilot, a Pom of course, had both legs in the cockpit and was about to drop into the seat when he spotted the snake. I will leave the rest of the story to the reader's imagination. Snakes abound in the Shoalhaven area, along with the red-bellied blacks, there were also brown, tigers and harmless beautiful diamond pythons. One Chief kept a python as a pet in his cabin. During the lunch breaks, the bar in the CPO's Mess would be open and in the two years following the

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[103] Ferguson, *A Short History,* p. 16.
[104] Matterson, p. 34.
[105] Ferguson, *A Short History,* p. 17.
[106] Trevor (Snow) Tite, 'May the Memories Sail on Forever', *Slipstream,* 5;3 (July/Sept 2007), p. 1.
[107] Webster, p. 3.
[108] Ferguson, *A Short History,* p. 17.

commissioning the mess would be full of RN CPO's. One day following an unsuccessful attempt on the part of this Chief to get to the bar counter to obtain a beer he withdrew the snake from beneath his shirt and threw it on the bar. I enjoyed the spectacle of about one hundred Poms trying to get out of the door at the same time.[109]

During the seven months before the arrival of *Sydney* and the 20th CAG at *Albatross*, training facilities were established to cater for aircraft maintenance-mechanical, electrical and radio; aircraft ordnance, photographic, meteorological and aircraft handling. To simulate the flight deck of a carrier, an area of concrete in appropriate dimensions was outlined to allow aircraft handlers to practice safe techniques.[110] Brian Dunne explains that:

> Long before the arrival of the Sydney and the 20th Carrier Air Group with the first of the Sea Furies and the Fireflies, the student airframe and engine mechanics ran up the [Spitfires'] engines for practice. [These aircraft] were later given to the aircraft handlers to push around the dummy deck and also to expose them to the dangers of operating near aircraft with engines running. The final indignity was when [the aircraft] were doused with AVGAS [aviation gasoline, usually contaminated] and set alight for the fire crews to practice putting out aircraft fires. If only someone could have foreseen that thirty years later a Spitfire in flying condition would be worth a quarter of a million dollars.[111]

The schools of Aircraft Handling and Safety Equipment at *Albatross* came under the command of experienced World War II pilot Bill Crozer RN, under whose guidance the permanent Dummy Deck was designed and built. Having mastered the art on land, the handler's training stepped up and the rolling pitching carrier deck was a much more dangerous proposition. RN air engineer Ralph Hudson, serving on HMAS *Sydney,* had this to say regarding the newly trained handlers:

> One of the things I remember about life in the Sydney was the aircraft handlers. When twelve Sea Furies – or twelve Fireflies – parked in a [Herringbone range] at the aft end of the flight deck were given the order 'start engines' each aircraft had two handlers in attendance, one wrapped around each double–chocked main wheel. When the signal 'away chocks' was given, these men would crawl out from among the ranks of aircraft, propellers whirling not far above their heads, to seek the sanctuary of the catwalk, each dragging a pair of chock with him. I always thought they deserved a medal for each time they did it…At the

[109] Price, 'A Tiffy's Odyssey', p. 23.
[110] *Flying Stations,* pp. 65-66.
[111] *Flying Stations,* p. 66.

end of the day's flying these same aircraft handlers would be given the task of lashing down the aircraft to be deck-parked for the night.[112]

The instruction, training and the facility itself were world class and are borne out by the fact that 'no aircraft handler was killed on the flight decks of HMA ships, a record not equaled by any other navy'.[113]

On completion the training facilities were more than adequate at *Albatross,* although living conditions were somewhat primitive. Married personnel lived in hotels and rental accommodation in Nowra and surrounding districts but many families were forced to live in caravans and tents on the town's showground. 'There were about thirty caravans located around the perimeter…the style of living was particularly hard on the wives with children'.[114] With the arrival of the CAG the population swelled by 1000, consisting of air staff and their dependents, and thousands of tons of extra equipment, all in need of accommodation and storage space.[115] One of the first qualified fighter pilots, Fred Lane, has vivid memories of the accommodation difficulties in the early days at Nowra:

> There was a severe shortage of housing throughout Australia, but particularly so in the Nowra area. At one early stage (1950-51) aircrew used tents in the Nowra showground as permanent accommodation. Married personnel were also forced to take accommodation in the Huskisson area where rents rose to exorbitant levels during the holiday season. The RAN was very slow to supply minimal married quarters and even when it did it fell foul of the "economic rental" of the McMahon Treasury of the early 50's. This was interpreted to mean that the servicemen would be charged whatever the local rents might be. Occupants of converted Nissen huts were charged rentals equivalent to three bedroom brick cottages in inflated Nowra. This was eventually resolved, but not before it had generated considerable ill will and led directly to the loss of many valuable officers and ratings from the Navy. There was cheaper accommodation and better work opportunities for wives and girlfriends in Sydney, but this had one very bad side effect: the poor road conditions between Nowra and Sydney were contributing to a high casualty rate.[116]

RN radio electrical mechanic Roy Allman was one of many who volunteered to add his experience to the newly formed FAA. Allman spent two years in Australia and recalls the early working conditions at *Albatross*:

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[112] *Flying Stations,* p. 74.
[113] Lehan, *HMAS Albatross,* p. 40.
[114] Lehan, *HMAS Albatross,* p. 40.
[115] *Flying Stations,* p. 69.
[116] Lehan, *HMAS Albatross,* p. 49.

> Aircraft accommodation and workshop facilities were pretty basic. This was understandable I suppose, as we had brought all the equipment with us. There was only one CAG hangar (igloo hangar) and no crew rooms, although an old wooden hut served as briefing and ready room for aircrew.[117]

In the winter of 1949 Nowra broke previous records for rainfall, consequently cutting both road and rail transportation between *Albatross* and Sydney. Naval airman John Buchanan recalls the continuing inclement weather in May 1950 when he was posted to *Albatross*:

> It was raining at Nowra, the depot roads were awash and there was no hot water. We had no mosquito nets (Nowra was considered too far south by the authorities), and no drying rooms for our washing (Nowra was too far north). The temporary huts (they were still there in 1960) had no heating and it was cold.[118]

There can be no doubt that the operational and living conditions experienced at *Albatross* during the early years were so harsh that members continue to recall them with clarity. There were very limited facilities on the base for entertainment or social activities so Nowra, situated approximately six kilometers away, was a very popular attraction, especially for the single personnel. Accessed by one unsealed and often all but impassable road, many members took their lives in their hands on dubious motorbikes during their off duty hours. These experiences are one small component of the long term memories accurately recalled by older members of the FAA which enrich their collective history.

FAA personnel, members of the 20th Carrier Air Group, embedded themselves at *Albatross* in 1950, while plans for the 21st CAG came together in England where the first direct naval entry mechanics were completing their training.[119] Of the original 57 Naval Airmen Mechanics (NAMs) 15 were posted to the 21st CAG and spent an extra eight months in the UK. They returned to Australia after an absence of two and a half years. Those immediately returning to Australia for further postings did so via cruise ships.[120] By mid April NAMs were posted to HMS *Vulture*, RNAS St. Merryrn in Cornwall where Lieutenant Commander Harrington RN took

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[117] Lehan, *HMAS Albatross,* p. 50.
[118] Lehan, *HMAS Albatross,* p. 54.
[119] Matterson, p. 28.
[120] Matterson, p. 30.

command of the new carrier air group.[121] Forming the various branches into an efficient cohesive unit took organisation and time, likewise for the two new Squadrons, 808 and 817.[122] Once again the CAG was made up of experienced RN personnel and RN trained RAN recruits who were joined by *Albatross* trained Safety Equipment, Aircraft Handler, Ordnance and Photography recruits.[123] Operational flying began after commissioning on 25 April 1950 and the CAG embarked on *Sydney* to complete their work up. The 21st CAG arrived from England with 808 and 817 Squadrons embarked on 6 December 1950 and commenced unloading her 65 new aircraft in Jervis Bay.[124] Ray Hathaway, an Electrical Artificer, remembers the role he played in the 21st CAG arrival:

> The day before HMAS *Sydney* arrived from England we tested the bit 20 ton Coles mobile crane at Albatross in preparation for lifting aircraft off at Jervis Bay. During the final tests with big concrete blocks the hoists burnt out. Working all night we swapped the hoist motor for the jib motor and locked the jib at 60 degrees, its best angle. I set off with the crane the next morning by road to Jervis Bay, but I could see the jib would foul electricity wires. Disregarding orders from *Albatross* to drive through the wires I found someone at BTU who would cut them for us. So on we went, driving or cutting half a dozen sets of telephone and electricity wires on our way. We must have caused consternation until they were repaired later that day.[125]

In July 1950 *Sydney* was again en route to the UK to embark the 21st CAG, a composite group comprising 805 and 808 Squadrons flying Sea Furies and 817 Squadron with Fireflies.[126] Also embarked at this time were one helicopter and crew on loan from the United States Navy.[127] The 21st CAG were to serve on Australia's second aircraft carrier acquisition, the Majestic class HMS *Majestic*. Completed in 1955, she began life as HMAS *Melbourne* that same year.[128]

When invited to comment on the advantages that a life in the FAA presented and the level of training they received, the consensus was that their decision to join was positively life changing. Brian Poole served as a fixed-wing pilot and in his opinion 'it was because of the FAA a lot of men were set up for life, men who came from

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[121] R.E. Geale, *Australian Naval Aviation History: A Diary covering the period 1950- 1955,* (Shoalhaven Sub-Section of the Naval Association of Australia, n.d.) p 1.
[122] Matterson, p. 30.
[123] Matterson, p. 30.
[124] Geale, p. 4.
[125] Lehan, *HMAS Albatross,* p. 59.
[126] Jones, p. 68.
[127] Nally, p. 14.
[128] Gillett, *HMAS Melbourne,* p. 13.

modest backgrounds. The navy set me up for the rest of my career, quite definitely'.[129] Aircraft Handler of the same era, Dennis Nixon, expresses it this way:

> The navy seems to make you think for yourself; stand on your own two feet. If you stuffed up, you stuffed up. If you had the balls to admit it you were quids in front. I would do it all again, probably stay in longer.[130]

Presently serving in the Western Australian Police Force, Kim Ferguson began his work life in the FAA and served as an airframes and engine fitter. His memories of this early chapter of his life are very positive and Ferguson is unstinting in his appreciation of his training and the unique opportunities he was offered. As he explains here:

> The training was really good, there was a lot of practical training involved and you had to reach a certain standard and we studied and I put 100 per cent into that to get the best mark, I was determined to do very well and I did. I managed to get cross trained with the Air Force in certain areas and I was competing to get those courses and trades. At the other end of my career it helped me very much. I did nine years and loved every minute of it, but my family split up and if that hadn't happened I would still be there because that's how much I loved it. All credit to the navy, I was given every opportunity, provided with every training needed, they were brilliant to me.[131]

According to those who served and are serving today, the level of competency that FAA personnel reached in their various fields far exceeded that of any Air Force trained recruit. One point of difference, according to Pilot Anthony Adams, was the confidence and ability to use their own initiative when the opportunity presented itself. He relates one example of that unique aspect of the FAA here:

> The FAA? It was fantastic, it really was, we just did so many fun things, it used to be known as the best bloody flying club in the world and I believe that's about it. The navy just used to get on and do things whereas the Air Force never did, to this day they are still pretty soft on political correctness, straight up and down, no one operates on their own initiative which in the navy we were allowed to do. I was given a 748 and told to go up north and find a base to operate out of when we take the Trackers up. I said right oh. Off we go, me and another pilot, an observer and an engineer, and picked up Toz Dadswell in Darwin and we went down and checked out all the west coast, stayed in various places, talked to everybody and back to Nowra. They at Nowra had decided on Derby to operate out of but I convinced them that Broome would be better. We had so many hours for the Squadron to fly

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[129] Poole, interview, p. 7.
[130] Nixon, interview, p. 7.
[131] Ferguson, interview, p. 4.

and as long as we stayed within those hours and we didn't smash the aircraft and make fools of ourselves and we didn't draw attention to ourselves nobody really worried.[132]

Captain Brett Dowsing has added 'Defence Attaché to South Korea' to his impressive Naval and FAA career and is conscious of the opportunities his training offered:

> Being a member of the FAA has equipped me with valuable flying experience that remains attractive in the civil market place as well as exposing me to high level executive management positions where the skills I have developed are directly transferable to the corporate environment. I have had four overseas postings, the first as a peacekeeper flying Hueys in the Sinai, a helicopter instructor's course with the RAF Central Flying School in the UK, two years exchange as a flying instructor with the RN and a year on staff college with the USN at the US Navy War College in Newport.[133]

In the 1970s many FAA helicopter pilots were fortunate enough to be taught by those who had served in the Vietnam War and Dowsing is of the opinion that these experiences ensured they were unequalled as instructors:

> Pretty much every helicopter pilot that was teaching us had done Vietnam. And so they came with camaraderie and they came in with a certain bent of what was important for you to learn and know as a helicopter pilot. And they taught you and they were ruthless in teaching you but you knew that they had come from the real thing.[134]

Dowsing and many others have built on the foundations of great training to achieve long and impressive careers in the FAA. Rick Meehan served as an aircraft maintainer for 27 years and finds his skills highly appreciated in the civilian world:

> As far as service training and experience it can only enhance. As servicemen we are highly skilled and trained and therefore employable. I had no trouble getting a job when I left the navy and have had numerous offers for advancement and or alternative employment. The navy was what I expected, I visited many countries and ports, experienced different cultures and witnessed many things. Most people would not experience that in a lifetime. It is quite uncanny that sailors can always find things in foreign ports that the common tourist will never see.[135]

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[132] Adams, interview, p. 7.
[133] Tony Dalton, completed questionnaire, (11 October 2008), p. 2.
[134] Dowsing, interview, p. 5.
[135] Rick Meehan, completed questionnaire (24 July 2008), p. 2.

Today the FAA enjoys a well deserved reputation within the international naval milieu, a reputation that owes much to the meticulousness of their training. John Selsmark served in the FAA as an observer and went on to an extensive career as a commercial pilot and in his estimation quantity is always bested by quality:

> We might be a little navy but one thing you can always say about Australia's services is what we lack in quantity we make up for in quality. We've got a very good training system and the quality of the people we recruit, we don't mass produce them.[136]

It is this quality training system which has stood the FAA in such good stead according to currently serving head of the Helicopter Systems Division, Rear Admiral Tony Dalton. That initial training was greatly extended in overseas postings which allowed greater interoperability, thus enhancing Australia's naval value. As Dalton reiterates:

> As a very junior pilot in 1982, the opportunity to fly in the Sinai was a fantastic learning experience. Representing Australia in both the UK and the US was a privilege that I thoroughly enjoyed and that was enhanced by the very solid reputation, largely earned by my predecessors, the Australian Navy enjoys with both of those countries. Over the last 10 years I have been fortunate enough to have worked in positions of steadily increasing influence, and have been able, in some small part, to shape the future of the Fleet Air Arm.[137]

Operating in the era of aircraft carriers and fixed-wing aircraft has little in common with a helicopter-based Fleet Air Arm but veterans and currently serving members are emphatically unanimous in the importance of their training. They came to the FAA from civilian jobs or transferred from various branches of the navy and their reasons varied greatly. For many recruits the 1940s offered the unique opportunity of sailing to Britain for training; an impressive first step in what was, especially in the aircraft carrier era, a catalogue of overseas destinations. Their specialist training allowed the FAA to make a valid contribution to Australian military operations and by extension, international peacekeeping and security forces. These operations, both fixed-wing and rotary, are examined in the following chapter which will show conclusively that the FAA's mode of operation has had little bearing on their operational value.

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[136] John Selsmark, transcript of recorded interview (10 July 2008), p. 13.
[137] Dalton, p. 3.

4. Carriers and Fixed-wing Aircraft; Small Ships and Helicopters

Melbourne and *Sydney* were the spearhead of the Australian Navy; protection of the fleet is the fundamental role of aircraft carriers, primarily in intercepting and destroying enemy submarines and fighter aircraft.[1] One of the responsibilities of the (CAG) was to maintain daylight Combat Air Patrol (CAP) over the aircraft carrier which significantly extended the area of protection.[2] Long-range reconnaissance and surveillance capabilities have been established as pivotal roles in this protection and to this end, launching and retrieving aircraft successfully was paramount.[3]

The RAN maintained a comparatively constant and visible presence in the Asia Pacific region during the aircraft carrier era, a show of strength in an effort to control the spread of communist ideology. I would argue that with the shift from fixed-wing to rotary aircraft, the presence of naval aviation in the Australian Navy became less visible but no less valuable. The shift in political ideology with the end of the Cold War encouraged an international policy of watchfulness, policing and combined response which is reflected in a reordered small ship FAA. At the core of this chapter is a comparative study of operational methods; the Majestic class aircraft carriers operated fixed-wing aircraft in anti-submarine warfare mode from 1949 with the Fairey Firefly in service until 1968. From 1955 the Fairey Gannet was introduced and was followed by the Grumman Tracker from 1967 until 1984.[4] In the same role, the Westland Wessex helicopter was introduced in 1962 with the Sea King following in 1974 and in 1988 the Sikorsky Seahawk took over the anti-submarine role with the Kamen Super Seasprite being introduced in 2003.[5] Anti-submarine Warfare (ASW) has remained at the core of FAA operations from its inception as has an effective offensive posture. The versatile Firefly served as a fighter aircraft as did the single seat Hawker Sea Fury which operated as a fighter-bomber and saw service over Korea between 1951 and 1953. In the post-Korean War years the De Havilland Sea Venom took the lead role of fighter-bomber followed by the McDonnell Douglas Skyhawk in 1967 and phased out with the end

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[1] Stevens, *Royal Australian Navy,* foldout facing p. 160.
[2] Gillett, *Wings,* p. 159.
[3] Stevens, *Royal Australian Navy,* foldout facing p. 160.
[4] Fleet Air Arm Association of Australia, *Aircraft (Fixed Wing), http://www.faaaa.asn.au/photos-faaaa/aircraft-fixed-wing/* [accessed 13 August 2008].
[5] 'Aircraft (Fixed Wing)', n.d.

of the aircraft carrier era. Multi-role helicopters have ensured that the FAA have met all operational requirements in the post-aircraft carrier age as this chapter will document.

Naval aviation has little in common with that of land-based flight, such as the Royal Australian Air Force (RAAF), which is a wholly land-based operation. The advantages of aviation in the maritime environment are obvious and distinct and naval aviators contend with a multitude of variables not experienced by their Air Force counterparts. Here Australian Navy Skyhawk pilot Keith Johnson explains why:

> Many naval aviators are often asked, 'Why join the navy to fly in preference to the Air Force?' According to most, the primary reason was the challenge of operating from an aircraft carrier at sea. The three light fleet carriers to serve with the RAN all had one thing in common; their deck could move up and down many feet in as many seconds, offering a test of skill and professionalism not available in other forms of flying. A sea-going airfield presented other challenges too. The carrier could sail more than 2,000 miles in a week, with rapid changes in climatic conditions and introducing new terrain to test the pilot's navigational skills. But the naval flyers' greatest test was the launch of the aircraft with the aid of a catapult and landing on a tiny moving runway using the arrester wires. Before any attempt at carrier operations could even be envisaged, each pilot would be requested to make 100 simulated deck landings at NAS. This was normally followed by 20 carrier landings and a similar number of take offs before the more demanding task of night launches and landings.[6]

How fixed-wing aircraft were launched and retrieved from purpose-built aircraft carriers and the small ship operations of the FAA today offer an operational comparative from which an evaluation of their contribution can be made.

Australia's one remaining aircraft carrier, decommissioned in 1982 and necessitating major operational changes, will in this chapter will be juxtaposed with the aircraft carrier era. Although changing times and technology have altered the face of Australian Naval Aviation, the FAA continues to operate in deep water, far from home and ever at the behest of the Australian government.

As previously stated, the RAN operated aircraft carriers from 1948 and it is from this era that the modern FAA has evolved. HMAS *Albatross, Vengeance, Sydney* and *Melbourne* carried the men and machines of the 20th and 21st CAGS but advances in technology made each of the carriers unique. HMAS *Albatross* was

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[6]   Keith Johnson, cited in Gillett, *Wings,* p. 92.

the first foray into equipping the Australian military with a naval aviation component and it is worth having a brief look at the early system employed to launch and retrieve aircraft. This will place the technological developments that occurred in the following four decades in their historical context.

A seaplane carrier, *Albatross* supported six Vickers Supermarine Seagull Mk III amphibious aircraft and was completed in 1928 and duly commissioned in 1929.[7] The ship was constructed without a catapult but with the provision for one to be added when aircraft had been suitably reinforced.[8] Until then her aircraft were launched and retrieved using a hoist while the ship maintained reduced speed.[9] The ship was fitted with three six- ton cranes mounted both in front of the bridge and on either side.[10] These side-mounted cranes were responsible for maneuvering aircraft from hangar to flight deck and retrieving them from the water. The foredeck crane moved the aircraft onto the catapult when it was installed in 1936. The ship was capable of maintaining, servicing and repairing aircraft, being equipped with all the necessary equipment, including a blacksmith's forge.[11]

The crew of the *Albatross* numbered 450 which included 30 members of the RAAF.[12] The RAAF formed 9 Squadron in 1925 from 101 (Fleet Co-operation) Flight, which was the first to fly from HMAS *Albatross*.[13] The ship's first cruise began within two weeks of her commissioning and she attended the Hobart Regatta before returning to Melbourne where she embarked her aircraft. Exercises to work the ship up to her ultimate fighting ability commenced in Jervis Bay and included gunnery, ship handling and seamanship. Her aircraft and their crews were successfully brought to a state of readiness and the ship sailed to Sydney for replenishment.[14] From here *Albatross* was deployed to Darwin to operate in support of Country Class Cruisers *Australia* and *Canberra.*

Limitations of her deployment owed much to her Seagull aircraft, which were not well suited to the maritime environment; immersion in rough seas caused the aircraft to lose whatever seaworthiness they had. This shortcoming limited her

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[7] Lind, p. 68.
[8] 'First of the Line', n.d.
[9] Fazio, p. 11.
[10] Nally, p. 6.
[11] Nally, p. 6.
[12] Lehan, *HMAS Albatross,* p. 3.
[13] Keith Isaacs, *Military Aircraft of Australia 1909 – 1918* (Australian War Memorial, Canberra 1971) p.54.
[14] Fazio, pp. 10-11.

success as deep water operations were restricted.[15] *Albatross's* slower speed also impeded her service with the cruiser Squadron. She was, however, able to supply the cruisers with reconnaissance and acted as a spotter for either torpedo or gunnery practice and in many respects the ship fulfilled her role admirably.[16] The ship's peacetime routine included training exercises in ports such as Port Moresby and Rabaul where she also undertook survey and photography work.[17] In 1931 RAAF Sergeant W J Symonds (later Squadron Leader) joined the flight to maintain the Seagull aircraft and remembers some of the anomalies of life in the RAN aboard *Albatross*:

> I had a couple of years on the Albatross and a lot of these young fellows came on the Albatross and they hadn't been on board half an hour and they were 'Aye, Aying Sir' and our (RAAF) blokes used to try and upset them. If they asked one of our fellows where so and so was they'd say, 'he's upstairs somewhere instead of 'up top' or 'he's over by the railing there.' Gee, they were a funny old lot! One time they let one of these rocket things go and it went shooting across the deck. It was a funny Air Force in those days! We had a lot of fun on the ship. The thing was that on Albatross you had two sets of rules and regulations – the Navy and the Air Force – and the Navy did everything at the double. You'd see an Air Force chap meandering down the deck and somebody up on the bridge would be singing out: 'Hurry up that man down there!' and he'd just look up and toddle on.[18]

This quotation clearly demonstrates that the amalgamation of RAAF and naval personnel within the naval aviation environment did not achieve a seamless or particularly successful composite group. Aviation in any form is a dangerous endeavor and operating in the maritime environment increases that danger to the highest degree, necessitating a high degree of coordinated team work. Clearly discipline in the newly formed RAAF was not equal to that of the RAN, a situation that did not foster an atmosphere conducive to successful maritime aviation operations. The ship entered a reserve period in 1933 and was transferred to the British Navy in 1938 but the outbreak of World War II saw her commissioned again and she served until the end of hostilities. In *RAN Aircraft Carriers*, Lieutenant Vince Fazio lists *Albatross's* additional roles as; 'repair ship, floating cabaret,

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[15]   Fazio, p. 11.
[16]   Fazio, p. 11.
[17]   Fazio, p. 12.
[18]   Lehan, *HMAS Albatross,* p. 9.

migrant ship and troopship' and states that she was 'a valuable unit of two navies'.[19]

The RAN's second aircraft carrier was HMAS *Sydney* and she bore little resemblance to *Albatross.* After commissioning at Davenport, England on December 16 1948, Majestic Class *Sydney* began her service with the RAN in February 1949 after some modifications.[20] The ship measured 695 feet in length, was 80 feet wide at her narrowest point and 112 feet wide including her flight deck. Four boilers and two turbine engines propelled *Sydney's* 14,000 tons at a top speed of 25 knots and the ship was capable of steaming for 8,500 nautical miles at an economical speed of 20 knots.[21] *Sydney* was capable of carrying and launching between 39 and 44 aircraft (depending on type) from her one catapult. Ten arrester wires were responsible for the safe retrieval of these aircraft and she was also fitted with two crash barriers which would bring an aircraft to an abrupt halt in the event the aircraft missed all the arrester wires.[22] These arrester cables, which were strung across the flight deck, had the ability to bring a 14,000 pound aircraft to an abrupt but safe stop from speeds of 60 knots.[23] Sea Fury pilot Andrew Powell served on *Sydney* and offers one example of the speeds involved in successfully landing on a flight deck:

> A Sea Fury on ideal landing conditions picked up a wire with a ground speed of around 90 knots – say around 167kmh – and came to stop in 60ft or 18m which is a pretty good breaking device. In other times with lower wind speed across the flight deck the slowdown was more dramatic.[24]

The advances in aircraft carrier technology are clearly demonstrated in Powell's above quotation. *Albatross* and *Sydney* both operated aircraft in the maritime environment but their divergent operational procedures ensure any commonality is purely coincidental. The addition of this modern capital ship ensured that the RAN once again earned the title 'Fleet'. That category carried with it respect within the Australasian region as this modern aircraft carrier amplified Australian military strength.

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[19] Fazio, p. 17.
[20] Nally, p. 14.
[21] Fazio, pp. 171-173.
[22] Fazio, pp. 171-173.
[23] Gillett, *Wings*, p. 62.
[24] Andrew Powell, via e-mail (20 February 2011).

Sydney successfully completed her sea trials during January 1949, although one aircraft and crew were lost when the borrowed RAF Mosquito aircraft crashed into the sea. The aircraft was flying in an exercise which simulated that of an enemy, giving the ship's radar a solid contact with which to trial their new electronic technology.[25] The field of electronics was a major innovation in the world's navies at this time and the RAN was no exception with the Electrical Branch being formed in 1948. This modern technology allowed *Sydney* and her aircraft a more precise communication facility, greatly extending the limits of reconnaissance and increasing on board aircraft control and safety.[26] Commencement of flying trials in February saw nine aircraft sustain serious damage in incidents that largely involved the crash barrier, a situation not entirely unexpected.[27]

Successfully landing an aircraft on to the deck of a ship takes practice and this practice was undertaken on land using a system called Aerodrome Dummy Deck Landings or ADDLS, in an accurate simulation of deck landings, before moving on to the ship to become qualified.[28] FAA Pilot, Lieutenant John Gunn, recalls that after transitioning to the carrier not everything went according to plan:

> My logbook shows that March 17, 1949, was the last time Chief Petty Officer Jones, my observer, flew with me. He quit flying that day, courtesy Lieutenant Danny Buchanan. It was a world record day. Danny broke five new aircraft in one landing. We were in the southern part of the Irish Sea. There was no wind, which meant higher approach speeds, and the horizon – so necessary to sense the right aircraft attitude for the approach – was shrouded and indistinct. The weather pattern of preceding days had built up a big swell and the deck was moving a lot. I think it was John Goble who landed on before me and I managed to get down with the help of the batsman. I taxied across the lowered barrier with a marshaller guiding me and still remember his astonished face as he looked past me wide-eyed, turned and sprinted for the ship's side. I glimpsed others jumping for the nets and put my head between my knees, wrapping my arms around it. Then wallop! Danny had landed heavily, dropping in from way up when the deck disappeared from under him, he bounced high over the barrier and came down on my aircraft, his right wing hitting the top of CPO Jones' cockpit. There's little doubt he would have been killed if he hadn't been bending down to pick up some gear at the time. The back of the aircraft was broken and it slewed round violently. Danny careered on, hitting three more parked aircraft, until he came to a stop close to the bow. He had no wings and no undercarriage but the fuselage was upright, tail

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[25]   Fazio, p. 20.

[26]   Jones, p. 63.

[27]   Fazio, pp. 20-21.

[28]   Lehan, *HMAS Albatross,* p. 60.

towards the bow, neatly aligned with the ship's centreline. Danny stepped out unhurt.[29]

Gunn's statement clearly demonstrates that while the ADDLS system taught pilots to land on a very short runway, the land based training could not simulate the ever changing weather conditions FAA flight crews faced. For naval aviators the challengers inherent in the safe launch and retrieval of aircraft at sea places them apart from their land based counterparts. As such, the fixed-wing aircraft they flew were subject to structural stresses far in excess of those encountered during RAAF operations. Therefore advances in technology which allowed aircraft to be utilized in the maritime milieu were essential and ongoing.

Unlike their predecessors, the modern Majestic Class carriers of the RAN operated purpose-built aircraft and these aircraft were flown and maintained by members of the FAA. These FAA personnel formed nine Squadrons, all of which initially formed in the RN, and four of which continue to serve today. Some of the Squadrons disbanded and reformed, some remained carrier based while others served a training role at Royal Naval Air Station (RNAS) *Albatross*.[30] The aircraft operating on board the *Sydney* were from designated Squadrons 805 and 816 and collectively they formed the 20th CAG. This formally identified the aircraft and men who served on a particular aircraft carrier and ensured that the FAA component of the ship was a unified one.[31]

Initially equipping the 20th CAG was another major expenditure for the Australian government which would be repeated when the 21st CAG commissioned in 1950. Bob Nicholls records this outlay in *Flying Stations*:

> To equip the 20th CAG the Australian Government placed a London purchase order on 5 April 1948 for 25 Hawker Sea Fury FN Mark 11, 25 Fairey Firefly Mark 5, nine Centaurus engines and nine Griffin engines. A similar order was placed on 6 October 1948 for the outfit of the second Carrier Air Group. These orders were the first of a number which would see 101 Sea Furies and 108 Fireflies being acquired for the RAN.[32]

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[29] Lehan, *HMAS Albatross,* p. 60.
[30] Lehan, *HMAS Albatross,* pp. 247-252.
[31] *Evolution of Carrier Air Groups and Wings: Appendix 15,* n.d. http://www.history.navy.mil/bin/imageDownload?image=/content/dam/nhhc/research/histories/naval-aviation/pdf/app15.pdf. (accessed 17 January 2016).
[32] Lehan, *HMAS Albatross,* p. 57.

The initial intake of pilots who flew as members of the 20th CAG were experienced aviators, although not all had naval aviation experience. Nicholls explains how the air crews were brought to readiness for commissioning in August 1948:

> While all the CAG aircrew were experienced, some lacked recent practice, and a small number, such as the ex-RAAF pilots, had little prior deck landing experience. Typically, in those days, the work-up included conversion to a new type of aircraft for a number of pilots, as well as battle formation flying practice, instrument flying training, navigation exercises, interceptions, 'dogfights' (called aerial combat manoeuvres) and armament practice for the fighters. The Firefly aircrew, in addition, would include anti-submarine practice.[33]

Nicholls explains that the intense training members of both CAGs underwent was vitally necessary as 'the deck of an aircraft carrier is not for the fainthearted. The flight deck has always been known to those who have served on aircraft carriers to be the most hostile and accident-prone place on earth.'[34] Author of *Wings and The Navy 1947 – 1953,* Colin Jones puts it this way:

> Aviation is very unforgiving of those who make mistakes, and it is most unforgiving aboard an aircraft carrier. As Jacky Fisher was wont to say, 80 years before, what is required are three things, 'Efficiency, Efficiency and **EFFICIENCY!**'[35]

HMAS *Sydney,* like other carriers of her time, launched her aircraft from an axial or straight deck, as retired British naval engineer Bernard Ireland explains in *The Rise and Fall of the Aircraft Carrier*:

> All carriers up to that time had had an axial deck with the forward third the province of the catapult and aircraft ranged for takeoff. The after two-thirds were for landing on and a pilot, once committed, relied on picking up the arrester wires. If he did not, all that remained between him and the forward park were good brakes and the deck barrier; the former were of little use on a wet heaving deck and the latter was expensive of aircraft and men.[36]

All aircraft need air moving across their wings to gain flight, which is achieved when aircraft accelerate down a runway. Aircraft carriers have restricted runway lengths which necessitate aircraft being assisted to maintain air movement across their

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[33] Lehan, *HMAS Albatross,* p. 57.
[34] *Flying Stations*, p. 213.
[35] Jones, p. 65.
[36] Ireland, p. 130.

wings to gain enough speed to generate lift.[37] The ships achieve additional speed across the runway or flight deck by positioning into the wind and increasing the ship's speed, thereby minimizing the aircraft's take-off speed.[38] In *Wings and the Navy*, Colin Jones gives an example of an aircraft launch:

> Normally aircraft would be spotted on the deck for a rolling take-off with the more junior officers first and the senior last. From the time the starter cartridges were fired there would be continual roaring of engines to drown speech. The pilot would apply full throttle, release the brakes and adjust his controls for engine torque and, with luck, soar off the deck like a very noisy bird. As each plane took off it would 'jink' to starboard and then continue on its set course. This prevented the next aircraft from being affected by its propeller turbulence. If an aircraft was being catapulted the pilot had to be careful that he did not pull the stick back at the moment the impact was applied. It was all controlled routine as the pilot fired the starter cartridge, did his radio and cockpit check while the deck handlers made sure the aircraft was tight against the launching strop. The flight deck officer would hold up his green flag; the pilot would apply full throttle and drop his right hand. Down would come the green flag, the engineer would put his foot on the pedal and the catapult would fire. The aircraft was secured by the tail also, and this rope had to break before the aircraft could move. This ensured that maximum thrust was being applied at the right moment.[39]

Accomplishing flight from the short runway of an aircraft flight deck means achieving high speed in the shortest possible length. A successful launch necessitated technological assistance and to this end aircraft catapults in their crudest form were used as early as 1911 in the United States.[40] Development progressed and the Rocket Assisted Take-Off Gear (RATOG) system was introduced during World War II and used multiple rockets on both sides of the fuselage to propel the aircraft. Problems included uneven ignition or ignition failure which resulted in accidents and eventually a casualty in May 1951.[41] Naval aviator, historian and curator of the Fleet Air Arm museum in Nowra, Robert (Windy) Geale noted that:

> An 808 Squadron Sea Fury VX754 stalled when climbing out after a Rocket Assisted Take Off (RATOG) from HMAS Sydney. The pilot,

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[37] Tom Harris, 'How Aircraft Carriers Work', *How Stuff Works,* n.d. http://science.howstuffworks.com/aircraft-carrier.htm [accessed 1 December 2015].

[38] Harris, n.d.

[39] Jones, p. 66.

[40] *Flying Stations,* p. 12.

[41] *Flying Stations,* p. 82.

> Lieutenant Robert Westwood Barnett, RAN was killed and his body was not recovered. It would appear that only one side of rockets ignited.[42]

This system required the pilot to ignite these attached rockets at a pre-determined point during a successful launch, after which they would be jettisoned. Barnett experienced an asymmetrical ignition when one side ignited while the aircraft was still on the deck and the other ignited as the aircraft gained flight, sending it into an uncontrolled spiral into the sea. Barnett's death was a contributing factor in the navies worldwide abandoning this launch method.[43]

Further development introduced the hydraulic catapult system, but again, there were serious problems. The aircraft to be launched is attached to the catapult which runs through the deck where a system of pulleys will throw the aircraft into the air. Hydraulic fluid under extreme pressure is the driving force powering the catapult stroke.[44] In 1954, aboard the United States aircraft carrier USS *Bennington,* 100 crewmen lost their lives when this high pressure hydraulic system failed. Undetected, the catapult had developed a leak and the unconfined heated hydraulic vapor permeated into connecting spaces below deck.[45] The subsequent explosion and catastrophic fire which caused the deaths of so many of *Bennington's* personnel, together with an estimated 100 injuries, were attributed to the simple act of a seaman lighting a cigarette and igniting the hydraulic vapour.[46] HMAS *Melbourne* safely operated a hydraulic catapult until the system was upgraded in 1970.[47]

The limitations of the hydraulic catapult system became apparent with the introduction of faster and heavier aircraft which was the catalyst for the next phase of carrier technology.[48] While the hydraulic catapult was adequate for launching aircraft such as the Sea Fury and the Firefly, both of which operated from *Sydney*, the modern carrier-borne aircraft required changes. According to Bernard Ireland,

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[42] Geale, p.4.

[43] Commonwealth of Australia, '808 Squadron History', *Royal Australian Navy,* http://www.navy.gov.au/history/Squadron-histories/808-Squadron-history [accessed 1 January 2016].

[44] Clark G. Reynolds, *The Carrier War,* (London: Time-Life, 2004), p. 119.

[45] 'Launch and Recovery: From Flywheels to Magnets', *Naval Aviation News,* n.d. http://navalaviationnews.navylive.dodlive.mil/2013/08/05/launch-and-recovery-from-flywheels-to-magnets/ [accessed 10 December 2015].

[46] 'USS Bennington: 26 May 1954 explosion', *USS Bennington,* http://www.uss-bennington.org/history26may1954.html [accessed 5 October 2011].

[47] Fazio, p. 178.

[48] 'Launch and Recovery', n.d.

the development and introduction of the steam catapult by the British in 1951 was a major step forward:

> In the new design, the long cylinder laid below the flight deck drew steam from the ship's boilers to accelerate the shuttle; the bridle arm connecting it to the aircraft passed through a slot with a double flexible sealing strip…over 250 launches were carried out with a wide variety of aircraft and high reliability and good launch rate were recorded.[49]

Overcoming the problem presented by the amount of steam required to launch aircraft of divergent weights and speeds was a simple process of adjustment of the launching valve. This system was successfully incorporated into many of the world's navies and according to Vince Fazio:

> Its simplicity resulted in power-on-demand and power to spare. As an example, a USN Tomcat fighter at a shore station requires a mile of runway to get airborne. Onboard, a 300 foot length catapult is required to get a 30 ton aircraft moving at 170 knots at the end of the catapult stroke.[50]

For many pilots the challenges of military flying are addictive while the constant striving for perfection carries the ultimate adrenalin rush. Carrier flying, especially being catapulted off the deck has been described many times as the ultimate challenge and the atmosphere is very, very competitive.[51] FAA Pilot Des Rogers concurs:

> The steam catapult is a continuous thing. A bit of a kick in the bum; suddenly you're airborne. It has been described by a lot of blokes as better than sex. The hydraulic catapult is better than sex. It's a hell of a thrill I can tell you!! Some people got very very used to it and they used to select their undercarriage 'up' while they were sitting on the catapult. They would not come up because it's being held down; as you're going along the catapult the weight came off the wheels which means you're flying anyway and the wheels just came up. They were idiots in my mind but a couple of them used to do it.[52]

The flight deck crew on any aircraft carrier operate under very dangerous conditions. There are aircraft being moved around the deck in preparation for flight or storage, whirling propellers and powerful jet blasts ready to maim or kill those whose focus drifts for even a moment. When the carrier is turned into the wind for

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49 Ireland, p. 130.
50 Fazio, p. 177.
51 Jones, p. 65.
52 Des Rogers, transcript of recorded interview (16 April 2008), p. 7.

flight operations the deck was often battered by wind and sea spray and the acrid smell of aviation gas. At 17 years old, 18-month veteran aviation sailor Ralph Illyes was posted to the *Melbourne* in 1978 where he was initiated into the flight deck crew and 'followed like a lost puppy; eyes like duff bowls, mesmerised by the hive of noise and activity'.[53] On witnessing his first Skyhawk jet fighter launch; 'It was an experience I will never forget and the adrenalin rush alone could have kept me going for a week!'[54] Here he describes the launch procedure:

> The large hydraulic jet blast deflector would rise from the deck as an aircraft was marshaled into position. The shuttle would slide up its track followed by wisps of steam and the catapult team would hook the aircraft up with the launch strops giving the metal ropes a good tug and an obligatory thumbs up as tension was applied to the system. A little metal shack (known as the Howdah) would protrude from the flight deck next to the catapult housing the launch control. Right adjacent was the Catapult Officer, waving a small brightly coloured flag to signify to the aircrew to power up. The aircraft now at full military power and under the tension of the launch strops on the catapult shuttle, crouched low on the usually tall nose gear strut like a lion waiting to pounce on its prey. The catapult was fired as the ship was on an upward pitch and the deafening roar of an A4 [Skyhawk] would rapidly accelerate along its short trajectory, getting airborne in a matter of seconds.[55]

I would argue that Illyes' recollection of his first flight deck experience was one he would 'never forget' because the adrenalin rush was totally unlike anything previously encountered. It was the *unique* sights and sounds which triggered this physical response, a response so strong that 40 years later this long-term memory remains equally powerful.

Illyes also recalls that the teamwork and camaraderie on *Melbourne's* flight deck ensured that what appeared to be utter chaos was in fact a smoothly orchestrated operation. The flight deck and crew were called upon for many reasons other than flight operations, such as after engine repairs or maintenance. An aircraft is securely positioned on the flight deck and the engine test run to ensure its serviceability. Aircraft Handler Tom Henry recalls one incident during *Sydney's* deployment to Korea when this routine procedure went awry:

> A Fury [Seafury] was parked on the Port quarter with the after fuselage aligned over one of the many flight deck ring-bolts. The mechanics

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[53]   LCDR Ralph Illyes, 'Back to the Future (Part 1)', *Touchdown: The Fleet Air Arm Safety and Information Magazine* (Sydney: Impact Graphics, April 2010), p. 19.
[54]   Illyes, p. 19.
[55]   Illyes, p. 19.

soon had a lashing around the after fuselage and secured to the ring bolt. Prior to the young pilot manning the cockpit I checked the lashings on my chocks, then got into position on the deck with my feet around the after chock and my arms and upper body wrapped around the wheel and front of the chock. Needless to say, it was a very uncomfortable position. As the powerful Bristol Centaurus engine burst into life, I noticed that the yellow coated Director and the Fire-suitman had moved away, probably to get out of the cold. The pilot ran the engine at medium power for some time. I remember thinking that under these conditions, lying on a hard deck was a stupid place to be, the noise, and the huge five bladed prop blowing bitterly cold air over me added to the discomfort. My day dreaming of home came to a sudden halt as I realised that the pilot was increasing power considerably! At the same time I noticed that the deck movement was becoming more pronounced, maybe getting rougher or the ship was changing course. The aircraft was approaching full power when my fellow chockman caught my eye by frantically pointing to the rear of the aircraft. I checked to see what was grabbing his attention – the fuselage lashing was starting to FRAY! From my cramped position I anxiously looked around for someone to get the attention of the pilot – there was no one in sight! My mind started working overtime. What will happen if the lashing parts? Will the aircraft ground loop and go over the side? It was freezing cold, the Fury was really roaring, the deck was heaving from the rough seas and I could sense that something was going to happen. I buried my face between my upper arm and the aircraft tyre. There was a deafening noise and I was suddenly sprayed with debris, then…all was quiet. I looked up to see the Fury precariously balanced on its nose atop a badly bent propeller. The Flight Deck Officer and others were soon on the scene and the Fury was restored to its original position. 'Good lad Henry, sticking with your chocks! You may have helped save that aircraft', said the FDO. At this point one of my Aircraft Handler mates whispered, 'you silly bastard. You should have shot through, you could have been killed!' Little did they both know that because of the severe cold and 'Fury fear', I was more or less frozen with fright! The FDO told me I could go below for stand-easy then added with a grin 'You might need to change your underpants!'[56]

The above quotation again illustrates the ability to recall the details of this occasion which has been enshrined in Henry's long-term memory. It was a significant event in Henry's service because it was utterly unique and involved an emotional response that continues to resonate today. This event is one example of why flight operations were of great interest to the carriers' off duty sailors, referred to as 'goofers'. At every opportunity they gathered to watch the proceedings, often with cameras in hand, just in case. Colin Jones explains the attraction:

> With a well worked up air group it was something to see, with the aircraft coming in like birds one after the other, with the barrier up only for a few seconds between each. A Firefly might come in at 90 knots

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[56] Tom Henry, cited in Letters to the Editor, *Slipstream, The Quarterly Journal of the Fleet Air Association*, Volume 6 Number 1.(April 1995) p. 14.

and a Sea Fury at 100 knots, though the approach speed of a Sea Fury could be as low as 92knots if the aircraft were light and clean. Then, with luck, the aircraft would take the wire neatly and be brought swiftly to a standstill. If it did not, there was a very expensive sound of it hitting the steel net of the safety barrier – or worse. If the aircraft caught its wheels in the barrier it was known unofficially as the Grand National.[57]

To the side of the flight deck were the sponsons which housed the gun platforms and the men who manned them. According to Jones these gunners were 'always wary of suddenly having to share their perches with an errant aircraft or some of its parts.'[58] If the landing was successful the aircraft's extended tail hook would engage one of the ten arrester wires and the aircraft would come to a halt.[59] Gordon Cummings describes the atmosphere on the flight deck:

'Stand by to recover aircraft', the final act, and what a performance! All the drama and tension of a high trapeze act in a three ring circus can be felt as the pilots culminate months of training and practice to bring the aircraft safely back to a rolling, pitching deck.[60]

Sydney's returning aircraft were required to circle the ship while the landing order was ascertained with any aircraft sustaining damage, mechanical problems or those with the least fuel taking precedence. Proceeding down the port (left) side of the ship, the pilots lined up on the stern at 400 feet from the water.[61] Sydney's aircraft landed with the assistance of her Landing Signals Officer (LSO) or batsman, whose responsibility it was to guide the pilot onto the deck. The LSO used large bats, not unlike oversised table tennis bats, to communicate with the pilot in regard to his speed, height and course. The batsman and the pilot worked closely together to achieve a safe landing but the LSO had ultimate control; if he signaled a wave off – the signal to abort the landing, or if all was well to cut the engine power and land, 'compliance was mandatory'.[62] If the LSO signaled a wave off when your aircraft was descending, wheels ten feet above the deck and the engine at minimum speed, a torque stall was an unwelcome, but not uncommon adrenalin rush in early carrier operations.[63] Pilot Toz Dadswell explains this phenomenon:

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[57] Jones, p. 67.
[58] Jones, p. 67.
[59] Dadswell, presentation, p. 6.
[60] Gordon M. Cummings. 'The Romance of Flying from a Carrier', *Slipstream,* 3:2 (April 1992), p. 8.
[61] Jones, p. 67.
[62] Geoff Litchfield, 'Just one of those days', *Slipstream,* 5:3 (July 1994), p. 8.
[63] Litchfield, p. 8.

Torque is a moment of force. Moments of force are pulling, pushing and twisting. Torque is twisting. When you start up a rotary engine the engine exerts a torque force on the drive shaft. In your car when you start up there is a torque exerted. If that force were strong enough and your car was very light and did not have its wheels on the ground the car would spin around the drive shaft due to torque force. So it is with rotary engines in aircraft. At take off in a single engine aircraft you apply power to the engine with care or the torque will cause you to veer off the runway. Once you get some speed you can counter the torque by use of the rudder. When in flight the lift generated by the wings means you counter the torque. However when you are landing you throttle back the engine and so have little power going to the engine. You are at a slow speed so the lift is less. If the batsman waves you off and you apply full power, especially in a Sea Fury, the torque will have an effect of making you bank sharply and the aircraft might stall. Being close to the ground this could be a disaster. In the most simple terms the drive shaft is trying to turn the engine around it rather than the other way around.[64]

A successful landing was followed by the appearance of the Hookman who scurried across the flight deck to unhook the incoming flight the moment it was brought to a stop, resetting the arrester wire immediately after. The aircraft's wings were then folded; the ability of all carrier borne aircraft to fold their wings is essential for carrier operations as the aircraft need to be stored either on or below the flight deck. With the pilots needing to keep up their skills, they were required to complete 20 hours of flight time each month and if the weather conditions were ideal, refueling and flying continued during daylight hours.[65]

While daylight flight operations were highly challenging, night flying was not an option for *Sydney* due to the inability of the pilots to see the batsman or for him to safely gauge the aircraft's position in relation to the deck.[66] 'When the Canadians tried it aboard the *Magnificent,* four aircraft crashed on the first night'.[67] There were very few pilots aboard *Sydney* who expressed disappointment in night flying being disallowed.[68]

While technological advances, such as the steam catapult (which is still in use today), allowed much faster and heavier aircraft to be flown from modern aircraft carriers, the problems inherent in retrieving those aircraft remained. The first step in addressing this problem was the introduction of arrester wires which were strung

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[64] Dadswell, presentation, p. 17.
[65] Jones, p. 69.
[66] Dadswell, presentation, p. 6.
[67] Jones, p. 68.
[68] Dadswell, presentation, p. 6.

across the ships deck in the 1920's. Along with the wires a crude barrier system was implemented.[69] Bernard Ireland explains how this early system worked:

> The inefficient system of longitudinal arrester wires was augmented in the mid 1920's by a series of transverse wooden flaps which, in being knocked down by the aircraft, were supposed to absorb its energy and slow it. Not surprisingly, the arrangement caused much damage and was taken out; incredibly nothing was available to take its place and, for the next five years, aircraft landed with no arrester gear whatsoever.[70]

Fortunately for the future of naval aviation, the British introduced a much more successful system in 1931 which was the precursor to the system still in place 80 years later.[71] HMS *Courageous* became the first carrier to use this modern system in 1933.[72] Louis S. Casey, author of *Naval Aircraft*, is succinct in his explanation:

> Wires connected to hydraulic cylinders were paid out gradually when engaged by a hook on the aircraft, giving smooth deceleration. This method of safely recovering aircraft, first installed in 1933, has endured to the present.[73]

The system's inventor, W.A.D. Forbes and colleague C.C. Mitchell further developed his prototype by instigating an automatic system whereby aircraft of varying weights and landing speeds were catered for. This system took the place of the more time consuming manual adjustment previously the responsibility of the deck crew.[74]

Maintaining the integrity of the flight deck was paramount to continued flight operations and therefore an essential ongoing chore. Clearing grease or debris and maintaining or replacing arrester wires was one element of the safety procedures and practices which were followed religiously.[75] Safety was paramount in all aircraft carrier operations and all members of the carrier's crew were conversant with flight operations which depended heavily on the synchronization of naval and FAA crews. No more so than while refueling aircraft. These aircraft were powered by avgas, a gasoline that is extremely flammable therefore creating an extremely dangerous and volatile refueling environment.[76] Sea Furys and Fireflys were piston

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[69]   Ireland, p. 24
[70]   Ireland, p. 24.
[71]   Ireland, p. 24.
[72]   Fazio, p. 175.
[73]   Casey, p. 64.
[74]   Fazio, p. 175.
[75]   Jones, p. 69.
[76]   Jones, p. 64.

engine aircraft and as such, 'used the same basic principles as spark ignition engines of cars.'[77] Long hoses were used to pump the avgas to the aircraft which were positioned along the edge of the flight deck, a much safer option.[78]

Sydney very successfully amalgamated the seamanship and aviation branches of the navy which ensured continued attention to safety, mutual respect and cooperation. The introduction of a combined branch cafeteria aboard *Sydney* meant that meals were taken together, an unusual situation from the traditional branch segregation. Strict dress standards were enforced which encouraged entrepreneurs to offer laundry and hairdressing services. The Canteen manager, Vic (Jesus) Zammit was said to have 'made a fortune selling smokes to the sailors' according to Colin Jones.[79] The ship's official photographers were on hand to record flight operations and their efforts, the good, the bad and the ugly were always available for sale in the Canteen. When flight operations were completed and the weather co-operated the cleared flight deck was used by the crew for a variety of games as recalled by Jones:

> A favourite was deck hockey, played six a side with a rope ball. Even with the ship rolling 15 degrees they would race the ball along the deck. For sheer speed and daring, observers reckoned, it beat both codes of football.[80]

The combination of these interactions, together with the use of the after lift well as a picture theatre, ensured that the ships company worked together and relaxed together. This cohesion culminated in impeccable teamwork which is essential for successful flight operations.

In a demonstration of the professionalism attained by *Sydney* and the 20th CAG the two branches reunited for a tour of Australian capital cities in July 1949, a 'show the flag'[81] trip that proved very popular with the general public and the ship's company. Melbourne was included, just in time for the Melbourne Cup and Hobart in time for the Regatta. On completion of 10 days leave in Hobart the ship was preparing to leave harbour and carried out her first 'Operation Pinwheel' explained here by RAN member C.C. Price:

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[77] 'Avgas Grades and Specifications', *Shell Australia* http://www.shell.com.au/products-services/solutions-for-businesses/aviation/products/fuels/avgas.html [accessed 14 June 2014].
[78] Jones, p. 63.
[79] Jones, p. 70.
[80] Jones, p. 70.
[81] Webster, p. 3.

> This was carried out to enable the ship to be moved away from the wharf by utilising the propeller driven aircraft. The Squadron were lined up on the flight deck, the pilots would man the aircraft, start up and pull the carrier away from the wharf. Without the cooling effect of the ram airflow experienced in flight, the engines would rapidly overheat, ignition harnesses would be cooked and suffered magneto RPM drops. The ship's company would be lined up on the rest of the flight deck for leaving harbour. I amused myself counting the large number of windows on the wharf cargo sheds that were blown in. I wonder who paid the bill for that lot.[82]

There is no evidence to suggest that Price or his contemporaries were particularly politically aware in the early 1950s or that for members of the FAA the traditional 'show the flag' deployments were anything other than routine. For Australian Prime Minister Robert Menzies and the Liberal Party the threat of Communism, particularly in Malaysia and Korea, constituted a major threat and 'this conviction dominated most of his thinking and policy-making'.[83] The Communist threat was twofold; the Australian Communist Party was the enemy within and in *Perceptions of Communism in Australia Reception and Rejection,* Robert Dick states that at this time 'the perception of the Australian government that the Communist Party or some other radical group, was actively planning to overthrow our established system of government' was very real.[84] Therefore these public relations deployments, which preceded RAN involvement in the Korean War, were seen by the Menzies government as active preparation for the coming Third World War.[85] This perceived Communist threat further manifested itself in the National Service Scheme, introduced in 1951, and the commitment of troops to Malaysia under the Australia New Zealand and Malaysian treaty (ANZAM).[86]

As a result of perceived escalating Communist aggression, the FAA used these cruises to intensify routine training in all aspects of aviation operations including strafing and bombing.[87] Traditional aspects of the deployments were maintained with public relations exercises in major Australian cities designed to reassure the populace with a show of military strength. In conducting these fly past exercises the FAA Squadrons publicly demonstrated the success of their training, their ability to

[82] Price, p. 23.

[83] Robert M V Dick, 'Perceptions of Communism in Australia: Reception and Rejection', *Humanity,* p. 5, www.humanities.mq.edu.au/humanity/2007/rdick.tml. [accessed 5 July 2015].

[84] Dick, p. 5.

[85] Commonwealth of Australia, 'Australia's Prime Ministers', *National Archives of Australia, http://www.primeministers.naa.gov.au/primeministers/menzies/* [accessed 3 September 2015].

[86] Commander Andrew Brown, 'The history of the Radford-Collins agreement', *Royal Australian Navy,* http://www.navy.gov.au/history/feature-histories/history-radford-collins-agreement [accessed 1 December 2015].

[87] Ferguson, *A Short History,* p. 19.

deploy far in advance of the aircraft carrier and were an integral part of entertaining the public.[88] On her second deployment *Sydney* and her aviators conducted combined exercises with the New Zealand navy in the Bay of Islands, a travel destination which proved very popular with the combined ships company. Ian Ferguson recalls that swimming was a popular pastime after flying operations were completed for the day, complete with diving from the 45feet high flight deck. Diving from the flag deck, a much higher proposition, was according to Ferguson 'absolutely stunning! The powers that be did not think so, the practice was immediately banned'.[89]

While the aircraft carrier and her crew trained to meet all atmospheric conditions, advances in technology also ensured flight skills were never static. Technological improvements in aircraft carriers was often the result of advances in aircraft development and the appearance of Jet-powered aircraft was the catalyst for arguably the greatest innovation in the carrier era. The first jet-propelled aircraft landed on the deck of an aircraft carrier in 1945 and the RAN introduced them to the FAA in 1954.[90] Jet engines greatly increased aircraft speed which necessitated stronger and larger airframes. Jet-propelled aircraft airframes were under considerably more pressure when landing on an aircraft carrier than their propeller driven equivalent, therefore their weight increased exponentially. In consequence, aircraft carrier flight decks were modified. From the previous axial or straight deck, the newest carrier's flight deck was angled to the side which allowed for greater safety for flight operations.

Australia's second Majestic Class carrier, HMAS *Melbourne* was to accommodate the modern jet or turbo propeller aircraft, thus her design was modified to include the British developed angled flight deck.[91] The increased angle of her deck was minimised to five and a half degrees[92] allowing the ship to maintain equilibrium, whereas the modern design of the United States carriers allowed for an angle of ten degrees.[93] Angling of the flight deck to port not only dispensed with the dangers presented by torque stall in single engine aircraft but guaranteed the safety of aircraft ranged on the deck. The port bow housed the state of the art steam

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[88]   Price, p. 23.
[89]   Ferguson, *A Short History,* p. 20.
[90]   David Hamer, *Bombers Versus Battleships: the struggle between ships and aircraft for the control of the sea* (St. Leonards: Allen & Unwin, 1998), p. 326.
[91]   Dadswell, interview, p. 7,
[92]   Gillett, *Wings,* p. 15.
[93]   Winston James, transcription of recorded interview, 25 July 2008, p. 7.

catapult which allowed aircraft to be ranged along the starboard bow, well clear of operations along the flight deck.[94] FAA pilot Winston James explains why this innovation was so successful:

> The angled deck allowed you to come down and if you missed the wires you could keep going and you went off the side of the aircraft carrier and you wouldn't hit anything. You could keep going if you managed to get your power on, you went around and you tried again. When you think you're going to land and the hook goes over all the wires, it's called a bolter. Everybody in the world screams out to you bolter, bolter and when that happens, full power and away you go. That basically was the difference between the straight deck and the angled deck.[95]

Melbourne also carried another innovative aid to modern carrier landings; the mirror landing system. Coupled with the steam catapult and the angled deck, *Melbourne* was 'the most advanced carrier in the world, albeit for 30 or 40 minutes!'[96] The significance of these three inventions can not be overstated; they are still employed in operating fixed-wing aircraft in all the world's navies today.[97] A successful carrier landing necessitates congruent air speed, position and angle of advance, all communicated to the pilot via the Landing Systems Officer or LSO . The mirror landing system (MLS) made the LSO redundant.[98] James simplifies this new landing system:

> The mirror landing system is a concave mirror with either side of it a row of lights. And this row of lights constituted the middle, basically of an horizon or your deck. The lights shone into a mirror set at an angle and directed back into the sky and you would watch and could see this concentrated ball of light coming back at you and observe it in relation to the lights either side of the mirror and if you could keep that ball in the middle of the lights on either side you were directly on the glide path all the way down. And as long as you believed in that and didn't watch the ship, cause (sic) the mirror was gyro stabilised, forget about the ship pitching, other people were thinking of that for you, all you had to do was ensure you were lined up on the centre line.[99]

The introduction of this system was paramount in enabling the world's navies to incorporate the much faster speeds of jet aircraft, advancement not conducive to

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[94] Dadswell, interview, p. 6.
[95] James, interview, p. 7.
[96] James, interview, p. 7.
[97] Commonwealth of Australia, 'Deck Landing Mirror Sight', *Royal Australian Navy,* n.d. http://www.navy.gov.au/history/deck-landing-mirror-sight [accessed 30 December 2015].
[98] Ireland, p. 131.
[99] James, interview, p. 8.

the LSO.[100] Aircraft were flown onto the deck and trapped by a wire at full speed as opposed to landing under minimum power under the old system. Full power was applied as the wheels touched down allowing the aircraft enough power to bolter if required.[101] The mirror was positioned towards the stern of the ship and allowed the pilot to adjust his relative position with greater accuracy and speed, regardless of weather and in complete darkness.[102]

The inclusion of these innovations delayed *Melbourne's* commissioning until 1955 and in the interim period the British Navy agreed to loan the RAN HMS *Vengeance,* an aircraft carrier of the *Colossus* class.[103] *Vengeance,* built in 1945, began her short sojourn with the RAN in November 1952 and was returned to Britain in August in 1955, with the commissioning crew for HMAS *Melbourne.* The first Australian Squadrons to embark on *Vengeance* were 816, 805 and 850 in June 1953.[104] Although the ship was primarily used for training purposes, *Vengeance* acted as escort ship during the Royal Tour in 1954.[105] She sailed to Japan late that year and ferried home 77 RAAF Squadron, aircraft and equipment, on completion of the Squadron's deployment to the Korean War.[106]

There was little to distinguish *Vengeance*, *Sydney* and *Melbourne* when the ships were laid down in the 1940s but *Melbourne's* modernisation placed her in a different category. The angled deck and Mirror Landing System were simple and easy to use according to FAA pilot Toz Dadswell, 'except on a dark night when the ship was rolling and pitching. On those occasions we earn't (sic) every cent of ones flying pay'.[107] Dadswell went on to say:

> Anyone who says that deck landing didn't worry them was lying. Especially on a dark night when the ship was rolling, I guess you could say that fright, fear, apprehension, whatever you want to call it, you had time, ever since you went off the front end you had an hour to think about how you were going to get back. And that used to get to you. They had a great big sign, attributed to me that says the first 600 landings were frightening and after that you tended to settle down. That was a throw away line in a bar one night that someone quoted me on. I did 720. Catching a wire on a dark night and it's raining and the ships

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[100] 'Deck Landing Mirror Sight', n.d.
[101] 'Deck Landing Mirror Sight', n.d.
[102] Shores, p. 238.
[103] *Australian Seapower: Aircraft Carriers, Photofile No. 2*, (Marrickville, N.S.W.: Topmill Publishing, n.d.), p. 19.
[104] Geale, p. 16.
[105] Geale, p. 117
[106] Geale, p. 24.
[107] Dadswell, interview, p. 11.

rolling is the only time you can have an orgasm and evacuation of your bowels at the same time.[108]

Observer John Selsmark is in agreement. 'Daytime it's alright, but night time? Bloody wet drizzling rain, 2 o'clock in the morning, pitch dark. You can't possibly like that'.[109] Night flying necessitated a pilot relying on his instruments and not his sensory perception according to Pilot Peter Adams, and he explains why night operations on a carrier increase the danger exponentially:

> Everything's wrong at night because without visual cues your sensory system doesn't work very well and you get false sensory perception. In fact we lost a Tracker because of it, so in a black night you get this incredibly harsh rapid acceleration which does all sorts of things to your root canals and you've got to really, really, really concentrate and convince yourself that you must only believe that the instruments in front of you and do not for one instant believe what your body's telling you.[110]

Retired RAN pilot John van Gelder stated that although *Melbourne* used the latest aids available, one thing remained very much the same and that was the sporting element. 'Now we had the opportunity to demonstrate how clever we were by flying through the night as well as the day. Whoever said "the more light, less fright" was absolutely spot on'.[111] In this aviator's opinion carrier flying was 'the greatest sport in the world'.[112]

Successful negotiation of a short pitching rolling runway is what distinguishes the naval aviator from all others. An anonymous A-4 Skyhawk pilot has vivid memories of carrier operations where survival depends on excelling in professionalism:

> After a 'high pucker factor' combat mission, it's the Naval Aviator that finds that home is a runway that is barely longer than the width of some land based runways, and that it is pitching and rolling across the ocean. The successful carrier landing, the 'Trap' in NavAir jargon is the ultimate test of nerve and flying skill. And to crank up the difficulty even higher, do it at night or in bad weather. And in 'Blue Water Operations' far out at sea, if one can't get aboard – well the options are very, very limited; and highly undesirable. In reality it isn't even a 'landing'. The aircraft is flown onto the deck. There is no long runway to settle onto, it's a 'HIGH SPEED ARRIVAL', of tons of aircraft at speeds that allow

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[108] Dadswell, interview, p. 11.
[109] Selsmark, interview, p. 14.
[110] Adams, interview, p. 21.
[111] John van Gelder, cited in *Slipstream,* 12;3 (July 2001), p. 16.
[112] van Gelder, p.16.

for an immediate powered return to flight if a 'Bolter" (non-trap) occurs.[113]

While *Sydney* and *Melbourne* were the largest of the RAN's ships and *Melbourne* was fitted with the most technologically modern features, she was built in 1943 and was in no way equal to the new British or United States carriers. Her size alone came as a shock to those used to the larger flight decks of allied navies. One member of *Melbourne's* crew, Armourer Phil Smith, recalls a conversation with an American naval aviator who rose to the challenge *Melbourne* presented:

> I did 350 cat shots and it's the greatest ride of your life! I remember it was 1979 and we were in Shoalwater Bay along with the USS Chicago. One of their pilots flew with us to Rockhampton to ferry back our Air Boss. He said he'd done 1300 traps but when he saw Melbourne he said 'are we going to land on that postage stamp?!' We landed on and he said 'goddamn! That was the wildest ride of my life!'[114]

Melbourne celebrated her 20,000 aircraft landing in 1963 which according to Ross Gillett was 'an amazing record which went almost unnoticed in the press'.[115] The same year she received new aircraft in the form of Grumman Trackers and Douglas Skyhawks which were in addition to the 26 new anti-submarine Wessex helicopters.[116] These rotary aircraft were initially intended to take the RAN towards a purely helicopter force, a decision which was then delayed until circumstances changed in 1982.[117] *Melbourne* went on to serve in the RAN for 27 years during which time she deployed overseas on 35 occasions and reached the milestone of 100,000 fixed-wing landings.[118] According to Vince Fazio, *Melbourne* 'steamed 868,893 nautical miles and there were no fatalities in her last 16 years of service, a world record'.[119] HMAS *Melbourne* was decommissioned on June 30, 1982. The period in which the aircraft carrier and her aircraft formed the core of the Australian fleet with *Sydney* and *Melbourne* covering both east and west coasts, was coming to an end. RAN hierarchy campaigned vigorously to replace the aging carriers against defence bureaucracy's argument of 'too many eggs in one basket'.[120] This was amid the 'poor comprehension of sea power displayed by those outside the

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[113] 'Flight Operations', *A-4 Skyhawks Association,* http://a4skyhawk.org/content/flight-operations (accessed 12 October 2014)
[114] Phil Smith, transcript of recorded interview, (24 September 2008).
[115] Gillett, *Wings*, p. 42.
[116] *Australian Seapower,* p. 23.
[117] *Australian Seapower,* p. 23.
[118] Fazio, p. 165.
[119] Fazio, p. 165.
[120] Stevens, *Royal Australian Navy,* p. 216.

service' throughout the 1970s.[121] The shift in the global political environment, which began with the escalating antagonism between the Communist Russian and Chinese governments and the strong Japanese and German economic re-emergence, encouraged the RAN to adjust their operational mode from the previous focus on ASW to a much more encompassing base.[122] These factors, coupled with the cost of replacing the aircraft carriers, effectively stymied RAN plans and although *Melbourne's* future had been in doubt for some time, the decision not to replace her was the end of a successful era for the RAN and came as a great surprise to those serving in the Fleet Air Arm. FAA pilot Brian Poole considered that the loss of a fixed-wing component equated to the loss of the air arm which led to his separation from the Navy and ensured a future career as a commercial pilot. It is obvious that the loss of a fixed-wing capacity in the FAA had an impact on those who had served in the era of aircraft carriers and for many the loss of *Melbourne* signaled the end of the FAA. For pilot Brian Poole it was the catalyst for his retirement from the navy as he explains here:

> The end of the FAA? Well I can remember it quite clearly because we were tied up in Auckland harbour, it was most devastating for us all and that's probably when I decided that I was going to get out and join an airline. There didn't seem to be much of a future in the Fleet Air Arm although subsequently they did have a good future but at that particular time it was all doom and gloom.[123]

Clearly for Poole and many other members the loss of a fixed-wing component equated to the loss of the air arm and therefore their careers. Sonar operator Joe Kroeger served in the FAA for 25 years and has vivid but unhappy memories of *Melbourne's* decommissioning. For Kroeger, the loss of fixed-wing operations was also the catalyst for his retirement from the navy:

> I had the honour of being the last air operations officer on board and the last flight deck officer. To sit on the deck and decommission that thing in which I'd spent so many, many years, it was just heart breaking and I thought; this is not good. They sent me to the next establishment and they decommissioned that. It made me feel really old, a bit like the navy saying to me; well ok, you can go to work tomorrow but not as an aviator and I thought no, you can forget it. We lost so much expertise, people of my ilk and my training left the navy en masse.[124]

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[121] Stevens, *Royal Australian Navy,* p. 216.
[122] Andrew Heywood, *Politics*, 2nd ed., (Basingstoke, GB: Palgrave, 2002) p. 132.
[123] Poole, interview, p. 7.
[124] Joe Kroeger, transcript of recorded interview (14 April 2008), pp. 1,17.

For many others, like Bryan (Ben) Mathews, it was an opportunity to diversify, to take a new direction within the traditional naval aviation milieu. Mathews trained as a naval air mechanic before gaining his pilot's wings in 1951 and offers a different opinion in regards to the post- aircraft carrier era:

> A ship ceases to be an aircraft carrier when the number of aircraft carried is less than one. The term aircraft includes helicopters. There is still a FAA and we have had helicopters in the FAA since 1952 – over 56 years! I considered that the Fleet Air Arm was an essential component of the RAN, whether or not there were fixed-wing aircraft. I know there are many wonderful Fleet Air Arm personnel of the 1950's – 1980's period that have yet to come to terms with fact that there is no longer a fixed-wing element in the FAA. They would do much better to live in the present and future and not in the past. I agree it was a wonderful period but it came to an end over 20 year ago! The FAA personnel of today are just as dedicated and capable as those of yesteryear.[125]

In agreement is Kim Ferguson who joined the navy in 1972 and served for nine years as an Airframes and Engine Fitter in the FAA. Ferguson believes that the use of helicopters and small ships is a much more cost effective way to operate aircraft in the maritime environment:

> I believe we need a lot of destroyers and frigates these days and smaller boats that carry helicopters. So we've still got a fleet air arm and we just don't have fixed-wing any more. If I had been in parliament I would have voted against keeping aircraft carriers, the threat now is a different one.[126]

The first step towards a post-aircraft carrier era FAA was taken with the commissioning of HMAS *Adelaide (II)* in 1980. This helicopter capable frigate was the first of six to serve in the RAN and included a flight deck and an aircraft hangar.[127] *Adelaide* and her sister ships deployed Squirrel helicopters in the first instance, the more sophisticated Seahawk following. To deploy the Seasprite and later Sea King helicopters, eight Anzac class frigates were commissioned throughout the 1990's.[128]

Many FAA fixed-wing air crew and pilots converted to helicopters during the late 1980's and went on to serve aboard these smaller aircraft platforms. One of those

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[125] Bryan Mathews, completed questionnaire (27 August 2008), p. 1.
[126] Ferguson, interview, p. 13.
[127] Oldham, p. 145.
[128] Oldham, p. 145.

pilots was Brett Dowsing and he has never regretted that decision to expand his capabilities:

> There are 27 odd computers within a Sea Hawk, some of which went to the moon and back. It's the interrelationship between them, the talking between these systems which has to be right because if it's not right then you've got something to deal with. I think rotary-wing flying is more challenging in a lot of ways, in the pure pilot control side of it but the challenge is part of the game. It's a phenomenal feeling being able to land pretty much wherever you like, and at the end of the day landing on the back of a heaving ship in the middle of the night is probably the ultimate challenge from an aviation point of view. I'm getting great satisfaction out of being able to do that and loving it.[129]

Harry Reasoner was an American journalist, television commentator and inaugural reporter for the American *60 Minutes* program[130] and his frequently repeated quote regarding helicopters and those who flew them is reproduced here:

> Helicopters are different from planes. An airplane by its nature wants to fly, and if not interfered with too strongly by unusual events or by deliberately incompetent pilot, it will fly. A helicopter does not want to fly. It is maintained in the air by a variety of forces and controls working in opposition to each other, and if there is any disturbance in this delicate balance the helicopter stops flying, immediately and disastrously. There is no such thing as a gliding helicopter. This is why being a helicopter pilot is so different from being an airplane pilot, and why, in general, airplane pilots are open, clear-eyed, buoyant extroverts, and helicopter pilots are brooders, introspective anticipators of trouble. They know if something bad has not happened, it is about to.[131]

While Reasoner's interpretation of helicopters and their pilots is a seriously humorous one, naval pilots, Dowsing and Adams were and remain, enamored with this rotary aircraft and its abilities. Like Dowsing, Adams converted to helicopters and flew the Wessex helicopter which was deployed in an anti-submarine warfare mode, an exercise that left a lot to be desired according to Adams:

> I loved flying helicopters but I didn't like the job we did in them. The Wessex were the first anti-submarine aircraft we had which involved going around in the middle of the night in the foulest weather and doing these horrible approaches, coming into a hover over the water, sticking

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[129] Dowsing, interview, p. 5.

[130] Richard Severo, 'Harry Reasoner, 68, Newscaster Known for his Wry Wit, is Dead', *The New York Times,* (7 August 1991), http://www.nytimes.com/1991/08/07/obituaries/harry-reasoner-68-newscaster-known-for-his-wry-wit-is-dead.html. [accessed 2 July 2015].

[131] Harry Reasoner, *ABC News Commentary,* (16 February 1971), http://www.nixwebs.com/SearchK9/helitac/harryreasoner.htm [accessed 23 September 2015].

a ball down looking for submarines. It was not my cup of tea. I did not like it, it was no fun at all. But flying helicopters is fantastic fun.[132]

As the sonar operator in the Wessex helicopters Joe Kroeger remembers the noise generated by the machine made listening for the submarine difficult. The sonar had a range of 3000 metres and two machines operating together were the equal of a submarine but the odds were lengthened with the aid of a surface ship. One helicopter would remain in contact with the submarine; deploying and dipping their dunking sonar while the other helicopter was vectored onto the correct course before dropping their torpedo. As Kroeger recalls these training exercises; 'they weren't always fair, they changed course, they didn't play the game right but it was very interesting'.[133]

Anti-submarine operations required specialist training and conversion to the Wessex helicopters but prior to this the newly trained helicopter crews were deployed in search and rescue operations. According to Dowsing it is a fundamental element of FAA operations and the only difference between flying a search and rescue mission and combat operations is that no one is trying to kill you:

> That's probably the only real difference in some of those jobs. They're still out there in the Iroquois, on shitty nights, flying in shitty weather, operating to the limits of the aircraft, to pull people to safety. You're right in there. We've done rescues down the Southern Ocean, we've done the '98 Sydney to Hobart Yacht Race where some of our guys were in the water and won bravery medals. They could just as easily have been lost. Night time rescues in shitty weather aren't easy but we learn great things from these rescues and come away with great experiences. They are a real measure, a real test of our training. They make great headlines at the time but generally the job we do is a quiet achievement over many, many years. [134]

The use of naval helicopters in search and rescue dates back to February 1947 when the US navy fleet were conducting training exercises in the Atlantic and Caribbean.[135] The Sikorsky Archives records the event:

> Operating from the big carrier, Franklin D. Roosevelt, the helicopter, in the eyes of hundreds of officers and seamen, proved beyond doubt its

[132] Adams, interview, p. 15.
[133] Kroeger, interview, pp. 9.
[134] Dowsing, interview, pp. 7-11.
[135] 'First Helicopter Naval Rescue', *Igor I. Sikorsky Historical Archives,* n.d. http://www.sikorskyarchives.com/Naval_Rescue.php [accessed 10 November 2015].

usefulness to the fleet not only for rescue work but many other duties which it performed more speedily and efficiently than they had ever seen before.[136]

All FAA pilots initial training is done on fixed-wing aircraft and carried out under the auspices of the RAAF and the choice to convert to helicopters is taken on completion of this training. Pilot Des Rogers was a member of the first group to be wholly Australia trained and gained his wings in 1955. Previous to this group, all flight crews were trained in England. Rogers explains that the Australian Operational Flying School (OFS) was conducted in two parts with the first being basic flight training with OFS2 combining flight with weapons training. It was this second component in which one trainee was killed when he 'flew it into the sea. Not intentionally; was it a mechanical fault? Who knows? I think he just misjudged his altitude. Big splash. Finished'.[137] Accidents were an accepted risk in naval aviation and according to David Farthing, 74 men were killed from 1949 – 2009. The years 1950 to 1959 were particularly difficult with aircraft accidents accounting for 48 lives.[138] These early years of Australian flight training were challenging and in many instances it was impossible to determine why fatal accidents occurred. In today's FAA experience, coupled with advances in technology have greatly improved both aircraft safely and investigative techniques.

Like all aircrew of the aircraft carrier era, Rogers completed his training with the RAAF and was awarded his wings. This milestone did not qualify Rogers to fly with the navy; further training had only just begun. Rogers explains that in the age of aircraft carriers gaining your 'wings' was only the beginning for naval aviators as the navy 'take you back to Nowra and teach you to fly.'[139] Fellow pilot Clive Mayo clarifies this statement:

> You learn the basics with the Air Force and then the navy teaches you to use the airplane. When you get back to Albatross we will teach you how to use the airplane, not just to fly it, but how to use it and take it to its limits. Without ammunition the Royal Australian Air Force would be the world's most expensive flying club.[140]

Flight training, either fixed-wing or rotary, is a dangerous undertaking that few members of the FAA forget. Dowsing recalls his initial training being challenging on

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[136] 'First Helicopter Naval Rescue', n.d.
[137] Rogers, interview, p. 4.
[138] Farthing, questionnaire, p. 2.
[139] Rogers, p. 3.
[140] Clive Mayo, input into recorded interview with Des Rogers, (16 April 2008), p.3.

many levels with a high percentage of trainees lacking the essential component - determination:

> It's a highly demanding job, both in terms of the job and just getting there, the learning process. I'm using a pilot as the example because that's the one I'm comfortable with, but anyone can learn to fly, a monkey can fly, it's just whether you've got the time to teach him. With time comes expense. In my course more than 50 percent didn't pass the course. I started with 11 navy guys and three of us actually finished, two of us are still in the navy. You've really got to want to do it, it will test you, to become a pilot is a damn hard course, physically, mentally and academically.[141]

As the FAA has adapted to the post-aircraft carrier era, so too has a naval aviator's training. The Australian Defence Force Basic Flying at Training School (ADFBFTS) at Tamworth New South Wales is the first step in an Air Force or naval aviation career where pilots spend four months learning the basics of flight. RAAF Pearce in Western Australia is then home for between five and six months where advanced flight training is conducted. The conversion to helicopters is undertaken at *Albatross* in Nowra with 723 Squadron and is of twelve months duration. This Operational Flying Training School (OFTS) converts fixed-wing pilots to either Seahawks with 816 Squadron or Sea Kings with 817.[142]

Currently serving as the Senior Naval Officer RAAF Pearce, Flight Instructor Ryan Jose is responsible for the advanced flight component of a naval aviator's training before conversion to helicopters. Prior to this posting Jose had not flown a fixed-wing aircraft for 15 years: 'I've been coming to a stop to land in helicopters and then I've gone back to maintaining my airspeed on finals but you know, flying is flying'. Jose recalls his training program and conversion to Sea Hawks:

> Currently I'm flying PC9's which are the turbo prop trainers which the navy and the Air Force use as advanced pilots course, prior to going to operational types. But my career has mainly been in Sea Hawk helicopters. I have 12 years in Sea Hawks. The first helicopter I flew was a Squirrel on my rotary conversion. I did pilots course in 95-96 then I went to Canberra which was where the helo school was located at that time and where we did rotary conversion. I spent six months on Squirrels then went across to Albatross 723 Squadron and from there you do a mobilisation component on the Squirrel. From that point you

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[141] Dowsing, interview, p. 3.
[142] Commonwealth of Australia, 'HMAS Albatross', *Royal Australian Navy,* http://www.navy.gov.au/establishments/hmas-albatross [accessed 4 July 2015].

either stay with the Squirrel or move on to the Kiowa 206 which I spent 18 months on before joining the Seahawks.[143]

As a flight instructor Jose is conscious of the moments when his newly trained pilots appreciate the difference inherent in the advanced flying practiced by naval aviators. Here he recalls one such incident:

> We were teaching formation flying recently and up until now the young guys had been flying circuits and pretty much anything you can do in a normal aircraft down at the local flying club. Then we're out there with three aircraft doing formation together and you can see their faces just light up and they get out of there beaming and I think they realise that they are in the military now. That's pretty good, the sense of adventure. In training we get a lot of guys who struggle with IF, the instrument flying component of the course and the current system here has an expanded instrument flying component. You sit in the aircraft under a canopy so you cannot see out and you're flying solely on instruments, just like a simulator, and you get good at instrument flying. The Army don't do that because they fly close to the ground and at night they use goggles. Whereas we're at night over water, low level a hell of a lot, so we rely on instruments, much needed skills and this is why the navy send their guys through advanced flying training here.[144]

This advanced instrument flying capability is essential in a Seahawk which operates at low levels over the water in pursuit of either submarines or surface ships, irrespective of weather conditions or darkness. The Sea King is a much larger aircraft and is deployed in various roles which include transportation of men and equipment and search and rescue operations. The Squirrel remains the initial rotary aircraft used in the FAA training program.[145]

FAA helicopters operate from various ships in the RAN and in 2011 the Australian Navy deployed eight *Adelaide* Class Guided Missile Frigates (FFG), eight *Anzac* Class Frigate Helicopters (FFH), two *Kanimba* Class Amphibious Landing Platforms (LPA) and one *Tobruk* Class Heavy Landing ship (LSH).[146] These ships are all helicopter capable and operate either Seahawk or Sea Kings, 11 of which are always operational. The Landing Platforms were also capable of operating four Army Black Hawks simultaneously with Seahawks.[147] On the 13 December 2011 the RAN commissioned Landing Ship Dock (LHD) HMAS *Choules*, which has the

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[143] Ryan Jose, transcript of recorded interview (14 March 2012), p. 2.
[144] Jose, interview, p. 1.
[145] Oldham, pp. 114-115.
[146] Oldham, pp. 106-111.
[147] Commonwealth of Australia, 'Current Aircraft', *Royal Australian Navy,* n.d. https://www.navy.gov.au/fleet/aircraft/current-aircraft [accessed 3 July 2015].

capacity to transport 33 Abrams tanks, 150 light trucks and numerous other Army requirements together with between 356 and 700 troops. *Choules* will also operate two Chinook helicopters.[148] The newest vessel to be commissioned into the RAN is HMAS *Canberra,* an Amphibious Assault Ship (LHD) or Landing Helicopter Dock. *Canberra,* and her sister ship *Adelaide* who will join the fleet in 2016, are two of the 'largest ships ever built for the Royal Australian Navy. They are the most capable and sophisticated air-land-sea amphibious systems in the world'.[149] *Canberra* and *Adelaide's* flight decks will accommodate Chinook and Seahawk helicopters and the Australian Defence Forces (ADF) newest helicopter acquisitions; the multi purpose MRH90 Taipan[150] and MH60R Romeo,[151] which will in time replace the Sea King and Blackhawk. The ADF took delivery of 46 Taipans from 2007 with six now serving in the RAN, and which also includes 24 Romeo Sea Hawk helicopters which incorporate a highly sophisticated combat system, hellfire air-to-surface missiles and anti-submarine torpedoes. The RAN will also commission three Air Warfare Destroyers over the next four years. All of these ships are or will be helicopter capable.[152]

We can see from the above data that not only has the FAA survived the demise of the aircraft era, they have thrived. Serving on smaller rotary capable ships has little in common with the earlier deployments of *Sydney* or *Melbourne* as one former pilot will attest. John May is a retired helicopter pilot who served in the FAA for 24 years with his last posting being the Senior Naval Officer at RAAF Pearce before embarking on a civilian flying career. Flying helicopters off small ships, May served in various theatres:

> I had eight frigate postings in a bit over six years. I did a lot of work ups, in most of the postings in fact. There were a lot of short postings, partly because of the shortfalls we had in the numbers in the 90's, we needed to bounce people around ships a lot to make the manpower requirement to keep the flights going to sea. But helicopters is a much more varied job; you're doing passengers, freight, medivac off a rig to bring someone to safety. It's about variety.[153]

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148 'Current Ships', *Royal Australian Navy.*

149 Commonwealth of Australia, 'Amphibious Assault Ship (LHD)', *Royal Australian Navy,* n.d. http://www.navy.gov.au/fleet/ships-boats-craft (accessed 3 July 2015).

150 Commonwealth of Australia, 'MRH90 Taipan', *Royal Australian Navy,* n.d. https://www.navy.gov.au/aircraft/mrh-90-taipan (accessed 5 July 2015).

151 Commonwealth of Australia, '725 Squadron History', *Royal Australian Navy,* n.d. http://www.navy.gov.au/history/Squadron-histories/725-Squadron-history (accessed 5 July 2015).

152 Oldham, pp. 114-115.

153 John May, transcript of recorded interview, (14 February 2012), p. 2.

Former Aircraft Maintainer Rick Meehan served in the FAA for 27 years but was disappointed in the scarcity and variety of overseas deployments available in the 1990s. Meeham explains:

> The last 10 to 15 years have seen significant changes and differing lifestyles. There is very little travel now except to a war zone and with the media watching and reporting everything that defence forces do, there is very little room for error. Therefore everyone is on edge and afraid to rock the boat in case they do something wrong. Naval hierarchy is too gutless to do anything out of the norm for fear of ruining their career, which then makes the navy boring. I am glad I have retired from the navy now, there are less ships, less aircraft and less maintainers to work on them. The maintainer now on a Squadron is worked beyond his or her means which is ultimately why there is a high attrition rate of sailors leaving.[154]

In juxtaposition Tony Dalton, presently Head of Helicopter Systems Division, sees a bright future for the small aircraft capable ships that represent the modern FAA. Dalton began his 34-year career as a pilot and deployed on HMAS *Sydney III* and *Newcastle,* both of which are Guided Missile Frigates. Dalton previously served as Commander Australian Navy Aviation Group and is confident that the FAA has a strong future:

> I was the aviation representative on the seminal Naval Aviation Force Management Review in 1997. This review reset the budget and structure for Navy Aviation and survives as the baseline for the modern organisation today. We provide an essential force multiplying effect to navy's surface fleet and this capability will grow over the next 10 to 20 years. In the immediate future, the case for manned aviation capability remains strong and will continue to be championed at the highest levels within Defence.[155]

There is no doubt that Australian Naval Aviation has evolved in the decades since *Melbourne* decommissioned but the men and women who deploy in the navy's helicopter capable ships are as much Birdies as they ever were. Recruiting the necessary personnel to fill FAA positions has been a recurring issue in the post-aircraft carrier age. The Global Financial Crisis has helped initial recruitment according to Jose, but in the long term the RAN lose out to the RAAF:

> I think we'll see a struggle to recruit guys again. You will probably always see guys who want to be aircrew but normally that will be Air Force aircrew and we'll get those who think outside the box, but there

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[154] Meehan, questionnaire, p. 1.
[155] Tony Dalton, completed questionnaire (27 May 2009), p. 3.

are less of those. Generally speaking, the general public who think of military aviation think of the Air Force first. They have no idea that aviation within the navy is a possibility.[156]

Jose's statement reiterates the uniqueness of naval aviation as the ability to 'think outside the box' separates the FAA from all other forms of military aviation. This quality clearly limits recruitment within a military service that is not overtly visible or vocal regarding their quiet achievements. In contrast the RAAF are proactive recruiters which makes them highly visible in the public sphere as Jose explains:

> The RAAF is where people tend to drift towards and I know there's going to be another round of fast jet advertising hitting the streets pretty soon as that will probably help them out. We have had targeting advertising for navy aircrew but not nearly enough.[157]

Their title, 'Fleet Air Arm' is not now or ever has been widely known or generally synonymous with flight in the same way as the Royal Australian Air Force. Aircraft Electrician Doug Rassmussen joined the FAA in 1963 and served ten and a half years which included a 12-month deployment to the Vietnam War. Rassmussen states that while the naval policy of 'quiet achievement' is one of tradition it limits a wider acknowledgement of the operational value of FAA deployments and achievements:

> No one knew who we were. They didn't know then and most don't know now. Our government doesn't recognise us and even in military circles today, nobody knows who we are.[158]

Like Rassumssen, FAA pilot Winston James has faced this same misunderstanding throughout his career:

> Nobody knows who we are and I went through years and years of coming home on leave and family members asking how is everything in the Air Force. And I'd point out that I'm not in the Air Force, I'm in the navy but no one really understood. The navy doesn't push its own barrow and nobody else pushes it for them. People don't really seem to care, understand or comprehend and the navy doesn't get the recognition it deserves.[159]

Rasmussen and James's statements clearly show a lack of knowledge of naval aviation within the RAN in the wider community and government recognition has

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[156] Jose, interview, p. 3.
[157] Jose, interview, p. 2.
[158] Rasmussen, interview, p. 8.
[159] James, interview, p. 18.

indeed been a long time coming. It was in September 2004 that the Australian War Memorial unveiled a plaque dedicated to the FAA; 56 years after their service began.[160] Jose is of the opinion that the disparity in Navy and Air Force recruitment is largely one of Public Relations but it is not the only stumbling block according to one currently serving pilot. When asked his opinion of today's FAA and the issues surrounding recruitment and retention one member who wishes to remain anonymous had this to say:

> It seems to me that the intent of many actions in the military today is hampered by bureaucratic red tape, botched contracts or someone who just wants to get by while doing as little as possible. In general it seems like the attitude is 'how do I make this not happen' instead of 'how do I make this work.' This I feel is one of the crucial factors with retention, the fact that most issues end up with the member being worse off by default. It comes down to the fact that rarely in defence is there a nice round peg that fits in to the nice round hole that is written on paper. I love being a defence member and have no intention of discharging but it is small things like these that progressively build up and can cause good men and women to bitterly depart the service and this then hampers recruitment in the initial phase via word of mouth. I hope that through my career I can help change this aspect of the navy, even if only in the Fleet Air Arm.[161]

The above quotation is given by a member of the FAA but I would argue that the same issues of bureaucracy and the extensive use of private contractors are financial issues that today all units of the Australian Defence Force (ADF) must contend with. That some members of the FAA find these issues not consistent with naval aviation ethos is obvious and the ongoing evolution of the FAA will prove too challenging for many more in the future. The disparity of remuneration is another factor in declining recruitment according to Chad Summers, presently serving with the Training Authority Aviation, Defence Work Experience Program. Charged with introducing students to work experience within the ADF, including the FAA, Summers has been an FAA member for 14 years and describes his career as rewarding and challenging with the opportunities offered 'only limited by an individual's drive and ambition'.[162] Unlike Rick Meehan's experience, Summers' previous postings have taken him to Bougainville, East Timor, South East Asia, Korea, Japan and a six - month exchange posting to Britain. There is one downside to his chosen career though and here Summers explains:

[160] 'Fleet Air Arm', *Monument Australia,* n.d.
http://monumentaustralia.org.au/themes/conflict/multiple/display/103405-fleet-air-arm (accessed 28 November 2015).
[161] Name withheld by request, completed questionnaire (18 October 2008), p. 1.
[162] Summers, questionnaire, p. 1.

I regret the inequality of remuneration in comparison to equally skilled civilian workers, although money isn't everything and a job that you enjoy doing is more like fun than work. I don't think the sacrifices that members make is fully recognised or rewarded by either the government or defence.[163]

Recognition is once again the issue for Summers, be it comparisons of pay rates with the civilian sector or the lack of acknowledgment in the ADF or the wider community, all of which can lead to dissatisfaction, falling retention rates and a downturn in recruitment. The recent acquisition of state of the art helicopters and ships is much needed inducement to choose the FAA over the RAAF according to helicopter pilot Jack Sevier. Having joined the FAA at 18 solely to fly helicopters, Sevier is four years in to what he expects to be a long and challenging career with naval aviation experience being 'second to none' and highly valued in the civilian aviation sphere. Coupled with the recent fleet additions which have garnered the RAN some much needed positive press attention, superior flight training may yet have a positive effect on future FAA enlistment, if they are supported by a greater proportion of the ADF public relations initiative.[164]

According to Dowsing, economic factors and enlistment issues will always dictate operational procedures and today's FAA must continue to evolve within these parameters:

We're a small force, at the end of the day that's what we are…I think we're just too small in terms of having that ability to cover every component of maritime warfare which does include the carrier side of the house. It's disappointing but that's the reality of where we are as a country and I think we've had to cut our cloth to shape our resources…we were the spearhead of the navy and that put you in a certain position and that always makes you feel good. I don't think we are now, by any stretch of the imagination. We're a supporting element, a pretty important supporting element within the naval maritime environment, but we're not the spearhead anymore.[165]

As a supporting element of what is today a small force within an international peacekeeping and humanitarian global force, the FAA remains a vital component in Australia's modern navy. This is clearly demonstrated in the Australian government investing heavily in the newest ship and helicopter technology in the form of Amphibious Assault Ships (Landing Helicopter Ships) with the capacity to operate

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[163] Summers, questionnaire, p. 2.
[164] Sevier, questionnaire, p. 1.
[165] Dowsing, interview, p. 5.

18 helicopters.[166] Aircraft capable HMAS *Canberra* and sister ship *Adelaide* are larger by nine tons but require 1,000 less crew to operate in comparison with *Melbourne* and *Sydney* and they have the capacity to transport 1046 troops, 110 vehicles and carry four mechanised landing craft.[167] With these purchases the Australian government has publicly acknowledged the value of naval aviation as a maritime asset irrespective of their mode of operation. This chapter has followed the progression of the FAA from a fixed-wing aircraft carrier based force to a wholly rotary-wing, small ship operation. The fundamental objectives of naval aviation remain the same; protection of Australian territorial waters and of naval assets, anti-submarine warfare and search and rescue operations. As part of multinational peacekeeping and humanitarian forces the FAA continue to play a role in wider global maritime operations. Clearly the FAA remain a flexible, relevant and valuable maritime asset irrespective of their operational mode.

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[166] Commonwealth of Australia, 'HMAS Canberra (III)', *Royal Australian Navy,* n.d. http://www.navy.gov.au/hmas-canberra-iii [accessed 30 December 2015].

[167] 'HMAS Canberra (III)', n.d.

5. The Australian Fleet Air Arm and the Korean Conflict.

The aircraft carrier era, which incorporates fixed-wing aircraft, is the focus of this chapter, with the FAA's contribution to the Korean War being the basis for an operational comparison. The following chapter will document flight operations during the Vietnam War, which was a wholly rotary aircraft operation. These two very differently contested conflicts allow for a clear evaluation of FAA operations and illustrate that operational value has not been compromised in the post- aircraft carrier era.

In an attempt to contextualise the Korean War and Australian involvement, it is necessary to briefly examine the history of this East Asian nation. Korea is situated on a peninsula that borders China to the north and Russia to the east, while the islands of Japan lie to the south. Korea's geographical position has made her a target of her more powerful neighbours since the occupation by the Chinese Han dynasty in 108 B.C.E.[1]

In August 1910, Korea lost its sovereignty to Japan when the Korea-Japan Treaty of Annexation was, reluctantly, signed and Japanese occupation continued until their defeat in World War II.[2] The 1943 Cairo Declaration saw agreement reached between China, Britain and the United States on the future of Korea – independence, 'in due course'.[3] Andrew Nahm, in *Korea: Traditions and Transformations,* maintains United States President Roosevelt was of the opinion that the Koreans were just one of many Asian nations which lacked the political maturity to govern themselves independently. As a consequence the allied powers maintained political control of Korea and would do so for an 'indeterminate period of time'.[4] The Yalta Conference in 1945 saw Stalin agree to Roosevelt's request to assist in the defeat of Japan and to that end Russian troops occupied the north east of the Korean peninsula from early August 1945. The quick success of the Russian advance into Korea saw United States forces move to occupy the south. In

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[1]   Ilyon, '*Samguk Yusa, Legends and History of the Three Kingdoms of Ancient Korea,* trans. by Tae Hung Ha and Grafton (K) Mintz, (Seoul: Yonsei University Press, 2004), p. 10.
[2]   Kim Chum-kon, *The Korean War 1950-53,* (Seoul, Korea: Kwangmyong Publishing Company, 1973), p. 13.
[3]   O'Neill, *Strategy and Diplomacy,* p. 6.
[4]   Andrew C. Nahm, *Korea, tradition and transformation: a history of the Korean people,* (Elizabeth, New Jersey: Hollym, 1991), p. 329.

an attempt to divide the country into areas of Soviet and American occupation, General Dunn of the State Department made contact with General Lincoln (chairman of the State-War-Navy Coordinating Committee) calling for a line of demarcation.[5] Charged with determining at which geographical point the country was to be divided were Colonel Charles Bonesteel and Colonel Dean Rusk (later to become United States Secretary of State). Advised of Lincoln's preference for the thirty-eighth parallel and aided by little but a *National Geographic* map, within 30 minutes Korea became a divided country.[6] The Democratic People's Republic of Korea (DPRK) under Kim Il Sung[7] began life on 9 September 1948 following the birth of the Republic of Korea (ROK) under president Syngman Rhee three weeks earlier.[8]

The demarcation line saw bloody skirmishes between opposing guerrilla forces during 1949[9] but it was not until June 25 1950 that the North Korean Army crossed the parallel in a full-scale invasion.[10] Within days the North Korean People's Army (NKPA), backed by the Soviets, had taken the southern capital of Seoul.[11] The United Nations (UN) declared a 'breach of the peace'[12] and appealed to member nations for assistance. Australia was amongst the twenty-one countries who contributed military personnel to the multinational UN force.[13] 'Operation Strangle' was tasked with re-taking Seoul and forcing the communist forces to retreat beyond the 38th parallel.[14]

Undoubtedly Australia played a minor role in the Korean War, both militarily and politically, but as a member of the successful UN action, Australia made gains in the political arena and reaped many security benefits. The Korean War firmly established Australia within the Asia Pacific region and highlighted the unsuitability

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[5] William Stueck, *Rethinking The Korean War: A New Diplomatic and Strategic History,* (Princeton, N.J.: Princeton University Press, 2002), p. 12.

[6] Stueck, p. 12.

[7] Stueck, p. 27.

[8] Bruce Cumings, *Korea's Place in the Sun: A Modern History,* (New York: W.W. Norton, 2005), p. 235.

[9] Cumings, p. 247.

[10] Bartlett, p. 1.

[11] John Hunter Farrell, 'Korean Furies', *Australian & New Zealand Defender Magazine*, 3, (1994), p. 42.

[12] Stewart Wilson, *Sea Fury, Firefly And Sea Venom In Australian Service* (Weston Creek, A.C.T.: Aerospace Publications, 1993), p. 86.

[13] Ben Evans, *Out In the Cold: Australia's Involvement In The Korean War 1950 – 53* (Australian War Memorial and Department of Veterans Affairs, 2001), p. 89.

[14] Farrell, p. 42.

of a Eurocentric world view.[15] In *Out in the Cold: Australia's Involvement in the Korean War,* Ben Evans states that 'the Korean War was a major factor in defining Australia's place in the post-World War II world'.[16] Sir Percy Spender, Minister for External Affairs and External Territories from 1949-1951, was convinced that Australian security was assured with the United States having control of the Pacific region. While not directly threatened by ongoing South East Asian conflict or unsettling Middle East unrest, Australian military forces fell far below that needed to contribute combatants, if required, to two separate conflicts.[17] While Australia did not contribute to UN policy, in *Australia in the Korean War* Robert O'Neill states that:

> There was substantial interaction between Australia and its allies regarding both general policies towards global strategic problems and specific policies towards the Korean conflict. Participation in the war established trends which influenced the development of several other Australian relationships and commitments.[18]

We can see from the above statement that Australian alliances with UN forces, particularly the United States, which had its roots in the Second World War, was a necessary step in assuring Australia's security within the Asian region.[19] Therefore it can be concluded that Australian involvement in the Korean War had at its core political rather than military interest.

The United States and Australia built on their initial World War II coalition. The establishment of a 'formal information exchange system'[20] in 1947 between the United States Navy (USN) and the RAN cemented a mutually beneficial affiliation.[21] Having contributed to allied forces of occupation in Japan and honing ongoing diplomatic relations in the Asian Pacific region, the Australian government was a worthy contributor to the region's security policies and as such Australia was seen by the United States, and other South East Asian members of the UN, as a significantly important ally.[22]

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[15]   The Australian Government, Department of Veteran Affairs, 'The Cold War and the Crisis in Korea', *Australia's involvement in the Korean War* http://korean-war.commemoration.gov.au/cold-war-crisis-in-korea/australias-involvement-in-korean-war.php [accessed 14 July 2014].
[16]   Evans, p. 2.
[17]   O'Neill, *Strategy and Diplomacy,* p. xv.
[18]   O'Neill, *Strategy and Diplomacy,* p. xv.
[19]   Evans, p. 3.
[20]   Stevens, *Royal Australian Navy,* p. 161.
[21]   Stevens, *Royal Australian Navy,* p. 160.
[22]   O'Neill, *Strategy and Diplomacy,* p. 403.

Having established that Australia was firmly aligned with UN and US policy and had a valid interest in the escalating Korean conflict, Australian military involvement was assured. Therefore, when the British Prime Minister, Clement Atlee, notified the Australian government of their commitment of British military forces, Prime Minister Robert Menzies replied:

> Australian Government welcomes the decision of the United Kingdom to make available British naval forces in Far Eastern Waters. The Australian government, for its part, has decided to place Australian naval vessels at present in Far Eastern waters, namely the Shoalhaven and the Bataan, at the disposal of the Security Council in support of the Republic of Korea.[23]

Under the UN umbrella, United States Naval Commander in the Far East, V.A. Turner Joy, took command of HMAS *Bataan* and *Shoalhaven* the following day.[24] Immediately following this decision the RAAF committed 77 Squadron to the conflict with ground troops being dispatched in July.[25] It is interesting to note that as members of the RAN and the RAAF, Australian airmen, unlike those who served in the Army, did not volunteer for service in Korea; 'the war was a natural extension of the earlier decision to enlist in a particular service'.[26]

The decision to deploy aircraft carrier HMAS *Sydney* to Korean waters came at the behest of the British government. The newly established FAA constituted a substantial percentage of the RAN's operational capability and was therefore a crucial component in Australia's defence.[27] *Sydney's* absence from Australian waters represented a security risk according to the Minister for Defence, Philip McBride. Limiting her absence to three months and with the understanding that *Sydney* would immediately respond to any threat against Australia, *Sydney* therefore served in relief of HMS *Glory,* in the absence of any other RN carriers.[28]

HMAS *Sydney* deployed with 805 Squadron (formerly with the 20th CAG)[29] commanded by Lieutenant Commander Jim Bowles RAN; and 808 Squadron Hawker Sea Furies under Lieutenant Commander John 'Apples' Appleby, RN; and 817 Squadron of Fairey Fireflys, under Lieutenant Commander Richard Lunberg

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[23] O'Neill, *Strategy and Diplomacy,* p. 45.
[24] Tom Frame, *Pacific Partners: A History of Australian-American Naval Relations,* (Rydalmere, N.S.W.: Hodder & Stoughton, 1992), p. 89.
[25] O'Neill, *Strategy and Diplomacy,* p. xiii.
[26] Trembath, p. 95.
[27] Stevens, *Royal Australian Navy,* p. 177.
[28] O'Neill, *Strategy and Diplomacy,* p. 213.
[29] Stevens, *Royal Australian Navy,* p. 177.

RN.[30] The 36 aircraft formed the 21st CAG[31] under the command of Lieutenant Commander Michael Fell RN.[32]

With Captain David H. Harries in command,[33] HMAS *Sydney* departed Sydney in company with escort HMAS *Tobruk* on 31 August 1951.[34] RAN FAA armourer Theo Bushe-Jones recalls the carnival atmosphere of the ship's departure; 'there was a huge crowd on the wharf to wave us off, the band played and the flags waved'.[35] Her first port of call was to be the Australian base on Manus Island (Papua-New Guinea) for refueling,[36] however the ship received a signal to proceed to Rabaul in response to reports of civil unrest. The show of strength presented by aircraft carrier *Sydney* and the ability of her fighter aircraft to greatly extend the reach of her authority proved successful in demonstrating her government's ability to deal adequately with any civilian disturbances.[37] The disadvantage of land-based air operations in the event of civil unrest is the need to protect airstrips and the aircraft they service. In the Rabaul incident the presence of the aircraft carrier standing off shore and out of range of any form the disturbance took had the advantages of flexibility and control. *Sydney's* mere presence in Rabaul proved to be a sufficient deterrent in this instance.

Having left Manus in September 1951, training continued uninterrupted with the loss of one Sea Fury due to engine malfunction, her pilot Sub Lieutenant Ian Webster being rescued without injury.[38] The aircraft ditched into the Pacific Ocean only 1000 metres from the ship, allowing for a text book rescue, including the testing of survivor's rations. On being rescued, Webster commented that the rations supplied did not meet expectations; 'even in the tropics the chocolate was

30 John Hooker, *Korea, the Forgotten War* (North Sydney, N.S.W.: Time Life Books Australia,1989), p. 86.
31 Commonwealth of Australia, '817 Squadron History', *Royal Australian Navy* *http://www.navy.gov.au/history/Squadron-histories/817-Squadron-history* [accessed 4 January 2016].
32 Jones, p. 75.
33 Commonwealth of Australia, 'HMAS Sydney (III)', *Royal Australian Navy,* http://www.navy.gov.au/hmas-sydney-iii [accessed 4 January 2015].
34 Kirkland and Pears, p. 1.
35 Australian Government, Theophiles (Theo) Bushe-Jones, 'Interview No. 1245', Australians at War Film Archive, (Department of Veterans Affairs, 2004) [on DVD no. 1].
36 Jones, p. 59.
37 Kirkland and Pears, p. 1.
38 Kirkland and Pears, p. 2.

so rock hard that aircrew resolved to use it as a throwing weapon, rather than an energy source, should they be shot down'.[39]

Arriving in Japan on 19 September[40] the canteen assistant, Alan Zamitt, recalls their unexpected welcome. 'We were welcomed by scantily clad Japanese dancing girls at Yokasuka,[41] who were accompanied by the United States Navy Band. The US Navy had indeed welcomed us to Japan'.[42] *Sydney* served in the Korean theatre from September 1951 until January 1952[43] and relieved HMS *Glory* as:

> The carrier representative of the British naval forces in the Korean theatre. It was an historic occasion, being the first time that any Dominion carrier had gone into action.[44]

The FAA had been in operation for a scant four years when *Sydney's* air crew relieved her British counterparts in *Glory.* Allied naval aviation contribution previous to *Sydney's* arrival on station had been limited to British and United States assets. Australia was the third nation to commit her naval forces to combat operations since the end of World War II.[45]

HMS *Glory* completed her deployment with the loss of 20 of her aircraft and with 115 damaged, a statistic owing much to her pilots' penchant for very low flying. According to pilot K.S. Caloquohoun: 'our chaps liked hitting what they aimed at, and came in rather too low. I had to threaten them with court-martial if any flew below 500 feet'.[46] *Glory's* sorties numbered 2892, in excess of 6000 flying hours, an impressive operational statistic that involved a sustained commitment from all members of her FAA.[47]

Eight days later *Sydney* headed to Kure where the handover from HMS *Glory* took place on 27 September.[48] Involving several tons of data, including reconnaissance photographs, briefing notes, topographical maps and procedural notes on escape and evasion tactics, the transfer was successfully completed and *Sydney* sailed

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[39]   *Flying Stations,* p. 85.
[40]   Wilson, *Sea Fury,* p. 86.
[41]   Australian Government, Theophiles (Theo) Bushe-Jones, 'Interview No. 1245', *Australians at War Film Archive,* (Department of Veterans Affairs, 2004) [on DVD no. 1].
[42]   Kirkland and Pears, p. 2.
[43]   Wilson, *Sea Fury,* p. 16.
[44]   'HMAS Sydney (III)', n.d.
[45]   Evans, p. 18.
[46]   Captain K.S.Colquohoun, cited in Jones, p. 76.
[47]   Captain K.S.Colquohoun, cited in Jones, p. 76.
[48]   Wilson, *Sea Fury,* p. 86.

into the war zone on 3 October.[49] At 6.45am (0645hours) on 5 October HMAS *Sydney* began air operations against Korea. Forty-seven sorties were flown that first day[50] and one of 817 Squadron's Fireflys destroyed a railway bridge and was damaged by flak.[51]

Sydney contributed to 'Operation Strangle' which was orchestrated by the United States Air Force (USAF) under the command of General Otto Weyland, a firm believer in the supremacy of aviation. As a veteran of World War II, Weyland's experiences with air power had convinced him of the tactical advantages of maximum air cover for allied ground troops. Naval aviation capabilities offered the added security of being outside of the retaliatory reach of North Korean forces, unlike their land based counterparts. All land-based forces, be they Army or Air Force, must operate from a fixed geographical point and are inherently susceptible to enemy attack. An aircraft carrier's mobility allows its force to retire beyond the reach of artillery or land-based enemy aircraft. The Democratic People's Republic of Korea did not have naval forces of sufficient size or capability to seriously challenge maritime operations, therefore Weyland was confident that 70 percent of Air Force assets, combined with 100 percent commitment by the combined FAA, would succeed in destroying North Korean lines of supply and communication.[52] As an attacking force, this combination of naval and Air Force aircraft were successful in completing their mission without the greater loss of life expected by a committed ground force. Weyland was convinced that the use of air power, both naval and land-based, would always prove to be the more prudent option over exposing ground forces.

This combination of aerial force included aircraft and aircrew from the RAAF who had been committed to the Korean campaign from their bases in Japan. While initial RAAF operations commenced from these Japanese bases the deployed Squadrons would over time occupy five Korean bases.[53] The disadvantages of operating from Japanese bases included the greatly extended flight time, the lack of local maintenance facilities or access to a secure landing site in case of emergencies. The disadvantage of land-based aerial forces over naval aviation is

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[49] Wilson, *Sea Fury,* p. 86.
[50] Wilson, *Sea Fury,* p. 86.
[51] Farrell, p. 41.
[52] Hickey, p. 251.
[53] Australian War Memorial, 'War in the Air: The Royal Australian Air Force in Korea', *Out in the Cold: Australia's Involvement in the Korean War,* www.awm.gov.au/exhibitions/korea/ausinkorea/raaf/ [accessed 28 April 2015].

demonstrated in this instance as the use of Korean land bases was always dictated by the war itself. Territory was won and lost, held by the enemy and fought for by the allies or vice versa. The retreating force often attempted to destroy or seriously damage infrastructure, often necessitating time consuming and labour intensive repairs. The flexibility of naval aviation was, in comparison, a far more efficient option. Naval aircraft are fully maintained, repaired and refuelled by the aircraft carrier they operate from, thus negating the need to over expose flight operations to the enemy. This maritime advantage is a potent weapon in support of any military force.

In combination with United States and British naval aviation, the FAA demonstrated this advantage and their inclusion in the Task Force allowed the FAA to make a valuable contribution to United Nation forces in operations conducted in Korean waters.

Operational flight data included here is a practical demonstration of the FAA contribution made by *Sydney's* 22 Sea Furies and 12 Fireflys. These assets were responsible for 2366 sorties beginning with the 47 sorties in the first two days, a substantial contribution to the mission. Her service culminated in *Sydney* holding the light fleet carrier record of flying 89 sorties in one day.[54] This record, set on the 11 October, included attacks on enemy positions coupled with acting as a spotter for the USS *New Jersey's* guns during bombardment, earning accolades for her crews. The British Commander-in-Chief Far East Station had this to say:

> Your air effort in the last two days, unprecedented in quantity and high in quality, has been a magnificent achievement on which I warmly congratulate you. Though it is invidious to particularise – the spotters especially did a first class job and the New Jersey with [the commander of the] 7th Fleet embarked said they were the best she has had yet. Eighty-nine sorties in one day is grand batting by any standards, particularly in the opening match…[55]

Acknowledged also were the efforts of the aircraft engineers, the maintenance and armaments crews who maintained the highest levels of efficiency, irrespective of weather conditions on the flight deck, and kept the aircraft in the air between 0630 and 1700 hours.[56] Their combined efforts kept the aircraft serviceable and ensured

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[54] Stevens, *Royal Australian Navy,* p. 177.
[55] '817 Squadron History', n.d.
[56] Jones, p. 78.

the aircraft were replenished in quick order, thereby making the record possible.[57] The last sortie of the day saw 12 Sea Furies attack 2000 enemy troops caught in the open. Colin Jones records that:

> All pilots reported seeing hundreds and hundreds of enemy troops and estimated hundreds of small store dumps dotted all over the general area of the eastern slopes of the ridge within a mile of DU 013119. Both troops and dumps were repeatedly rocketed and strafed. Troops had been digging in and the trenches were only partly dug with resulting chaos and confusion on the ground with enemy running in all directions. A conservative estimate of the enemy killed or wounded by the Furies is 200.[58]

Maintaining a rotating cycle of approximately 14 days of patrolling which included nine days of flight operations, the ship transited to and from Sasebo or Kure for replenishment and rest and relaxation (R&R).[59] In addition to contributing to Operation Strangle, *Sydney* carried out anti-submarine and Combat Air Patrols (CAP) throughout her deployment.[60] On the third day on station, the ship was refuelled and re-deployed to the east coast. Admiral G.C. Dyer, United States Navy (USN) Task Force 95 Commander,[61] had ordered Vice Admiral Alan Scott-Montcreiff, (RN) Commanding the West Coast Blockade Force to make a simultaneous air and surface strike against Kojo.[62] Dyer had ordered that HMAS *Sydney* be one of the seven ships used in the strike force and an area 30 miles south east of Wonson was duly bombarded.[63] In *HMAS Sydney*, Alan Zamitt recalls hearing of the ship's next assignment:

> Captain Harries announced that we were heading for the east coast of Korea for special operations. Radio silence was to be maintained and no "gash" (rubbish) was to be thrown over the side as this could identify the ship's whereabouts to the enemy. At about 0400 hours 10 October, about 40 bombers could be heard flying overhead. At dawn "action stations" we could see the gun flashes from HMS Belfast, HMS Comus and HMS Cossack as they bombarded the coastal Kojo area of North Korea. HMAS Sydney had a screen of British, Canadian and US destroyers. Our first aircraft were in the air by 0630 hours and attacked

57 Stevens, *Royal Australian Navy,* p. 177.
58 Jones, p. 78.
59 O'Neill, *Combat Operations*, p. 470.
60 Commonwealth of Australia, '805 Squadron History', *Royal Australian Navy* http://www.navy.gov.au/history/Squadron-histories/805-Squadron-history [accessed 4 January 2016].
61 Bartlett, p. 132.
62 Commonwealth of Australia, 'Record 304835', *Australian War Memorial,* http://cas.awm.gov.au/photograph304835 [accessed 4 May 2009].
63 O'Neill, *Combat Operations*, p. 470.

any targets that they could find. By 1500 hours the sea became very rough, and after 58 sorties flying had to be cancelled.[64]

Sydney's aircraft were unable to fly during darkness as the ship was reliant on her Landing Signals Officer to guide her incoming aircraft onto the flight deck. In gathering darkness the danger increased exponentially so flight operations were conducted from first light until dusk. During daylight hours the flight deck crews worked tirelessly to ensure her flight crews met their quota of sorties. Each aircraft launched increased the total of sorties by one and could involve reconnoitering a previously determined area for enemy movements, referred to as the 'milk run'; providing fire cover for allied ground troops, or escorting various allied assets in routine convoy movements. A Combat Air Patrol (CAP) was flown each day as a precautionary measure against Chinese aggression, as was the routine deployment of a Firefly anti-submarine patrol in search of a Russian presence.[65]

Added to these more routine patrols, *Sydney's* aircraft were predominantly deployed on disruptive missions; to attack and destroy enemy positions or militarily important infrastructure. Norman Lee was one of *Sydney's* pilots who were part of the attacking force charged with the destruction of bridges as a means of disrupting the enemy supply lines. Here he describes how they achieved their aims:

> We started off dive bombing bridges using an attack profile of entry at 8000 ft, releasing our two 500lb instant fused bombs at 3000ft. The old Firefly didn't like being used as a dive bomber as it picked up speed very quickly and if you didn't get the rudder trim right on entry, it would try and go down sideways. We soon found that although we could straddle the bridges, the bomb blast dissipated through the lattice work structure and the bridge would be left standing. Someone in the hierarchy decided that the only way to knock out the bridges was to change the attack profile to a low level attack, down to about 100ft, just as we had trained for anti submarine bombing, aiming for the abutments, but with a delay fuse (it was either 27 or 35 seconds). We started off bombing in flights of four, one after the other and as tail end Charlie, as I always was, it was essential not to lag otherwise you might suffer some collateral damage, like being blown up. We proved to be very successful, occasionally knocking out a bridge with only one aircraft.[66]

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[64] Kirkland and Pears, p. 3.

[65] Jean Bou, 'First and last: Australia's carrier airpower goes to war' *Wartime Magazine,* 53, (2011), p. 16.

[66] Norman Lee, Letters to the Editor, *Slipstream*, 19;2 (2008), p. 5.

On completion of this record breaking first patrol, HMAS *Sydney* returned to Sasebo to rearm and replenish. The date was 14 October 1951 and Typhoon Ruth was bearing down on the ships in the Japanese harbour. Sasebo Harbour is enclosed by 2,000 foot hills and is accessed by one narrow entrance. The Japanese Imperial Navy considered this protected, near land locked situation, a safe port in which to ride out typhoons.[67] While aware of its strengths, Admiral Scott-Moncreiff was unwilling to risk his ships in the crowded harbour, confident that the open sea would be the safest option.[68] Recalling the ship's company from R&R, *Sydney* joined the larger of the British ships and escaped the confines of the harbour.[69] What followed is related by Alan Zamitt:

> It was a night of terror…Typhoon Ruth, a revolving tropical storm was reported to have reached wind speeds of up to 200 kilometers per hour and was heading straight for us… Once clear of the sheltered harbour, the 19500 ton aircraft carrier began to roll like a pig in mud. Because HMAS Sydney was on active service she carried an extra Squadron of Sea Fury fighters, making a total of 36 aircraft plus one United States Navy manned helicopter for rescue duties. The hangar could only accommodate about 20 aircraft. This left well over a dozen aircraft lashed to the after part of the 695 foot flight deck.[70]

The full force of the wind made its presence felt the moment the ship cleared the harbour as Theo Bushe-Jones recalls:

> We had never seen anything like it. The seas were like mountains, rolling and pitching all night. Japanese boats with people in the water, you couldn't do anything for them. The water off the waves was 3 to 4 feet above the waves, we were taking water. Planes were shifting, one aircraft was blown over the side even though it was held down with steel ropes. Three planes were smashed. The gym was filling with water, you were walking in water in the bathrooms. There were electrical fires all over the ship. People were sick, vomit and food everywhere, you could ride it out in your hammock. I was sick and praying. You didn't care if the ship went down. Most of the crew were sick, 1100 or 1200 people, half of them were sea sick. You had to be tied to the upper deck to be able to move, other ships lost people over board, we didn't.[71]

Commanding Officer Captain David Harries' first consideration was for the ship's aircraft and with the storm worsening Harries reduced the ship's speed to just two

[67] Bartlett, p. 223.
[68] *Flying Stations,* p. 93.
[69] Australian Government, Theophiles (Theo) Bushe-Jones, 'Interview No. 1245', *Australians at War Film Archive,* (Department of Veterans Affairs, 2004) [on DVD no. 1].
[70] Kirkland and Pears, p. 9.
[71] Bushe-Jones, 'Interview No. 1245'.

knots and was able to keep the ship in the best position to ride it out. It was late afternoon and the visibility was limited to the length of the ship with the seas described as 'almost totally white, vaguely resembling steep hills or houses covered with soap suds'.[72] The ship's 16-foot motor boat was lost overboard from its stowage 36 feet above the water line and a fork lift truck suffered the same fate from the flight deck. Reg Holton who survived World War II in destroyers before signing on with the FAA had this to say: 'I think we have had it. If it gets any worse, I don't think any of us will see tomorrow'.[73] According to Zammit, Holton was a tough leading airman who had excelled at sports and was well known and respected throughout the RAN and describes him as 'no panic merchant or pessimist'.[74] Another with 30 years of sea time was heard to say: 'These seas are the worst that I have ever been in. It is like being in another world.'[75]

Aircraft were lashed to the flight deck and in the hangars with steel cables, some of which proved unequal to the weather conditions. Ring bolts and steel lugs were torn from their mountings setting fuel-laden aircraft careering across heaving decks. Ruptured fuel tanks insured the danger was real and immediate. Throughout the night well-trained crews struggled to repair or replace damaged moorings under unprecedented conditions.[76] Their success minimised the loss to six aircraft which were lost overboard or damaged beyond repair.[77] The fire alarm sounded four times during the night to which the fire crews answered with alacrity. As Norman Barlett explains in *With the Australians in Korea*, the fires did little real physical damage although the alarm added to the fear all crew were feeling:

> Fire is never a pleasant thing at sea, even worse in the middle of a typhoon aboard a vessel which carries thousands of gallons of high octane petrol.[78]

According to Chemical Company Chevron Phillips, aviation fuel is classed as a flammable liquid which has a flash point of 60-65% and is highly dangerous carcinogen.[79] Those working closely with aviation fuel in the FAA wore protective

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72 Kirkland and Pears, p. 10.
73 Kirkland and Pears, p. 10.
74 Kirkland and Pears, p. 10.
75 Kirkland and Pears, p. 10.
76 Bartlett, p. 225.
77 Fazio, p. 31.
78 Bartlett, p. 225.
79 Chevron Phillips Chemical Company, 'Jet Aviation Fuel', Material Safety Data Sheet, (10 May 2013) http://www.cpchem.com/msds/100000014588_SDS_US_EN.PDF [accessed 26 July 2014].

clothing to minimise the risk to their skin and eyes and breathing apparatus protected them from its lethal vapour. During Cyclone *Ruth, Sydney's* aviation fuel leaking from ruptured fuel tanks flowed over the flight deck and leaked into the ventilation system and Bartlett infers that it was 'by the grace of God no spark made an inferno of the ship then'.[80] Leaking fuel and the ensuing toxic vapour reaching the confined areas below decks enhanced the danger of facing mother nature, and the *Sydney* was one spark away from disaster.

In the circumstances perhaps it was advantageous that many areas below decks were awash; so much so that one of the cafeterias was damaged by a wave formed by the ship's motion.[81] With seas estimated at 40 to 45 feet, *Sydney* rode out the typhoon much more successfully than others, with the damage standing at 12 ships wrecked and the loss of 200 civilian lives.[82] One of *Sydney's* armourers, Theo Bushe-Jones, will never forget the experience:

> Clean up involved everyone on board and took us three days. Everything on board was wet and the whole ship was checked and repaired. Planes, instruments and armaments. We looked like we had been hit by a Kamikaze. My plane was smashed and we had to get the guns and bombs off it, clean up all the bits and pieces everywhere.[83]

Sydney sustained damage estimated to be worth five hundred thousand pounds. Scott-Moncrieff's decision to ride out the storm proved to be the correct choice according to founding editor of *Australian and New Zealand Defender Magazine*, John Hunter Farrell: 'as at least one large beached ship had dragged her moorings right through *Sydney's* anchorage'.[84]

While flight operations are always subject to the limitations of weather, naval aviation, by its very nature, is conducted at the mercy of the sea. No aircraft can operate in such extreme weather conditions as that experienced by *Sydney*, whether shore or maritime based. Such extreme conditions are not common and unlike shore bases aircraft carriers are often able to limit the damage to ship and aircraft by their very manoueverability. As stated previously, the fear generated by

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[80] Bartlett, p. 225.
[81] Fazio*, p. 11.
[82] Kirkland and Pears, p. 11.
[83] Bushe-Jones, 'Interview No. 1245'.
[84] John Hunter Farrell, 'Korean Furies', *Australian & New Zealand Defender Magazine*, 3, (1994), p. 44.

aviation fuel instability in such conditions is not insubstantial but *Sydney* and her crew rose to the challenge and flight operations recommenced in good time.

There is little doubt that the above related experiences were not routine for any who were present. I would suggest that the unique sensory stimuli produced by cyclonic conditions ensured that these memories are the foundation for the physiological responses that ensure these memories remain archival.

Having recovered from Typhoon *Ruth*, *Sydney* embarked on her second patrol during which the ship lost a further three aircraft.[85] The patrol began with successful attacks on shore targets that included bridges, buildings, tunnels and railway lines. Seven junks were sunk on 21 October with another 15 damaged. *Sydney* operated an organised search and rescue (SAR) capability, a basic tenet of aircraft carrier operations and on 23 October two Sea Furys were sent to assist HMAS *Murchison* on a rescue mission.[86] The crew of a Sea Fury, flying Carrier Air Patrol (CAP), located the co-pilot of a United States Air Force (USAF) B-29, brought down North West of Chinnampo, and dropped a dinghy and a survival pack, landing it within 90 feet of his position. HMAS *Murchison's* boat crew ensured his rescue while the remainder of the crew was picked up by a USN rescue flying boat (Dumbo) in quick time.[87]

In the Korean War downed aviators found themselves in a unique position. According to Bob Nicholls, 'the rules were that the war stopped and every effort was directed to affect a rescue'.[88] This unusual situation could be attributed to a number of factors, including advances in technology that allowed pilots of damaged aircraft to accurately communicate their whereabouts. Unlike operations in the European or Pacific theatres of World War II, the Korean theatre was of limited geographical area, therefore limiting the search area. The most important advancement in the area of search and rescue was the introduction of the helicopter. Initially operated by the United States Air Force, these rotary aircraft made possible the rescue of downed aircrew from otherwise inaccessible situations. With fixed-wing aircraft flying in support to suppress enemy fire, helicopters allowed search and rescue operations, first undertaken in World War II,

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[85] *Flying Stations,* p. 94.
[86] Kirkland and Pears, p. 4.
[87] Kirkland and Pears, p. 4.
[88] *Flying Stations,* p. 94.

to enter a new era; one that gave rise to the search and rescue motto: 'That Others May Live'.[89]

In a textbook example of a successful search and rescue operation conducted at sea two days later, FAA Sea Fury pilot Lieutenant Colin Wheatly's aircraft suffered flak damage and ditched into the sea between the carrier and Chinnampo. Uninjured, Wheatly was rescued by an USN Dumbo after a short time in his dinghy.[90] While awaiting rescue Wheatly found that the urinating tube in his immersion suit had not sealed completely causing a mix of sea water and dye (used to indicate position from the air) to leak into his suit. On rescue it was discovered that the dye had stained the lower half of his body a 'brilliant fluorescent yellow'.[91] In true Australian fashion, his fellow officers were quick to see the value in exploiting his misfortune:

> He was a sight to behold in the showers for some days. Some entrepreneurial fellow officers schemed to hire him out to a premier brothel next R and R period, planning to make a fortune with him as part of a floor show. Wheatley saw no merit whatsoever in the plan and, in any event, by the time they got him in to port the colour was fading.[92]

The following day Sub Lieutenant Noel Knappstein was shot down near the mouth of the Han River. This incident is recorded in the 805 Squadron's history as 'one of the more unusual occurrences of the war.'[93] Knappstein force-landed his Sea Fury on the nearby island of Kyodong Do in the Han Estuary, just south of the 38th Parallel. Realising that the plane was a write-off, he salvaged what he could and sold the remainder of the wreck to some local villages for about 1000 Wong. He was rescued shortly afterwards by HMS *Amethyst* which was then ordered to retrieve some more much needed and scarce equipment from the downed aircraft. The landing party was confronted by a farmer armed with a blunderbuss determined to protect his new acquisition. Following some diplomatic discussions, the equipment was retrieved peacefully. Once he had converted the currency, the entrepreneurial Knappstein's haul from the exercise amounted to one shilling and nine pence.[94]

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[89] Forrest L. Marion, *That Others May Live: USAF Air Rescue in Korea,* The Korean War Fiftieth Anniversary Commemorative edition, (Washington D.C.: Air Force History and Museums Program, 2004).
[90] Kirkland and Pears, p. 4.
[91] *Flying Stations,* p. 95.
[92] *Flying Stations,* p. 95.
[93] '805 Squadron History', n.d.
[94] '805 Squadron History', n.d.

On the same day, a rescue by the ship's plane guard was a convincing demonstration of the potential of rotary-winged aircraft in the RAN.[95] Firefly pilot Sub Lieutenant Neil MacMillan and his observer Philip Hancox were hit by anti-aircraft fire while bombing a railway tunnel and survived a crash landing 60 miles behind enemy lines. Stranded on frozen rice paddies the aircrew defended themselves with an Owen sub-machine gun.[96] What followed was 'described at the time as one of the most exciting and dangerous rescues of the war'.[97] David Stevens chronicles the incident in *The Royal Australian Navy*:

> The US Navy helicopter UP28 on HMAS Sydney was flown by Chief Petty Officer "Dick" Babbit and his crewman, Aviation Mechanics Mate, "Callis" Gooding. Both volunteered to go to the rescue of the Firefly's crew. UP28 left HMAS Sydney at 1622 hours (4.22 pm). An American shore based helicopter was closer to the crashed aircraft so UP28 reached the scene of the crash at about 1730 hours. Airman Gooding shot dead a North Korean soldier while the Firefly's crew boarded the UP28 which then headed for Kimpo Air Base, arriving at about 1830 hours where a line of jeeps used their headlight to make the landing strip.[98]

Sydney's Sea Furies flew cover for the rescue, as did *Meteor* jet fighters of 77 Squadron RAAF, suppressing enemy fire on the rescue helicopter.[99] The rescue mission was 'the longest helicopter rescue transit of the war' according to Bob Nicholls.[100] It was 'completed in darkness with all aircraft indicating zero fuel' was how David Stevens concluded the report.[101] Chief Aviation Machinist's Mate Arlen Keith (Dick) Babbitt remembers:

> We were detailed to rescue Sub Lieutenant MacMillan and CPO (Observer) Hancox who had suffered a direct hit and crashed in Korea. We successfully effected the rescue and flew back in darkness to Kimpo with no instrument lighting (none fitted to the helicopter) and had to use a dome light to check instruments. We flew by ear to maintain speed and engine r.p.m. Landing at Kimpo was achieved by using truck lights. Total flight time was two and a half hours at max (range) speed. There was no fuel left to taxi to dispersal on landing. The rescue was accomplished by landing close to the crashed pilot with our helicopter

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[95] Stevens, *Royal Australian Navy,* p. 178.
[96] '817 Squadron History', n.d.
[97] Stevens, *Royal Australian Navy,* p. 178.
[98] Kirkland and Pears, p. 4.
[99] '817 Squadron History', n.d.
[100] *Flying Stations,* p. 98.
[101] Stevens, *Royal Australian Navy,* p. 178.

being strafed on both sides, so close that we thought we would be hit.[102]

The success of this rescue mission was the catalyst for the Australian Government's first purchase of three Bristol Sycamore helicopters in 1952.[103] Air-sea rescues were very successfully carried out with the use of American boats, planes and helicopters of the rescue service, although the harsh winters were a race against time. An airman in the water without a dinghy had a life expectancy of just 3 minutes.[104]

Sydney's third patrol began on 3 November 1951 in ever increasingly difficult weather conditions and the ship suffered her first war casualty just two days later.[105] Lieutenant Keith Clarkson of 805 Squadron, in company with two other aircraft, was attacking a road convoy when his Sea Fury was hit by 20mm fire.[106] His aircraft was seen to invert and impacted with the ground killing the pilot instantly.[107] The loss of Clarkson hit the *Sydney* very hard as he was 805 Squadron's most senior pilot and 'one of the most experienced pilots in the CAG, having served in WWII with the Royal Australian Air Force'.[108] The remaining two Sea Furies returned safely to *Sydney,* although both were hit by flak.

Sydney again left Sasebo on 18 November for her fourth patrol which began with a combined air and surface attack on Hungnam on Korea's north-east coast.[109] Deteriorating weather conditions saw a fall in sorties as the flight deck experienced sub-zero temperatures and snow falls with some crew members suffering frostbite.[110] During this patrol the ship experienced problems with her catapult, necessitating a refit in Kure before the commencement of her fifth patrol.[111]

On the seventh of December *Sydney* lost Sub Lieutenant R.R. (Dick) Sinclair. Hit by flak near Chinnampo, his 805 Squadron Sea Fury experienced an engine fire and barely made it to the coast where he was seen to bail out. Unfortunately as he left the aircraft he hit the aircraft's fin and his body was later recovered by the ship's

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[102] *Flying stations,* p. 95.
[103] Stevens, *Royal Australian Navy,* p. 178.
[104] Kirkland and Pears, p. 4.
[105] '817 Squadron History', n.d.
[106] Jones, p. 84.
[107] Kirkland and Pears, p. 6.
[108] '805 Squadron History', n.d.
[109] Kirkland and Pears, p. 6.
[110] '817 Squadron History', n.d.
[111] Kirkland and Pears, p. 6.

helicopter.[112] Colin Jones recorded the effect of Sinclair's death on *Sydney's* crew in *Wings and The Navy:* 'There were 1200 men on deck in light snow with tears in their eyes as he was buried at sea with full honours'.[113]

One search and rescue mission involving *Sydney's* aircraft not only ended well, but still evokes memories of a more humorous nature. It involved Lieutenant Commander Jimmy Bowles, commanding officer of 805 Squadron whose Sea Fury was hit by gunfire necessitating a bail out over the sea. During WWII, Bowles had been a CAM pilot (a fighter pilot launched by catapult from a merchant ship) and as such was not overly bothered by having to ditch into deep water.[114] He assumed the correct position for such a wet landing, having stiffened his legs and grasped the parachute release along with the release box for the dinghy swaying three metres below him. Assuming he would reach a depth of between three and six metres below the surface before inflating his life vest, he took in as much oxygen as he could and hit the water. It came as a surprise to find himself in no more than 30 centimetres of water but up to his arm pits in soft slimy mud 'where he was left quivering like a bloody dart', according to Bob Nicholls.[115] No injuries were sustained by Bowles who was eventually rescued by helicopter and Nicholls reports that he was found to be 'smelly but unbowed'.[116]

The *Sydney's* rescue helicopter, piloted by Lieutenant Raymond Smith, USN, was employed twice on 13 December to rescue Lieutenant Peter Cooper and Lieutenant Commander Walther Gowles. Cooper had crash landed his 808 Squadron Sea Fury in enemy territory but the Search and Rescue (SAR) helicopter was quickly dispatched to ferry him back to the ship, without injury. Also rescued without injury after ditching into the sea, Gowles was grateful for the efficiency of the helicopter and her crew.[117]

While the RAN did not operate rotary aircraft until 1953 when they introduced the Bristol Sycamore, we can see that the United States supplied helicopters and crew for operations aboard *Sydney* in the Korean War. The ability to extend the field of operations in the Korean maritime environment to rotary aircraft greatly extended the proven versatility of the FAA and was therefore a crucial component in allied

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[112] *Flying Stations,* p. 98.
[113] Jones, p. 87.
[114] *Flying Stations,* p. 98.
[115] *Flying Stations,* p. 99.
[116] *Flying Stations,* p. 99.
[117] Kirkland and Pears, p. 6.

naval operations. In comparison, the RAAF did not incorporate rotary aircraft into their arsenal until the introduction of the Bell Iroquois in 1968.[118]

Christmas 1951 was spent in Kure where the ship was once again replenished for her sixth patrol beginning on 27 December. *Sydney* lost her third and final pilot on 2 January when Lieutenant Coleman's Sea Fury disappeared over the Yellow Sea. Coleman was flying a CAP mission out of range of anti-aircraft guns and as neither he nor his aircraft has ever been found the reason for its disappearance remains unknown.[119] On January 5 Lieutenant Peter Goldrick returned to the ship with a right arm wound, the only one of HMAS *Sydney's* airmen to be wounded in action.[120]

The seventh patrol, the *Sydney's* last, began on 16 January and although weather conditions prevented flight operations on two occasions, was completed without incident on the west coast on 25 January 1952.[121] *Sydney's* record of operations in Korea stands at: three men killed and 11 aircraft lost out of 2,366 sorties flown. On 99 separate occasions her aircraft were hit by enemy fire for the loss of '66 enemy bridges, 38 sections of railway tracks, 2,060 houses, 495 junks, 15 guns and about 3,000 enemy casualties'.[122]

While acknowledging the effectiveness, efficiency and success of *Sydney's* flight crews, they were not alone in their endeavors. Bob Nicholls makes the valid point that 'no aircraft could have flown without the wholehearted cooperation and effort of every man in the ship.'[123] Aircraft engineers worked continuously to keep the aircraft flying throughout *Sydney's* deployment with much of their rest and relaxation (R&R) time taken up with aircraft repairs. Percy Clarke who served as a Leading Airman Pilot's Mate recalls:

> When an aircraft came back with [just] holes, they were invariably repaired within the hour ready for the next take off. We…had what we called a puncture repair outfit, a selection of varying sized metal plates suitably drilled for riveting. The damage would be assessed, hole drilled

[118] 'A2 Bell Iriquois', *RAAF Museum, Point Cook,* available https://www.airforce.gov.au/raafmuseum/research/aircraft/series3/A2.htm
[119] Kirkland and Pears, p. 7.
[120] *Flying stations,* p. 98.
[121] 'HMAS Sydney (III)', n.d.
[122] Evans, p. 19.
[123] *Flying Stations,* p. 90.

and then riveted on, a lick of paint and it was ready. A more professional repair would be performed at a more opportune time.[124]

The ship's aircraft handlers worked extended hours, being the first of the ship's branches to begin work on the flight deck each morning and the last to leave it each night. Their work was dangerous, physically exhausting and unrelentingly stressful with time being their worst enemy. Aircraft were in continuous movement, being brought up to the flight deck or returned to the hangar, either landing on or catapulting off.[125] Bob Nicholls explains:

> Each day, regardless of weather, they had to rig and unrig the safety rails around the lift wells and deck edges. They had to coordinate a dozen simultaneous demands, from clearing a deck area to replenish the carrier herself to bringing up an aircraft from the back of a hangar for an engine run. They could not range aircraft until the engineers had 'pulled wires' to check the arrester wire rams. The ordnance people wanted no movement as they loaded armament. They had to man chocks when starting up and clear those chocks away, within inches of lethal whirling propellers, after the pilot signaled 'up'. A dozen things would go wrong each day – from the need for a last minute re-spot because an aircraft was unserviceable to clearing away a barrier crash. All the time the clock ticked on, with all hands mindful of the necessity to clear the deck to land for aircraft that were short of fuel or to make the next scheduled launch.[126]

Sydney's Armourers were also working long hours under dangerous conditions. Aircraft had to be re-armed continuously while flying sorties irrespective of the time or prevailing weather conditions. Bombs weighing up to 227kg were moved and attached by hand, a backbreaking task. The ship suffered only one armament mishap while on station in Korea and no injuries occurred, although it was a close call. Theo Bushe-Jones relates the incident with more humour than he perhaps felt at the time:

> Re-arming took 2 or 3 people. We quite often helped each other out with the job, we would work on our own plane then help a mate with his. You always had to test fire the Weapons after re-arming. I remember coming off the flight deck and into the hangar with a mate to change the guns on an aircraft but as re-fueling was going on we had to wait. We thought we might as well go to dinner while we waited. After dinner I left him to it. Well someone moved the aircraft while we were away and another one had been moved into its place but my mate didn't think to check the ID number as everything looked the same as when we had left it. Of course he test fired it. Shot the hangar up. He was in a bit of

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[124] *Flying Stations,* p. 91.
[125] *Flying Stations,* p. 92.
[126] *Flying Stations,* p. 92.

trouble! He was lucky refuelling had stopped otherwise he would have blown us all up.[127]

The bullets penetrated the flight deck as the aircraft concerned, a Fairey Firefly, had its wings folded and in this position the guns are vertical. The Squadron commander, along with another officer, were 'bracketed' by the shots as they walked along the flight deck.[128] While incidents like these were not common a very real danger was posed by some aircraft returning to the ship carrying unexpended rockets. This live ammunition could be dislodged when the aircraft arrested causing the rocket to career along the flight deck. On occasion, the rocket would remain attached to the aircraft, necessitating removal by an Armourer 'displaying considerable intestinal fortitude' who disposed of it over the ship's side.[129]

Sydney and her embarked aircraft successfully completed their tour of duty with six RAN officers receiving decorations and thirteen Mentions in Dispatches (MID). Of the nineteen awards bestowed, 14 of them were awarded to members of the FAA.[130]

The Korean War ended in a military stalemate. While neither of the combatants could claim victory, the consensus is that the Korean War succeeded in containing communistic aggression, which according to Michael Hickey in *The Korean War. The West Confronts Communism,* 'is proof that it was worth the effort'.[131] John Whiteclay Chambers II states in *The Korean War* that the Korean War 'demonstrated alternative strategies designed to gain national objectives without resorting to atomic war'.[132] If the war did not result in a military victory it may be said to have resulted in a moral one.

The FAA was formed four years before HMAS *Sydney* and the aircraft and men who made up the 21st CAG deployed to the Korean War. In that short space of time intense training and commitment ensured the ship was an efficient fighting force,

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[127] Bushe-Jones, 'Interview No. 1245'.
[128] *Flying Stations*, p. 91.
[129] *Flying Stations,* p. 92.
[130] *Flying Stations,* p. 100.
[131] Hickey, p. 362.
[132] John Whiteclay Chambers II, 'The Korean War', http://www.encyclopedia.com/topic/Korean_War.aspx [accessed 28 April 2015]. (originally published in The Oxford Companion to American Military History 2000, Oxford University Press 2000).

equal to, and at times exceeding those of the British naval aviation components. *Sydney's* naval aviators met or exceeded every operational target with skill and professionalism, thereby making an important contribution to UN forces. As the allied forces were led by the United States, Australia's contribution built on the defence relationship forged during the Second World War. The RAN, and by extension the FAA's contribution to the Korean War, led to the Australian New Zealand United States (ANZUS) treaty being ratified in 1952 which greatly enhances Australia's security. The ANZUS treaty may have come to fruition in time without Australian military involvement in Korea, but this successful alliance in the Korean theatre earned the FAA a valued and respected position within the international military environment. The importance of this acceptance was paramount to Australia's political, diplomatic and military standing within the Southeast Asian region and, as a consequence, continued participation in the South East Asian Treaty Organisation (SEATO) and the Far East Strategic Reserve (FESR).

The Korean War saw the first multinational force deployed post-World War II. It was also the first conflict in which communist and democratic ideologies openly clashed during the period of the Cold War. The Korean War saw the first rotary-wing aircraft, the helicopter, introduced to Australian naval operations with HMAS *Sydney* operating a borrowed Sikorsky in a rescue role.[133] As a direct consequence of the success of rotary aircraft in the Korean War, the Australian government purchased three Bristol Sycamore HR-50 helicopters in March 1953 which were operated by the Royal Australian Navy's (RAN) 723 Squadron. By 1965 the RAN and 723 Squadron had phased out the Bristol Sycamore and operated the Westland Scout and the Bell UH-B Iroquois.[134]

This chapter showed that the FAA were deployed to the Korean War aboard HMAS *Sydney* and served under a United Nations multinational force led by the United States. This operation is evidence that naval aviation is a valid weapon in any military arsenal; it greatly extends the maritime operational area while protecting airborne assets. Naval aviation ensures that essential combat air operations can be undertaken without the usual vulnerabilities inherent in Air Force operations - the static geographically fixed airfield. FAA operations during the Korean War, be they

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[133] Hooker, p. 153.
[134] Geoff Goodall, *Bristol 171 Sycamores In Australia,* http://www.goodall.com.au/australian-aviation/sycamore/bristol-sycamore.htm. [accessed 29 July 2015].

Australian, British or American, contributed to the success of UN operations, therefore the validity of their contribution is established.

The memories of service by FAA personnel in the Korean War have endured over time just as those who served in World War I or World War II have. I would suggest it is not possible to forget these exceptional experiences as by their very nature they attain the status of 'I will never forget' and therefore remain part of archival memory. This chapter has demonstrated that collective memory is essential to the historiography, but these valuable shared memories remain personally individual and as such, precious, unique and unassailable.

The FAA was called on to serve in the Vietnam War from the latter half of the 1960s and this deployment differed greatly from the traditional maritime environment of the Korean War. This difference in operational mode allows for a direct comparison and evaluation of operational value. The unique versatility and adaptability of the FAA is showcased in the Vietnam War with these two operational examples proving that their ability to operate successfully is in no way compromised by their mode of operation.

6. The Vietnam War and the Emus.

Australia's naval aviators were deployed to Vietnam from 1967 until 1972[1] but their service did not follow the traditional model showcased in the previous chapter. They did not operate from an aircraft carrier but were amalgamated into the United States Army's 135th Assault Helicopter Company (AHC), a helicopter unit which deployed from land bases in South Vietnam. This chapter explores this uniquely diverse operation within the context of the conflict and clearly demonstrates the versatility of the FAA. The FAA mode of operation, be it fixed-wing or rotary aircraft, remains an equally valuable asset within multinational forces in the interests of global security.

Uniquely this combat operation brought together members of different military branches; an Army land-based unit and a maritime-based naval unit for which the only common denominator was aviation. All Australian military units have been built in the image of their British counterparts and are therefore smoothly interchangeable as demonstrated by the efficacy of wartime RAF operations. Incorporation into a United States naval unit would throw up unique challenges; the two countries differed greatly in operational methods and different technological models. Within a United States Army unit these basic differences were greatly exacerbated by seemingly incompatible military hierarchical structures; Army and navy ranking differs within the same national military force and any dual-national force is twice subjected to this differential. Overcoming these operational obstacles, together with diverse flight career experiences and expectations and cultural idiosyncrasies, the amalgamation of the RANHFV and the 135th AHC was an outstanding success. Operationally this combined unit proved to be one of the most 'outstanding helicopter units of the Vietnam War'.[2]

This FAA deployment is the only instance in which Australian naval aviators have served outside of the maritime sphere they were designed for. To understand how this unique exercise in interoperability, officially termed the Experimental Military Unit or the EMUS, came about, we need to briefly look at the wider context.

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[1]   Fairfax, p. 176.
[2]   Geoff Carr, *EMU, Inc*. http://www.hueyvets.com/ [accessed 29 July 2015].

The instability of the Asian region following WWII was demonstrated by the Malayan Emergency, the Indonesian and Vietnamese Civil Wars, the communist threat to Laos and the Indonesian confrontation, in which Australian troops fought.[3] During this time the Australian government forged ties with the United States, Malaysian, New Zealand and British governments as a signatory to various treaties. ANZAM (Australia New Zealand and Malaya [under British Commonwealth]), FESR (The Far East Strategic Reserve), SEATO (South East Asia Treaty Organisation) and ANZUS (Australia New Zealand United States).[4] With these alliances in place the Australian government had implemented its Forward Defence policy, effectively assuring Australia's independent defence.[5] This policy was the foundation on which Australian security was built and had its beginnings in the 'containment' policy under which the United States government dealt with communism.[6] SEATO covered a wide geographical area and in consequence represented Australian interests to a greater extent and Australia played a more significant role from 1957.[7] Supporting the Laos government in discouraging Chinese Communist interest through diplomatic channels was an ongoing SEATO operation during the late 1950's and early 1960's.[8] SEATO comprised the United States, France, Britain, New Zealand, Thailand, Pakistan and the Philippines. New Zealand and Australian interests were geographical while Britain and France had colonial interests. The containment of communism was the sole interest for the United States under its Cold War Policy.[9]

Pre World War II, Indochina had been under French domination but the Japanese took control when France fell in 1940, although the French retained administration.[10] By 1945 the Japanese had ousted the French and had themselves been defeated, leaving the north in political turmoil.[11] Vietnamese revolutionary and nationalist Ho Chi Minh seized control and established the

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3   Ian Pfennigwerth, *Missing Pieces: The Intelligence Jigsaw and RAN Operations From 1939 – 1971*, (Canberra: Sea Power Centre – Australia, Department of Defence, 2008), p. 183.
4   Pfennigwerth, p. 183.
5   Terry Burstall, *Vietnam:the Australian dilemma,* (St. Lucia: University of Queensland Press, 1993), p. xxi.
6   The Australian War Memorial, 'Overview of Australian Military Involvement in the Vietnam War, 1962-1975', *Impressions: Australians in Vietnam,* https://www.awm.gov.au/exhibitions/impressions/impressions.asp [accessed 18 July 2015].
7   Pfennigwerth, p. 221.
8   Pfennigwerth, p. 221.
9   US Department of State, 'Milestones:1953 – 1960', *Office of the Historian, .* https://history.state.gov/milestones/1953-196o, (accessed 1 June 2013).
10   *Websters New World Dictionary of the Vietnam War,* ed. by Marc Leepson and Helen Hannaford, (New York, MacMillan, 1998), p. 455.
11   *Websters New World Dictionary,* p. 455.

Democratic Republic of Vietnam and proclaimed himself as president.[12] Fierce anti-colonialism was the catalyst for the growth of nationalism and the need for industrial independence fuelled the rise of socialism, tapping into traditional values of community solidarity.[13] Ho Chi Minh's communist Army, the Viet Minh, were challenged by renewed attempts to re-establish French control with the support of the British and Americans post World War II.[14] The Vietnamese fought to retain their independence against the heavily American backed French and 1954 saw the French defeated at Dien Bien Phu.[15] The loss of Vietnam was seen by the American-led West as opening the door for the spread of communism according to Marvin E. Gettleman, editor of *Vietnam and America*:

> The area of Indochina is immensely wealthy in rice, rubber, coal, and iron ore. Its position makes it a strategic key to the rest of Southeast Asia. If Indochina should fall, Thailand and Burma would be in extreme danger, Malaya, Singapore and even Indonesia would become more vulnerable to the Communist drive…The Communists must be prevented from achieving their objectives in Indochina.[16]

The French defeat at Dien Bien Phu was achieved by Vo Nguyen Giap who led the Viet Minh in surrounding the French forces and successfully cutting off their supplies.[17] The battle raged for 209 days and saw French technology defeated by Vietnamese 'peasants on bicycles' in a portent of things to come.[18]

Following the French defeat, representatives of the United States, the United Kingdom, France, the Soviet Union, China, Vietnam, Cambodia and Laos attended the Geneva Conference which had as its primary aim peace in Indochina. There remained various issues to resolve, not least of which was Ho Chi Minh's professed right to govern a united Vietnam.[19]

With China and the Soviet Union apprehensive of the United States' reaction to a communist Vietnam, Ho Chi Minh was persuaded to accept a compromise until

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[12] Trevor N. Dupuy, Curt Johnson, David L. Bongard, *The Encyclopaedia of Military Biography* (London: I.B. Tauris & Co., 1992), p. 338.
[13] Heywood, p. 118.
[14] *Vietnam and America: The Most Comprehensive Documented History of the Vietnam War,* ed. by Marvin E. Gettleman and others, 2nd edn, (New York: Grove Press, 1995), p. 4.
[15] Gettleman and others, p. 40.
[16] Gettleman and others, p. 39.
[17] 'Vietnam Population' *Index Mundi,* www.indexmundi.com/vietnam/population.html [accessed 31 March 2013].
[18] *Index Mundi*
[19] Christian G. Appy, *Vietnam: The Definitive Oral History Told from All Sides* (London: Ebury Press, 2007), p. 45.

elections could be called in 1956 - until then Ho Chi Minh would govern only the northern regions of Vietnam. This compromise took the form of a temporarily divided Vietnam and this decision was then implemented.[20]

As a result of this division the Democratic Republic of Vietnam[21] (DRV) occupies the northern part of the country from the Demilitarised Zone (DMZ) near the 17th parallel, with its capital of Hanoi.[22] This period before elections were held allowed for free movement across the divide with Viet Minh forces moving to the north while Catholics congregated in the Republic of Vietnam (RVN) to the south.[23] In *Vietnam: the Australian War,* Paul Ham states that:

> About 80,000 communist guerrillas returned north, but several thousand of these cadres - the stay-behinds - were ordered to remain in the south - 'sleeping' military cells, whose presence defied the letter and spirit of Geneva.[24]

From 1949 the Geneva Convention became the foundation on which armed conflict, and the protagonists involved, conduct is regulated with the aim of protecting all non-combatants under a Humanitarian Law.[25] Vietnam was a signatory to this treaty which was ratified on July 28 1957 and clearly embedding sleeping military cells in South Vietnam was a contravention of the Geneva Convention. It was obvious that Ho Chi Minh and his supporters had no intention of following these rules of engagement in their struggle to unify Vietnam.

The capital city of South Vietnam is now Ho Chi Minh City but was formerly Saigon. Taken together, Vietnam's 332,000 square kilometres is predominately mountainous with the majority of the population inhabiting the river deltas.[26] The combination of these two fertile areas, the Red River Delta in the north and the Mekong Delta in the south, are collectively known as the 'Asian rice bowl'.[27] By

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[20] Appy, p. 45.

[21] *Websters New World Dictionary,* p. 422.

[22] *Websters New World Dictionary,* p. 92.

[23] *Websters New World Dictionary,* p. 424.

[24] Paul Ham, *Vietnam: the Australian war,* (Pymble, N.S.W.: Harper Collins Australia, 2007), p. 51.

[25] 'Convention(IV) relative to the Protection of Civilian Persons in Time of War. Geneva, 12 August 1949', *International Committee of the Red Cross,* www.icrc.applic/ihl/ihl.nsf/Treaty/xsp/documentid=AE2D398352G5B08C12563CD002D6BSC&Action=opendocument. [accessed 12 December 2015].

[26] Gettleman and others, p. 5.

[27] *Websters New World Dictionary,* p. 253.

contrast, the narrow strait connecting the north to the south is sparsely populated due to its topography and climate not being supportive of agriculture.[28]

The South Vietnamese Catholic government, funded by the United States, and led by Ngo Dinh Diem, became a member of the United Nations and from its frail beginnings 'sceptics grudgingly came to accept the South's right to exist'.[29] Slowly Diem's 'nepotistic regime'[30]emerged and his inability to compromise, and his overtly proud and morally superior demeanor, influenced his policies with damning effects on the country and its population.[31] The failure of the promised election of 1956 to materialise caused 'a bitter sense of betrayal' in Hanoi and 'violent rhetoric soon curdled into aggressive action'[32] and war was inevitable. The Diem regime's unpopularity grew and increasingly there were guerilla attacks against government officials and protests against its policies which led to many executions. According to South Vietnamese map maker Ngo Vinh Long:

> A lot of people in the West denied that it happened but Diem made no bones about it. They advertised the executions and there were pictures in the paper of people getting their heads chopped off by a guillotine. Officials read a list of crimes the person was supposed to have committed, the blade came down, the head rolled into a box full of sawdust and that was that.[33]

The Diem government's inability to unite the southern population against communist ideology, coupled with the ineffectiveness of their military to counter communist forces uprisings, led United States President John F. Kennedy to doubt Diem's suitability to govern.[34] There remains widespread speculation regarding the Kennedy administration's measure of support for the coup on 1 November 1963, during which Diem was assassinated, just three weeks prior to the same fate befalling John F. Kennedy.[35] The following three years were volatile and unstable with many attempts at South Vietnamese leadership but a measure of stability returned when Nguyen Van Thieu took control and governed until the south collapsed in 1975.

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[28] Gettleman and others, p. 5.
[29] Ham, p. 54.
[30] Ham, p. 55.
[31] Ham, p. 55.
[32] Ham, p. 59.
[33] Ngo Vinh Long, cited in Appy, p.58.
[34] Appy, p. 62.
[35] Appy, p. 62.

In 1956, the Australian Commonwealth Naval Board concluded that 'by its presence in [South East Asia], by its close ties with the navies of other nations, and by the goodwill it engenders in foreign countries, the [Royal Australian] Navy is a valuable weapon in the Cold War against Communism'.[36] As such, RAN ships had visited South Vietnam under the umbrella of FESR, playing a role in diplomacy and the education of Republic of Vietnam (ARVN) military, which included secondment to ARVN units.[37] It is generally accepted that the Australian government increased military involvement in Vietnam, at the direct behest of the South Vietnamese government, but it is argued that the request was in fact issued by the American government.[38] Author of *Vietnam: The Australian Dilemma,* Terry Burstall explains:

> Although it was somewhat unusual for the request for military aid to be made through service channels, considerable discussion on the form of an Australian contribution had already occurred between Washington, the Australian Embassy in Saigon, the Australian government and the Defence Department. That Australia should provide a contribution was never in doubt. It suited the Australian strategy of 'forward defence', which meant holding a line in South East Asia against communism and at the same time providing depth to Australia's defenses. A demonstration of Australian willingness to respond to the American request at this time might also assist to elicit a positive response from America to any future Australian request.[39]

This atmosphere of quid pro quo ensured an Australian military presence which took the initial form of service with American military advisors and the US Central Intelligence Agency (CIA) in South Vietnam from 1962.[40] By 1964 the South was in danger of being overtaken by communist forces and American military attacks took place along the Ho Chi Minh trail through Laos. In retaliation the North attacked an American warship in the Gulf of Tonkin but it took a second attack to push the Americans into reprisals.[41] The conflict escalated and the Australian commitment increased to combatants with the deployment of the 1st Battalion in 1965 and at its height, Australian military personnel in Vietnam reached over 8,000, including 400 RAN personnel.[42]

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[36] *Maritime Power in the Twentieth Century: The Australian Experience,* ed. by David Stevens, (St Leonards, N.S.W.: Allen & Unwin, 1998), p. 177.

[37] Pfennigwerth, p. 224.

[38] MacDougall, p. 333.

[39] Burstall, p. 3.

[40] Burstall, p. 5. The Australian Army Training Team Vietnam (AATTV) were jungle warfare experts and served in Vietnam for 10 years and grew to be 1000 strong. It remains Australia's most decorated military unit.

[41] Stevens, *Maritime Power,* p. 177.

[42] Stevens, *The Royal Australian Navy,* p. 204. It was during the Vietnam War that Australian ships flew the Australian White Ensign for the first time.

There is no doubt that the Australian and United States governments were in agreement regarding the containment of communism which was seen as a philosophy of 'world domination' where the 'whole free world is threatened'.[43] According to the Australian Liberal Party member for Gwydir, Mr Allen, the inhabitants of South East Asia 'want their countries to be protected from communism and the communist hordes from inside China'.[44]

Against this numerically superior communist enemy, the American military pitted the helicopter, as had the South Vietnamese and French forces to a much smaller degree, previously.[45] Beginning in 1961, Assault Helicopter Companies were deployed in roles that included evacuation of casualties, troop transport, and support and reconnaissance. It was this aggressive deployment of the helicopter which was the catalyst for the RANHFV involvement as the number of aircraft in use was disproportionate to the number of trained aviators available in the United States Army.[46] Having made a request for Australian helicopter pilots to be made available, the government was obliged to look to the FAA as their aviators were not committed elsewhere.[47] In 1967 the RANHFV were assigned to the US Army's 12 Aviation Group and integrated with the 135th Assault Helicopter Company, operating from Vung Tau, South Vietnam.[48]

South Vietnam was divided up into military regions with region one being the northern-most region, the smallest and encompassed the DMZ. The largest region, bordering on region one was designated military region two, with a population above two million over 12 provinces. Saigon and the northern section of the Mekong Delta made up the 10 provinces of region 3 with 5.5 million people. The southern-most part of South Vietnam and the most populated area with over six million, was region four, consisting of 16 provinces.[49] Phouc Tuy province is in military region three on the South China Sea and from here the Australian Army

43   Parliament of Australia, 'Struggle against Communism in South Vietnam', *Parliamentary Debates,* (Tuesday 8 March 1966), http://parlinfo.aph.gov.au/parlInfo/search/display/display.w3p;adv=yes;orderBy=customrank;page=9;query=south%20vietnam%20Decade%3A%221960s%22;rec=9;resCount=Default. [accessed 29 July 2015].
44   Parliamentary Debates, 8 March 1966.
45   Eather, p. 6.
46   Eather, p. 6.
47   Elizabeth Stewart, 'The EMU: Getting The Bloody Job Done', *Wartime,* 51 (2010), p. 24.
48   Taylor, interview, p. 8.
49   Fairfax, p. 6.

deployed between 1966 and 1971.[50] To the south lies Vung Tau, home to the Australian Navy's Clearance Diving Team Three and the RANHFV between October and December 1967.[51]

The Royal Australian Navy contribution to the Vietnam War was not limited to the deployment of members of the FAA. Playing a particularly vital role was HMAS *Sydney*, although she did not deploy or carry aircraft during Australia's commitment of combatants. Having been placed in reserve prior to the Vietnam War she was again utilised for transportation of the men and equipment of the Royal Australian Regiments (RAR) to and from Vietnam. *Sydney's* hangars provided the only viable option to transport vehicles, artillery, armaments, stores, troops and helicopters.[52] The ship, now designated as a 'fast troop transport', traversed from both the east and west coasts of Australia as needed and into Vung Tau harbour on the southern tip of South Vietnam 25 times during the period 1955 to 1972.[53] It was these frequent voyages and the transportation of troops to and from Vietnam that *Sydney* earned the name of 'The Vung Tau Ferry'.[54] As a security measure the ship was escorted alternatively by destroyers or frigates and varied the route taken from Australia as much as geographically possible. The South China Sea was unavoidable and it was in this area that *Sydney* was considered particularly at risk by submarine attack according to Defence intelligence.[55] John R. Carroll states in *Out of Sight, Out of Mind- the Australian Navy's Role in Vietnam, 1965 - 1972* that 'Indonesia, China and the USSR were, at one time or another, seriously considered by the JPC [Joint Planning Committee] to be possible perpetrators'.[56]

Arrival in Vung Tau did not lessen *Sydney's* perception of danger as it was described as the 'most vulnerable harbour in Vietnam'.[57] To protect against any threat of the ship being mined while at anchor, two teams of navy divers were deployed around the clock as a protective measure.[58] On her initial voyages this threat was exacerbated by the two days it took to unload *Sydney* using the ship's Landing Craft Mechanised (LCMs), together with RAAF and US Army heavy lift

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[50] Fairfax, p. 6.
[51] Fairfax, p. 6.
[52] Carroll, p. 56.
[53] Carroll, p. 56.
[54] Carroll, p. 16.
[55] Carroll, p. 165.
[56] Carroll, p. 165.
[57] Carroll, p. 165.
[58] Fairfax, p. 168.

helicopters.[59] The time in harbour was eventually reduced to five hours with a continuous shuttle service, thus any perceived risk was greatly reduced.[60] Of her efforts in support of all Australian military operations in the Vietnam War, John Carroll had this to say about HMAS *Sydney*:

> It is accepted by almost all involved that Australia could not have supported its military commitment in Vietnam without the enormous contribution made by this one ship, and from the many sailors who served in her.[61]

In addition, the RAN contribution included HMAS *Perth, Hobart, Brisbane*, *Vendetta*, *Stuart*, *Yarra*, *Duchess*, *Parramatta*, *Torrens*, *Swan*, *Derwent*, *Anzac*, *Vampire* and *Melbourne.* The first four listed above served rotating six-month deployments until 1971, where they served under United States Navy 7th fleet control. While serving on this gunline, ships were called upon to direct fire onto enemy troops, bunkers and villages.[62] United States naval forces and those of their allies, including the RAN, were never seriously challenged by North Vietnam or their Chinese allies.[63] While naval operations were not hindered by the North Vietnamese navy, the ships were often under attack from land forces and HMAS *Perth* sustained damage and the wounding of four crew members in 1967.[64] In June 1968 CPO Raymond Hunt and Ordinary Seaman Raymond Butterworth were killed when HMAS *Hobart* was attacked in a friendly fire incident involving the US 7th Air Force.[65]

Additional to the RAN commitment, the RAAF also supplied both fixed-wing pilots for Forward Air Control roles with their American Air Force counterparts. The RAAF also deployed a detachment of 9 Squadron helicopter pilots, eight of which were members of the RAN.[66] The Squadron operated from South Vietnamese base Nui Dat and flew in support of the Australian Task Force. The Australian helicopter force differed from that of the 135th in that 9 Squadron RAAF were not integrated with the Americans. The 9 Squadron operated in support of the Australian Task Force rather than ARVN forces and was not part of any other Australian or

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[59] Fairfax, p. 169.
[60] Fairfax, p. 169.
[61] Carroll, p. 166.
[62] Stevens, *The Royal Australian Navy,* p. 206.
[63] Stevens, *Maritime Power,* p. 179.
[64] Stevens, *The Royal Australian Navy,* p. 206.
[65] Commonwealth of Australia, 'HMAS Hobart (II), *Royal Australian Navy,* n.d. http://www.navy.gov.au/hmas-hobart-ii. [accessed 13 July 2013].
[66] Fairfax, p. 223.

American unit.[67] These little known statistics equate to a substantial RAN commitment to combat operations in Vietnam particularly when coupled with the deployment of four contingents of the RANHFV.

The RAN personnel who served as members of the Helicopter Flight Vietnam were not unfamiliar with the American Iroquois prior to operations with the 135th AHC. The RAN's flight training Squadron, 723, to which all RANHFV personnel were transferred prior to deployment, operated the Iroquois from May 1964.[68] The Iroquois, or Huey as it was known to those who served in Vietnam, is the most recognised of all helicopters as its iconic image has become synonymous with the Vietnam War.

The Bell Iroquois was a gas turbine powered machine and model HU-I was initially introduced to Vietnam in 1962 and became the most widely used helicopter in the war. It is from the model name; HU - 1 that the machine derived its nickname of 'Huey' and it remains the most familiar aircraft in the world.[69] The Bell Company produced 11 models of the Iroquois - the UH - 1A's performance was greatly improved by the 'D' model and later improvements introduced the 'H', the 'penultimate Huey'.[70] When used to insert and extract ground troops the 'H' model was referred to as a 'slick' which alluded to the machine's sleek lines as it was largely unencumbered, usually carrying only two M60 machine guns. In contrast the UH-1C was a smaller aircraft and this model was used in the 135th as a heavily armed gunship.[71] Used as escort aircraft to the slicks, the gun-ships suppressed enemy fire and cleared landing zones with an assortment of weapons that included; 24-round rocket pods, up to four machine guns, grenade launchers and six-barrelled Gatling guns. On his *AirVectors* website, Greg Goebal, a retired United States Army veteran with a degree in Electronics, explains that alterations to the standard weapons systems were common:

> There were also improvised weapon mounts. Some Hueys were fitted with wooden chutes outside the doors to allow flight crew to drop mortar

[67] Chris Coultard – Clarke, *Hit My Smoke: Targeting the Enemy in Vietnam,* (St Leonards, N.S.W.: Allen & Unwin, 1997).

[68] 'Fleet Air Arm (RAN)', *Helis.com,* n.d. www.heli.com/database/org/au_royal_australian_navy [accessed 17 April 2013]

[69] Military Factory 'Bell UH-1 Iroquois (Huey)', *Military Factory,* (19 August 2015), www.militaryfactory.com/aircraft/detail.asp?aircraft_id=42 [accessed 29 June 2013].

[70] James Chiles, *The God Machine: From Boomerangs to Black Hawks – The Story of the Helicopter,* (New York: Bantam Books, 2007), p. 171.

[71] 'Hueys in Vietnam', *Helis.com – Helicopter History Site,* n.d. http://www.helis.com/60s/h_h1nam.php (accessed 30 June 2013).

rounds on enemy positions, with aircrews simply yanking the bottom doors of the chutes open with wires to drop the loads. This Mortar Aerial Delivery (MAD) scheme was reportedly very effective in jungle fighting. Another scheme said to have been used was to drop a 208 litre drum full of gasoline and hooked up with a grenade as an informal incendiary. Soldiers tend to be ingenious in cooking up their own means of destruction.[72]

It is obvious from this statement that the Hueys were very versatile weapons platforms, the only limitations were the crew's imaginations. Other advantages included its relative lightness in comparison with the other helicopters used in Vietnam and its reputation for being a tough machine. Maintaining the machines was fairly straight forward and they were relatively easy to fly; qualities that greatly added to its versatility.[73] It was the total lack of protective armour on the Huey which lessened its overall weight but as a consequence the machines and her crews were very susceptible to enemy ground fire. According to Steve Eather, it could take as little as 'one or two lucky bullets to bring down a Huey'.[74] RANHFV pilot and Commanding Officer of the third contingent to serve with the 135th in Vietnam, David Farthing, provides one example of this Huey vulnerability:

Towards the end of my tour, when I was conducting an assault in a supposed secure area of eastern Kien Hoa province, a VC soldier emerged from a small haystack, armed only with an AK47 assault rifle, and shot down five of the flight of eight aircraft. To add insult to injury, he got away…In this case he was acting alone and we suffered no casualties, but had the enemy been present in force it could have been a major disaster. As it was, all five aircraft had to be hooked back home by Chinook heavy lift helicopters.[75]

The above quotation highlights another of the disadvantages of the Huey; the noise. That distinctive 'whoop whoop' rotor noise that has become the soundtrack of the Vietnam War alerted any enemy forces to their presence and intended landing positions.[76] Vietnam has long been referred to as the helicopter war as many more traditional modes of transport and communication were replaced by helicopters. From the earliest deployment of United States advisers the helicopter made an impact and according to *New York Times* reporter David Halberstam, how could it have been any different?

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[72] Greg Goebel, 'Early Hueys/Huey in Vietnam', *Air Vectors,* (1 April 2015), http://www.airvectors.net/avhuey_1.html. [accessed 3 July 2013].
[73] 'Hueys in Vietnam, n.d.
[74] Eather, p. 6.
[75] David Farthing, cited in David Stevens & John Reeve *Sea Power Ashore and In The Air,* ed. by David Stevens and John Reeve, (Sydney: Halstead Press, 2007), p. 218.
[76] Eather, p. 6.

In Vietnam the helicopters emerged, almost otherworldly in their technological superiority to a foe who just months earlier had used coconut grenades. Through much of 1962 almost everyone – even the doubting reporters – agreed that the helicopters had, at the least, staved off collapse. How could little men in black pajamas possibly hold up against the big iron birds?[77]

The 'little men in black pajamas' did so by exploiting the machine's obvious vulnerabilities. Huey pilots learned very quickly that decreasing height and speed to insert troops shifted the operational advantage to the enemy. According to RANHFV pilot Clive Mayo, a Russian Kalashnikov or AK47, the favoured assault rifle of the North Vietnamese Army (PAVN) troops and the Viet Cong, had an effective range of approximately 1300 feet.[78] To offset this enemy advantage while the slick was engaged in landing troops, the gunship was pivotal. During these operations there were usually 10 slicks, flying in formation at 120 knots and five feet off the ground, totally focused on their landing zone.[79] Committed to their course the slicks relied very heavily on their gunship's protection as Mayo reiterates here:

I always felt pretty confident in the ability of our gunships, our protection, they were a pretty gung ho sort. I remember Roger Cooper who was on my pilot's course and we shared a cabin in Vietnam, he was a gunship pilot, probably one of the best one I ever saw. I actually saw him hit a North Vietnamese soldier in the middle of the back with a 2.75 inch folding aerial rocket from about 500 metres. This guy was clearly North Vietnamese, in uniform, in the Delta and he got permission, fired and hit him in the back and severed his spine. Best shot I've ever seen.[80]

An intense action fought in May 1970 involved troop insertion under different circumstances when South Vietnamese Regional Outpost was taken by a large Viet Cong force. The 135th was responsible for transporting the three battalions of ARVN troops to retake the base and in doing so were subjected to a barrage of enemy fire which included .50 caliber machine guns. During the assault several Hueys were damaged, including the lead helicopter, piloted by Lieutenant Marum (RAN). A more successful mission being run concurrently was advised of Marum's inability to continue and sub-lieutenant Andy Perry (RAN) volunteered to replace

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[77] David Hallberstam, cited in William Prochnau, *Once Upon A Distant War: Reporting From Vietnam,* (Edinburgh: Mainstream Publishing, 1996), p. 159.
[78] Clive Mayo, transcript of recorded interview (5 May 2008), p. 5.
[79] Mayo, p. 5.
[80] Mayo, p. 5.

him.[81] On his first insertion Perry's aircraft took a number of hits from ground fire and his Huey suffered mechanical damage which was rectified during the limited time the machine was on the ground. Two more missions were successfully completed before the day, if not the mission, ended. A reporter from *Navy News* was on hand to interview Perry after this action and a portion of that interview is reproduced here:

> He led a group of nine aircraft to the landing zone and began taking heavy machine gun fire from a kilometer and a half from the landing point. 'Normally you don't get it until you are almost there', he (Perry) said. 'We took our first hit at about 150 metres. It came in under the seat. Then, just before we hit the ground, a bullet came through the windshield and I felt blood on my face. The troops jumped out from my side and they all fell over – dead from a heavy machine gun. A piece of shrapnel came off the pedals and hit me on the foot. By this time I was sure I was in something of a state of disrepair. We took six more hits in the cockpit'.[82]

Despite the damage to his aircraft, which included the destruction of his cockpit lights and instrument panel, Perry completed three more missions during the night to the same landing zone (LZ). The damage inflicted on this machine during these insertions were such that the Huey was beyond repair and this first day on the flight line was its last.[83]

It is apparent that troop insertion into a landing zone that was fiercely contested inflicted heavy damage on the Hueys but unfortunately machine gun fire was not the only obstacle to be overcome. Second in command of the second contingent to RANHFV between 1968 and 1969 was Commander Ian (Max) Speedy, who during the course of his deployment served as a slick pilot, gunship co-pilot and Company Operations Officer. Here Speedy explains that the Viet Cong devised many less direct means of disabling the Hueys:

> It is impossible to describe to the uninitiated what it felt like to be there with bullets going every which way and knowing that you were locked in, just one of many in a fight and if you didn't do your bit, how could anyone else. It is not like the movies. With 20 M60s [US machine gun] in the flight and every one of them hammering away, we used thousands of rounds during every insertion. Then there were the gun ships with their rockets, grenade launchers, and 4000 round/m mini-

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[81] Eather, p. 86.
[82] Eather, p. 86.
[83] Eather, p. 86.

guns on our flanks. I have been into a hole in the jungle with a bunch of Russian trucks under the trees and taken fire from all round; open rice paddy only to find spider holes open up along a rice dyke; booby trapped LZs in the Delta with strings across attached to Claymore anti-personnel mines or 10' high stakes to hole the fuel tank. But then everyone else went into the same places, so I wasn't anything special.[84]

Personal experiences and our responses to them are unique to each individual and are therefore recalled from archival memory in an idiosyncratic manner. For Speedy and his fellow aviators the experiences of combat operations in Vietnam form a collective memory that is unique to time and place. Their physiological and emotional responses were such that they stand apart from the usual and normal aspects of life and therefore can not be fully shared with those who were not present. As Speedy states, their memories distance them from the uninitiated[85] but as Paula Hamilton argues, the sharing of these personal stories strengthens historiography and invites dialogue and discussion through public evaluation, and it is hoped, respect and validation.[86]

The above quotation concludes that his experiences were not exclusive, that all members of the RANHFV were subjected to the same operational challenges. They were all faced by an enemy who were very inventive when it came to booby-traps and they were not deployed exclusively within landing zones or indeed, on the ground. A US Army pilot Don Agren recalls one incident when he was partnered with Australian pilot Andy Perry soon after his arrival in Vietnam:

We were flying low level down a narrow river that had trees lining both banks whose canopies completely blocked out the sky. All of a sudden Andy brought the helicopter to a complete stop and hover, we did a 180 degree turn and came out the way we went in. I asked Andy what he had seen to make him pull such a drastic manoeuver. He said he had seen wires strung across the trees in front of us. The VC [Viet Cong] booby trap of the time was to attach hand grenades to the wires so that the rotor blades would pull the wire and the grenades into the helicopter. Andy had saved our lives with his keen eyesight and flying ability.[87]

While these examples of Viet Cong ingenuity ensured the RANHFV pilots' concentration when inserting or retrieving ARVN troops, Clive Mayo observed one

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[84]   Max Speedy, 'Some Final Thoughts', *Slipstream,* 18;4 (2007), p. 13.
[85]   Speedy, p.13.
[86]   Hamilton, pp. 11-18.
[87]   Eather, p. 86.

incident which made him question some of his allies' loyalty to the cause they were both fighting for:

> There was an incident where David Gibson was doing an insertion, our first for the day when it was discovered the LZ was booby trapped so the ground forces provided a marshaller for each of the 10 aircraft to land safely. Just as David was about to touch down, the marshaller took three paces to the left and told him to land. He landed on a booby trap which was a one five-five howitzer round that had been rigged as a bomb. His co-pilot was killed and blew half of David's hand off. They took 179 pieces of shrapnel out of him and he nearly lost his leg. I flew him to hospital and I didn't think he would make it, but luckily he did.[88]

Mayo recalls that other Helicopter Companies in Vietnam were brought face to face with this ambiguous question of loyalty in terrifying circumstances on more than one occasion. On routine ARVN troop insertions the crewmen were on occasion confronted by a live hand grenade left behind by the exiting troops. As the troops left the helicopter en masse one of them would just 'pull the pin and run'.[89] The gunners in the rear of the helicopter learned to expect the unexpected and hope the grenade did not explode before they could remove it.

These random acts of betrayal ensured that members of the 135th AHC operated in an extremely stressful environment, notwithstanding obvious enemy action. Members of the RANHFV adapted to this tumultuous environment quickly and quietly according to naval airman Frank Eyck. A member of the first contingent, Eyck served as a mechanic airframes and engines (NAMAE) and recounts helicopter operations:

> Helicopter insertion and recovery of troops, providing air to ground attack, re-supply of ammunition and equipment, and recovering casualties, in all weather conditions, night and day, under direct enemy fire was all part of the daily task of the multi-national unit. Although accommodation in tents, eating meals out of tins, flying as helicopter door gunner, working in dusty or wet, humid conditions, and evading enemy mortar, bullets and booby - traps was not what most Australian naval men had foreseen as an integral part of a naval career. Still they, like their American counterparts, did the job well.[90]

The above quotation leaves little doubt that the RANHFV operated outside their routine deployment limits; a situation it would be difficult to imagine transpiring

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[88]   Mayo, p. 12.
[89]   Mayo, p. 13.
[90]   Frank Eyck, 'A Gathering of Emus', *Slipstream,* 12:2 (2002), p. 2.

without the helicopter. The Vietnam War was said to 'hang on the rotor blades of the helicopter' according to one United States General and for the 135th AHC and the Australian component, this was certainly the case.[91] On the subject of the helicopter, the leader of United States forces in Vietnam, General William Westmoreland, had this to say:

> What would we do without helicopters? We would be fighting a different war, for a smaller area, at a greater cost, with less effectiveness. We might as well have asked: What would General Patton have done without his tanks?[92]

The helicopter was first used by the United States Army in 1944 when there were in excess of 30 machines being deployed in the South Pacific. Used successfully to transport light equipment, assist in medical emergencies and the rescue of combatants, the American military had purchased over 400 of Sikorsky's machines by the end of World War II.[93] In the post-war period, military interest ensured further developments but it was in the Vietnam War that the helicopter in general, and the Iroquois in particular, came into its own. Altogether 7,013 Hueys saw service in Vietnam where 3,305 were ultimately destroyed.[94]

The Australian military did not embrace the helicopter to the same degree as the United States but its versatility, especially in the Search and Rescue role during the Korean War, ensured its future role in Australian aviation forces.[95] The Australian government made its first helicopter purchase in 1953 and all subsequent purchases have extended the operational use of helicopters to include a crucial role in anti-submarine warfare. Until the RANHFV deployed to Vietnam, search and rescue and the anti-submarine warfare role were the extent of RAN helicopter operations.[96]

Advances in technology and operating procedures in various peace-time deployments drove helicopter upgrades and the variety introduced. All purchases followed government and military consultation after observing successful service

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[91] Eather, p. 6.
[92] Chiles, p. 161.
[93] Stephen Budiansky, *Air Power: From Kitty Hawk to Gulf War II: A History of the People, Ideas and Machines that Transformed War in the Century of Flight,* (London: Penguin Books, 2003), p. 307.
[94] Speedy & Ray, p. 28.
[95] *Flying Stations,* p. 179.
[96] *Flying Stations,* p. 179.

within allied military forces.[97] The American Iroquois met the needs of the Australian military in every respect and its record during initial training operations in Vietnam from 1962 was the deciding factor for Australian purchase. The machine was introduced in 1964 when 723 Squadron took its first delivery of the Bell Iroquois, UB 1B model.[98]

All Australian naval pilots are first trained on fixed-wing aircraft from which point they join the navy's helicopter training Squadron for the conversion to rotary-wing aircraft. In the RAN this responsibility lies with 723 Squadron which initiates each new helicopter purchased and trains the technical, flight and maintenance crews.[99] Following the decision to deploy FAA members to Vietnam and the 135th AHC, all personnel were transferred to 723 Squadron for additional technical, mechanical and flight training and familiarisation.[100]

Between 1967 and 1971 four contingents of FAA personnel served in Vietnam with the first arriving in October 1967.[101] Composed of pilots (8) observers (4) aircrew (4) and maintenance personnel (24) each group served for a 12-month period.[102] Prior to the first contingent's deployment the Officer in Charge (OIC) Lieutenant Commander Neil Ralph arrived in Vietnam for a 10 day briefing with the US group. In order for the integration to be successful the Australians needed to be fully conversant with the US Army 12 Aviation Group flight procedures and tactics, under which the 135th Assault Helicopter Company flew.[103]

Formed in the southern US state of Georgia at Fort Benning in July 1965, the 135th flew Caribou aircraft initially before being designated a helicopter company in 1967. They were one of four companies of the 214th Aviation Battalion, 12th Combat Aviation Group, 1st Aviation Brigade.[104] The 1st Aviation Brigade comprised more than 2000 aircraft which required 20,000 personnel to deploy and maintain them, a

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[97] Carroll, p. 16.
[98] 'The Fleet Air Arm (RAN)', *Helis.com,* n.d.
        www.heli.com/database/org/au_royal_australian_navy/ (accessed 17 April 2013)
[99] *Flying Stations,* p. 179.
[100] Eather, p. 12.
[101] *Flying Stations,* p. 179.
[102] *Flying Stations,* p. 179.
[103] *Flying Stations,* 179.
[104] Fairfax, p. 130.

record in US Army aviation.[105] Their deployment to Vietnam preceded the arrival of the Australians of the RANHFV by a matter of days.[106]

On arrival in Vietnam the crews, be they Australian or American, were required to complete a 30-day course that would enable them to reach operational flying standards. Also included were instructions in the use of various weapons and in the event of being shot down, how to survive until rescued.[107] As the 135th was not yet operational or combat training qualified, the pilots, both Australian and American, were posted to various AHCs where they were brought to combat readiness. During this short attachment the Australian pilot's greater expertise was noted, with American Army pilot Wayne Coe of the 187th AHC recalling one of them:

> I flew mostly with a pilot named Jeff. I cannot remember his last name but he could fly a helicopter with the best in the world. I was so impressed with him that I named one of my sons after him years later.[108]

This statement is indicative of the training and experience which the RANHFV brought to the AHC. While few members of the combined force had any previous combat experience, the level of training offered to the Australians' far exceeded that of the US Army combatants. David Farthing led the third contingent of the RANHFV from September 1969 until October 1970 and is of the opinion that the training before deployment was second to none, as was their performance during operations.[109] FAA Pilot and member of the RANHFV Clive Mayo explains that the Australian flight crews were career aviators as opposed to the Americans who were usually draftees. As such the Australians often had years of search and rescue and anti-submarine flying experience behind them while their American colleagues were newly trained:

> The Australians were extremely experienced because we were all commissioned, pilots were all commissioned, whereas the Americans were all Warrant Officers and they were trained to 120, 150 hours. They

[105] Fairfax, p. 131.
[106] Fairfax, p. 131.
[107] Jeffrey Grey, *The Royal Australian Navy and South East Asian Conflicts, 1955 – 1972,* (St Leonards, N.S.W.: Allen and Unwin in association with the Australian War Memorial, 1998), p. 238.
[108] Eather, p. 17. Note: Wayne Coe refers to Sub-Lieutenant Jeff Dalgleish.
[109] Stevens & Reeve, *Sea Power,* p. 215.

were lovely blokes but they just didn't have the experience the Australians had.[110]

The Australian members had the advantages of years of training and experience in the aviation sphere but in every respect embedding sailors within a land-based Army unit would be challenging. Geographically and operationally, service in Vietnam would confront their perceived notions of adaptability in ways which could never have been foreseen.

For the adaptation to be in any way successful the RAN undertook the same training as the Royal Australian Regiments (RAR) deployed to Vietnam, which would ensure some familiarisation with their environment. Each of the four units deployed would serve for 12 months and live, work and fly together so this preparation was also undertaken as a combined unit. This group structure proved to strengthen the bonds of mateship and ensured that each unit was a committed team for the length of the deployment. Adopting Army dress was the first step in this acclimatisation process as pilot and leader of the fourth contingent, Winston James explains:

> Our group got together in January 1970 and got issued with new uniforms, jungle greens and khakis and from that day until we got back from Vietnam we wore this distinct uniform that set us apart from everyone else. We went around the base, officers, the lot, as a group, normally at the double to improve our fitness and bit by bit it gave guys a sense of identity, they were different from everybody else and we had to work together. We did all sorts of stuff, handling of weapons, the M60's and M16's etc, if they had it we learned to fire it. We ended up going on a course, the battle efficiency course that every Army unit going to Vietnam had to complete. We did unbelievable things that normally sailors don't get to do; we marched, we did pushups, we climbed greasy ropes and we went through bloody obstacle courses. I was half way up Steve's Folly, a great big slimy muddy ridge when someone went; 'excuse me sir. You're wanted back at headquarters. The CO wants to see you.' Apparently he just wanted to know why we were so good on the weapons and I told him that we had unlimited access to all the weapons and ammunition we wanted and he was really shocked and said 'you realise Winston that our guys have never even seen those weapons?' They asked us sailors to help them out with some familiarisation. We spent three weeks at Canungra and developed into a team, it was magnificent, they were really good. The first contingent were almost thrust in there straight away, the second guys had a bit more training and then we were learning from guys who

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[110] Mayo, p. 5.

had come back, passing on their experiences so we were probably the best prepared of the lot. Great times.[111]

The weaponry used by the RANHFV in Vietnam was American Army issue, as were the aircraft they flew. This was not the case for members of the RARs who were issued with the Australian SLR or the Owen machine gun, to name two.[112] In his quotation James refers to the RANHFV being issued with United States Army weapons prior to their deployment to aid with the interoperability with the 135th AHC.

Aircraft Handler Bob Gilmour was an aerodrome controller in the control tower at HMAS *Albatross* in 1969 when he was posted to 723 Squadron in preparation for joining the fourth contingent to go to Vietnam. Gilmour took on the role of administration under the command of Winston James and he too recalls this unique preparation:

> The training program included physical training, armed combat, small arms fire, machine gun fire, helicopter gunship fire and so forth. It was full on and it was hard but it was also interesting. I remember the route marches we used to do around Albatross; I was a Petty Officer and was in charge of a platoon and doing things that I'd never considered normal for me in the navy. We had backpacks and god knows what on and we were marching around the depot and you felt a bit of a git. But you weren't. Everybody knew who we were and everybody had to do the same. There were aircrews, mechanics, cooks and stewards, the whole lot of us were in it and we marched for bloody miles. We then went to Canungra jungle training and they gave us 'can't see me suits' you know, jungle greens and we kinda tagged on the back of 3 RAR for three or four weeks. This was full on, horrendous. Ambushes, jungle warfare, weapons, navigation, map reading, mines and the booby traps the Viet Cong used at the time. When we finished the training we had leave but before we separated I asked them all, there were about 40 of us, I asked them what they had thought of the training and to a man they said it was bloody hard but it was bloody good. Then we were in Vietnam and we'd gone from navy rig to Australian Army rig to American Army rig and for the first week it was a case of 'where am I and what am I doing'? I was the operation sergeant and I'd had no training for this and I couldn't understand the American paperwork. I spent those days not understanding a thing but I took the view that if an American can do it I'm bloody sure an Australian can do it.[113]

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[111] James, interview, p. 7.

[112] 'Weapons & Hardware used by the "Tiger Battalion" soldier', *5th Battalion The Royal Australian Regiment Association,* http://www.5rar.asn.au/weapons/infantry.htm. [accessed 1 July 2015].

[113] Gilmour, interview, p. 11.

Training for deployment to Vietnam with the RANHFV had reached a much higher level of competency by the time the fourth contingency arrived at Canungra. The sailors had so enthusiastically embraced these previously unimagined tasks that the Army found themselves beaten on every aspect of the course.[114]

On completion of training each group flew to Vietnam together, served together and returned to Australia as a unit. Keith Taylor, an Aircraft Radio Mechanic and a member of the first contingent, recalls his flight to Vietnam and his first impressions of the 135th:

> We all flew from Sydney, dressed in civvies as traveling in uniform was not allowed in those days. We stayed overnight in Manila then on to Saigon where we were welcomed into the 1st Aviation Brigade of the US Army. They read us the rules of war, there are rules which you must abide by and then they bundled us onto a Chinook and flew us to Vung Tau. We got our uniforms the next day and then we had to fit in. They had drill routines and early morning musters and at first we used to form up by ourselves but as we got to know who we were working with, we formed up with those you worked with.[115]

The three following contingents flew via Singapore on Qantas charter flights. While transiting Singapore the Australians were permitted to wear their uniform pants but had to change into civilian-style shirts. Singapore saw this compromise as maintaining their stance of non-involvement and neutrality during the conflict.[116] This first contingent arrived in Vietnam on 16th October 1967 and the 135th AHC became operational on November 3.[117]

Winston James recalls his first sight of Vietnam:

> We flew into Tan Son Nhat in Saigon and it was the busiest airport in the world, it was fantastic. The helicopter base was called Helo 1 and it was a mile or so away and all the helicopters were there. I was picked up by David Farthing and there were guards everywhere, soldiers everywhere and all the windows in the car had wire nets on them and I asked what they were for and was shocked to hear they were to prevent anyone from lobbing a grenade inside. A totally new world. When I met the American general he noticed that I was still a lieutenant, the navy hadn't promoted me to lieutenant commander before I left and as I needed to be that rank, he promptly promoted me. We wore American uniform but always changed into Australian uniform

114 Eather, p. 99.
115 Taylor, interview, p. 8.
116 Taylor, interview, p. 8.
117 Perryman & Mitchell, p. 38.

if there were any visiting Australians and in my American role I was an Army major.[118]

While all members of the RANHFV were conversant with the details of their service within the ranks of the 135th AHC before their deployment, it was by no means universally known amongst 135th personnel. One United States Army Aircraft Mechanic, Marlyn Parenteau, clearly remembers his reaction to the news:

> It surprised us all when we arrived in Vietnam and were told that these sailors were to be part of our unit. I think the hardest part for us was to try and understand what each other was saying. We each had different views on how to use the English language, but it worked out and they were great guys.[119]

One of the first differences between the Australians and the Americans to be addressed was that of communication. American Ed Anderson recalls unravelling the puzzle that was the unique Australian idiom:

> The language problem took a short time to overcome – it was mainly certain words and phrases we had trouble with. The first time we were working together, an Aussie asked for a spanner [wrench to Americans] and we stopped work and said 'you want what?' After we worked out what 'earth', 'spanner', 'trolley', 'cart' and a few other things meant we were able to work great together. The Aussies adapted real fast to working on our stuff.[120]

The interpretation of the English language did cause some problems which were not so simply overcome. One American Crew Chief, who flew with Lieutenant Ray Godfrey, took exception to Godfrey's use of the term 'bastard'. His request to be posted to another crew came as a shock to the Australian who tried valiantly to explain that the Australian interpretation was often one of affection.[121]

It would seem that the above example was an exception rather than the rule and that for the most part the two nationalities interacted in an atmosphere of friendship, mutual trust and respect. I would argue that these three qualities made the amalgamation the success it became, especially where the levels of experience differed so greatly. Steve Eather quotes one US Army draftee in relation to the Australians he served with:

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[118] James, interview, p. 23.
[119] Eather, p. 18.
[120] Eather, p. 22.
[121] Eather, p. 23.

The only difficulties I perceived during the time the Australians were with us was a different outlook in term of military as a career for many of the Australians and not being so important to many of the Americans. While I was a platoon sergeant, I had several run-ins with somewhat starchy enlisted men from the Australian contingent. The Australians were somewhat more formal in their approach to uniform and discipline than we were.[122]

With the successful integration of Australians into the 135th, the unit was given a nickname by the Americans; EMU. Neil Ralph recalls the name being chosen by the Americans because 'it represented a large, aggressive and fast Australian bird, unaware that Emus are flightless'.[123] The gunship platoons flew under the name 'Taipan', likening themselves to a very fast and deadly Australian snake.[124] Along with the unit's name came a fitting motto; 'Get the Bloody Job Done.'[125] According to Max Speedy the motto came about during a mission on 27th January 1969 near the Cambodian border:

As slick leader in the Seven Mountains area I was asked by the Battalion Commander if we would stay a few more hours to extract his last remaining troops, I said that we will 'get the bloody job done.' We moved 1,300 soldiers that day and then had a 300km flight to get home to Bear Cat.[126]

This Experimental Military Unit brought sailors and soldiers together to operate in support of South Vietnamese troops but they differed greatly in both training and experience. Unlike their American counterparts, the Australian contingents were all volunteers to the military, if not strictly to service in Vietnam. As members of any military force they serve at the behest of their respective governments and as such participation in conflicts is an implied consequence. Members of the RANHFV, having enlisted in the RAN for between nine and twelve years, allowed those in technical branches to reach a high degree of training, far and above that achieved by their American draftee counterparts. To counter shortfalls in the United States military, from 1940 American men were conscripted into a one-year period of military service, in this case, service in Vietnam.[127] We can see that there were large discrepancies in training times between the Australian and the American

[122] Eather, p. 18.
[123] Stewart, p. 25.
[124] *Flying Stations,* p. 181.
[125] Stewart, p. 25.
[126] Speedy, p. 14.
[127] Mark Depu, 'Vietnam War: The Individual Rotation Policy', *History Net,* (13 November 2006), www.historynet.com/vietnam-war-the-individual-rotation-policy.html. [accessed 26 August 2015].

personnel in the 135th AHC and as such levels of expertise differed greatly. Therefore the Australians in technical branches assumed positions above that which their naval rank entitled them and as Frank Eyck put it; 'got the bloody job done'.[128]

Aircraft radio mechanic Keith Taylor had been in the FAA for five years and was very experienced in his field when he arrived in Vietnam. Working under the Americans who had between six and eighteen months experience was one consequence of the differing rank structure between the two services. During the first contingent deployment the Australians were one rank below their counterparts and irrespective of levels of experience, in military service, rank is the deciding arbitrator. This differential was addressed in later contingents but it is a credit to those qualities of trust and respect that initially professionalism triumphed over rank. According to Taylor the 135th AHC pilots accepted the status quo with equanimity as he explains here:

> Pilots worked it out pretty quickly. Just getting off the ground showed just how green some of the Americans were and the chairs were exchanged reasonably quickly. The very experienced pilots had worked anti-submarine in Australia and it was obvious to the Americans who might have been of higher rank but obviously less experienced.[129]

This quotation is testament to the fact that if left to their own devices, the rank and file would not risk their lives by insisting on maintaining the rank structure, but it was not always possible to circumvent the military system. RANHFV Pilot and commander of the third contingent, David Farthing, experienced one incident that demonstrated the consequences of strict adherence to tradition over operational experience:

> Most of the US pilots were young Warrant Officers who would arrive with typically 100 hours total experience. On one occasion a young Regular Army Captain was posted to the Company as our Flying Instructor, a vital position in any aviation unit, but double so when so many of your aviators are straight out of flying school. Inquiries revealed that the new Instructor had only 125 hours in total. This situation caused the only real argument in my time with the EMUs. I said that he did not have sufficient experience to instruct (observing that none of the Australian pilots had less than 1000 hours) but my American CO did not agree. Sadly, the new Instructor managed to kill

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[128] Eyck, p. 2.
[129] Taylor, interview, p. 9.

his first student the next day and the CO was sacked for something which was really the fault of the system.[130]

Australian pilots who served in Vietnam had years of flight training behind them as they were all initially trained in fixed-wing aircraft at the RAAF training facility in Western Australia. From this point on the real flight training begins according to veteran FAA pilot Des Rogers who states: 'Once you get your wings with the Air Force the navy teaches you to use the airplane, not fly it, use it'.[131] Flight in the maritime environment has little in common with land-based operations and therefore the FAA greatly extend and refine this initial training. All FAA pilots are trained on fixed-wing aircraft before they begin conversion to helicopters. In the United States Army pilots are trained to fly either fixed-wing or rotary aircraft so the training period is much less intense and much less extensive. There are obvious operational differences between fixed-wing and rotary aircraft and here pilot Clive Mayo gives some idea of the skills involved in mastering helicopter flight:

> We probably flew 120 odd hours of helicopter conversion training and the most exhilarating thing was being able to do your first hover. I mean, some-one used to say that if you could pat you head, rub your tummy, and whistle Beethoven's ninth symphony backwards, you were able to hover.[132]

It is understandable that some initial friction arose when the far more experienced Australians were to be outranked by their much less competent counterparts; be it flight or technical crews. United States Army technicians were trained in one aspect of their fields whereas the RAN personnel had much broader training base making it difficult to work under those who had far less expertise. These problems were confronted early in the deployment with the more experienced Australians taking the lead roles which ensured the EMU's formed a cohesive and therefore a much more successful unit.[133]

When it came to operations, American Army Specialist 4 Maintenance Technician, Ed Anderson was conscious of this disparity between his countrymen and the Australian pilots. On one occasion, as he recalls here, he had reason to be thankful for their superior experience:

[130] Stevens & Reeve, *Sea Power,* p. 220.
[131] Rogers, interview, p. 3.
[132] Mayo, p. 2.
[133] Taylor, interview, p. 9.

> I was flying maintenance one day when we ended up working late into the night – the weather was real bad. The [ground] troops we were working with were all having trouble and we kept flying to support them. Because of the weather conditions we had to keep a close formation and I heard the flight leader say to let the Aussies [who would have been officially classified as co-pilots at this stage] do the flying and follow their lead because they had been trained to fly tight formations at night and this was definitely 'a dark and stormy night'. They sure helped us get through that night.[134]

Night flying in formation is a skill the RAN pilots had mastered during their years of service prior to deployment to Vietnam. Anti-submarine warfare and search and rescue operations necessitated low-level flying over water on moonless nights during all weather conditions and this training could hardly be bettered. Replacing the maritime environment for the darkness of the jungle, the Australian aviators made this environmental transition seamlessly. Unlike their American counterparts, the Australian contingents had served together during their RAN careers, which often included aircraft carrier operations. As a small RAN unit the FAA personnel had lived and worked together for extended isolating periods which built rapport, respect and trust. Close formation flying requires a great deal of trust, especially when there are ten aircraft involved, as there were when inserting or extracting ARVN troops. Recognition of these qualities by the Americans in the above example is further proof of aviators making adjustments as needed, irrespective of the hierarchal system Farthing encountered.

As an RANHFV slick Pilot, Clive Mayo explains why the Australian expertise was so important in Vietnam:

> This experimental group, the EMU's and we were elevated into positions of authority, starting as section leader, platoon leader then flight leader which meant that you were the lead pilot for the 10 helicopters in formations and you directed the formation which route to fly and who was to do what when. I had just turned 21 when I flew command and control, in charge of 15 helicopters and their crews and cargos and the cargo is people. You have to direct where they land, and who fires at who and who lays down suppression and what targets get hit and what don't. A lot of Australians got to fly command and control because we had a lot more experience than the Yanks did. While you're the overall tactical director of the operation, your co-pilot does the flying because you are too busy and then there's the Vietnamese bloke in the back because we were flying in support of the South Vietnamese Army. There was also an American advisor usually

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[134] Eather, p. 23.

colonel or general type who told you what the mission was and you worked out the best way to get it done.[135]

While there is no doubt that the Australian airmen were highly qualified and experienced in comparison with the 135th AHC airmen, the number of hours flown in Vietnam were comparative. According to Farthing, the nine pilots who served under him in the third contingent flew in excess of 12,000 hours in support of ARVN troop operations. Responsibility for their operational flight hours rested with Farthing and he recalls one incident where his judgment was called into question:

> The eight Australian pilots (actually nine because two were rotated due to serious wounds) flew an extraordinary amount: over 12,000 hours in the course of the year. The Deputy Australian Commander, Air Commodore C.H. Spurgeon, sent for me and gently told me that what I was doing was dangerous, that we were flying too much. But we did not have one accident or incident involving an Australian pilot other than those directly caused by enemy action. We operated under a nominal limit of 140 hours per pilot per month, which could and did go up to 160 hours in case of necessity. Individual pilots reacted in different ways to this demanding regime, and I found that management required individual assessment rather than a blanket rule. The record speaks for itself.[136]

RANHFV pilot Clive Mayo made his first flight as a member of the FAA in January 1968 and his flight log book lists his flying hours as 395 and 45 minutes prior to his departure for Vietnam eight months later.[137] These figures are in stark contrast to the approximately 150 hours of flight training given to his American contemporaries before their deployment in the 135th AHC. On completion of his twelve months' service Mayo's flying hours numbered 1,800, a differential of 1,405.[138] As Farthing stated, this was the average of flight hours amongst his nine pilots during the third contingent's deployment and while these hours far exceeded allowable limits during peacetime deployments, in wartime conditions, needs must take precedence.

Flight crews put their lives in the hands of those who maintain the structural and technical integrity of their aircraft and once again, the FAA members had the advantage of long association. Farthing reiterates that while the pilots and aircrew were far exceeding their peacetime flight hours, they could not have done so without their maintenance crews:

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[135] Mayo, p. 5.
[136] David Farthing, cited in Stevens & Reeve, *Sea Power,* p. 221.
[137] Mayo, p. 5.
[138] Mayo, p. 5.

Our Technical Sailors also performed heroically in arduous and primitive conditions. It was always hot and either muddy or dusty and there was only rudimentary aircraft hangarage, but we always had enough aircraft to meet our daily mission (sometimes only just). Junior Sailors found themselves supervising major maintenance and repair tasks that would have required a Senior NCO in peacetime, and our Senior NCOs provided quite outstanding leadership throughout the Maintenance Platoon. We often had aircraft forced down by enemy action, but very rarely through any maintenance inadequacies.[139]

Aircraft maintenance and its importance cannot be overstated and the personnel who maintained every aspect of the aircraft worked 24 hours a day to keep the aircraft serviceable. Day shift concentrated on routine maintenance and repairs both minor and major while the night shift managed every non-routine repair, up to and including rebuilding the damaged aircraft.[140] As Keith Taylor recalls:

Most assault helicopter companies in Vietnam in the period that we were there, their average maintenance schedules were about 48 to 52 percent serviceability factor, we were running at about 85. If we took the gun-ships off the equation we ran at 90 percent serviceability. The gun-ships were two years older and more prone to down time than the slicks which were all new. The rate of flying was phenomenal, our pilots and permanent door gunners was in excess of 1000 hours in 11 months, the equivalent of four years flying at home. We went out after Tet, one mission down south in the delta we put 20 to 25 aircraft in in the morning, went back at night and by the end we had only six aircraft serviceable. Some didn't make it back and some had to be lifted back, and we had to have them back out again at six in the morning. We only managed 15. In Vietnam you had to keep producing and the pilots didn't abide by the 12 hours on and time off. We all had to just keep going, Vietnam was a very busy time. We went from a Squadron of 8 or 10 aircraft in Australia to a unit of 32. All the equipment I had to work on was new, I'd never seen it before so we had to learn and learn quick.[141]

The quality of the Australian maintenance crews was acknowledged in a 1968 Navy News report which stated:

The Australian maintenance crews were recognised by all similar US Army units as being the best maintenance people available, and the very high aircraft availability figures their Assault Helicopter Company has, attest to this fact.[142]

According to RAN Electrical Air Weapons Leading Hand, Doug Rasmussen: 'When it came down to the crunch, the senior maintenance positions were also all held by

[139] Stevens & Reeve, *Sea Power,* p. 221.
[140] Stewart, p. 26.
[141] Taylor, interview, p. 2.
[142] Stewart, p. 26.

the Australians'.[143] Rasmussen was trained as an aircraft electrician but his service with the 135th greatly expanded his job description; he added Peter pilot and door gunner to his repertoire, as he describes here:

> I got my Combat Aviation medal from the Yanks and being in maintenance, we actually got taught to fly. Basic stuff, nothing flash. We were taught radio procedures and how to bring the aircraft home if you had to, or to pick it up off the ground and move it, and we used to fly in the Peter Pilot seat on a test flight, go through the check list with the pilot and if anything happened to him, cause we were always flying over non friendly zones, we could take over. It happened to me once. We were at Dong Tan and the warrant officer wasn't going to let me go up with him so I told him, it's take me or don't go at all. During the flight, it was night time, my pistol dropped out of the holster and dropped to the floor. He thought the bang meant he was being shot at so pulled his feet right up and threw his hands in the air. I grabbed the controls and took the thing up to 1500 feet, turned it around to bring it home and by then he'd recovered enough to continue. Nothing was said. A couple of warrant officers would take 6 of us up and teach us enough to fly, pick it up, bring it in, taxi it to the revetments and put it to bed. We did all sorts of things we weren't supposed to do, it was all for a good cause. One day a week I'd fly, it was just to give the other guys a rest. It was a 24/7 set up so we'd all be working. Maintenance crews would be working 12 on and 12 off, day and night shift and we would swap over after about 3 or 4 months. If I didn't have much to do I would relieve one of the gunnies. Some days you didn't do much and on others you were flat out. It was interesting and yes, you could say it was my Wednesday sporty.[144]

Barry Todd, an FAA armourer prior to service in Vietnam, soon learned that 'looking after weapons' was only his primary concern and as a member of the AHC team, and like many other Australians, his responsibilities did not end there. When the need arose he found himself acting as a door gunner in one of the gun-ships. It was a world away from serving on an aircraft carrier as he explains:

> Me and a couple of other guys were put on the gun platoon. There were 24 helicopters, 8 of them gun-ships and the others were slicks, for transporting troops. We had never seen anything like it but we had to learn. In a week the Americans taught us all the gun systems and we were told we were going flying the next day. Why are we going flying? Because you're door gunners, I was told. No, I'm an armourer! You can be an armourer when you're not flying, we need door gunners, so you're now door gunners! There were machine guns, rockets and mini guns which were 6-barrelled guns that fired 6 thousand rounds a minute. So that was the start of the big adventure. I loved it. I sat on a little seat right on the edge of the door, with a little seat belt. I used to sit there and look at everything and in our settling in period the pilots were

[143] Rasmussen, interview, p. 12.
[144] Rasmussen, interview, p. 8.

a little gung ho, flying very low so we could pick palm fronds off the trees. When the action started things changed, they were a little more careful. We used to go out as a company with 10 slicks and 4 gun-ships, the gun-ships to support the troops on the ground. Sometimes as we were dropping off the troops they were being shot, helicopters were being shot down. Unfortunately when a helicopter goes down you lose four people, not one.[145]

Trained as an armourer, Andy Curran also served as a door gunner, although he joined the Taipans and served in gun-ships. It was a conscious decision on Curran's part as he remembers here:

They'd had some casualties the night before and I remember one of the first things I saw was body bags outside the operations room. The first sergeant came over to welcome us and asked who wants to fly. I stepped forward. I had decided when we were in Nowra that I wanted to fly and I did flights with pilots while they were training. They asked me if I wanted to fly slicks or guns and I said guns. So they sent me to see Sergeant Fanshaw, tell him you're the gunner. Fanshaw made me assistant platoon sergeant or a D5 they called it. One of the pilots from the previous group was still there, he was a gunship pilot and took me for a test to see if I was alright. We went around and did all sort of tests and on to a target area with a forty-four gallon drum and they flew around it and I was plonking shots into it so they said you'll do. The gun wasn't mounted, in the gunships we'd take the gun off the mounting, take the butt off and take a little bit off the barrel so it was short and you'd hold it and you had to be careful the belt didn't get tangled or the bullets jammed. You would fire maybe 50 rounds then look down and make sure the rest were ok. You've gotta maintain that all the time you can't just pull the trigger. The rest of the guys went off to get their mattresses and all the gear they had to have and I hadn't done that and 20 minutes after I got passed there was an urgent scramble and I was in the crew and off I went. I did my first operation on the afternoon of our arrival. A lot of the pilots didn't fly straight away, they had to do courses and find out the lay of the land and all that but I was flying the first day.[146]

Armourer Barry Todd was a member of the first contingent and remembers getting some much needed help from the Australian Army, although the position of door gunner did not always prove popular:

Early in the piece we started a program where we used Australian Army M60 gunners from Nui Dat as door gunners for two weeks. They came up to Blackhorse and flew in the slicks. One guy, he got shot down on his first week after they'd picked up ARVN troops and dropped them into a hot LZ. They took fire in the engine and the pilot had to auto rotate down into this rice paddy. He told us 'we came down and we hit

[145] Todd, interview, pp. 9-10.
[146] Andrew Curran, transcript of recorded interview (27 January 2013), p. 7.

> the ground and we slid along and the helicopter slewed sideways into this embankment and there was the ARVN guy sitting in the doorway. I just watched the embankment coming towards us and we hit it and this guy got thrown straight out the door and as that happened the helicopter tipped and the rotor blades came round and took his head right off in front of me!' When they pulled them out and he got back he came in and said 'that's it!! I would rather be walking around the jungle then doing this!!'[147]

As an experienced aircraft handler aboard aircraft carriers prior to service in Vietnam, Robert Gilmour never expected to find himself in a position of direct contact with enemy forces but as a member of the 135th he, like Todd and Rasmussen, made the adjustments necessary to meet the Helicopter Company's needs:

> I had to act as air gunner and let the regular gunners have some time off and it was usually hash and trash. Hash and trash was mail runs and stuff like that, where someone like me could take the flight. Every time we took off I had to clear the guns which I could do but on one flight we made contact and I had to fire. I couldn't see what I was firing at cause it was all bush and I wouldn't have known if I'd hit anybody or if I didn't hit anybody but the bullets were coming up and you could see them coming up and that didn't make me too happy at all.[148]

As members of the RAN these sailors had clearly stepped outside their comfort zones and not just operationally. The RANHFV personnel served under US Army command and as such were subject to Army rather than navy regulations and discipline during their time in Vietnam.[149] Rasmussen recalls that wearing American uniforms and using American equipment and weapons made them indistinguishable from their Army counterparts. Initially, to maintain some semblance of non-conformity and naval identity the sailors wore berets and many grew beards as they would have done had they been at sea.[150]

This idiosyncrasy did not go unnoticed by the Americans as Jerry Johnson, a United States operations officer explains:

> We wore the Navy black headgear [navy blue berets] and were the only aviation unit authorised to do so. This made us special but some people thought it was funny. In addition, the Australians did not have to shave so we, as a group, were a little weird looking, especially the top enlisted

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[147] Todd, interview, p. 13.
[148] Gilmour, interview, p. 13.
[149] *Flying Stations,* p. 179.
[150] Rasmussen, interview, p. 14.

Australian (our 1st Sergeant). He was a short fellow but had a long red beard – it came all the way down to his waist! I liked working with the Australians. They were the best troops I worked with while I was in Vietnam…they were all professionals and knew exactly what they were doing. The only problem I ever encountered was the differences in our regulations and the Australian rules [Queens' Regulations] but these all worked out in the end.[151]

The Australian personnel were integrated into the 135th Assault Helicopter Company according to rank and seniority and Lieutenant Commander Neil Ralph, commanding officer of the first contingent, became the company second in command.[152] The position of senior pilot fell to Lieutenant Commander P.J. Vickers (RAN) who commanded the 1st platoon and assisted Ralph in administration.[153] Ralph was accountable for the day to day running of the company and the adherence to United States Military Law, under the American commanding officer. The RAN participation in the 135th was on the understanding that missions undertaken would not contravene Australian government policy. Lieutenant Commander Ralph and all subsequent contingent commanders received policy direction through Commander of Australian Forces Vietnam (COMAFV).[154] Australian government policy during this period prohibited RANHFV military personnel from taking part in 135th AHC operations in Cambodian territory. In fact, 'the Australian government insisted its policy of not transgressing that border would be observed for the duration of the conflict'.[155] The reason for this policy, according to Max Speedy and Bob Kay, were secret:

> Australia was the conduit by which the American Government initially negotiated its peace talks with the North Vietnamese. To have an Australian captured or killed in Cambodia would have been a major diplomatic embarrassment.[156]

This restrictive policy was firmly enforced but for the members of the RANHFV this policy made little operative sense; in fact it limited their effectiveness as David Farthing, who remains disappointed in this policy, explains:

> The 135th was undoubtedly the elite aviation company operating in the Delta and whenever a crisis arose the cry went out 'call for the EMUs', but the political constraints imposed, increasingly rigidly, by the

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[151] Jerry Johnson, cited in Eather, p. 83.
[152] Fairfax, p. 130.
[153] Odgers, p. 182.
[154] Fairfax, p. 130.
[155] Speedy & Ray, p. 15.
[156] Speedy & Ray, p. 15.

Australian government resulted in operational limitations for the Company in some circumstances. This problem was highlighted starkly by the operations into Cambodia in May 1970, which the EMUs were nominated to lead. This operation, an excellent example of the strategic use of air mobile operations, was unfortunately in a geographical area into which Australians were forbidden to go. I was tempted to ignore the constraint…It reflected an appalling piece of political cowardice.[157]

The above quotation is indicative of military personnel feeling hamstrung by apparently inexplicable government policy. The operation was considered imperative to hinder the Viet Cong who were using the neutrality of Cambodia to move men and arms to South Vietnam.[158] The operation proceeded without RANHFV involvement and therefore at much reduced capacity and efficiency.

There is evidence that on more than one occasion this restrictive policy was contravened by Australian aviators and RANHFV member Andy Perry recalls one occasion when he did operate across the Cambodian border:

The Special Forces operated long-range patrols in Cambodia so from time to time I was tasked to the area north and west of the 'Parrots Beak' into the hills. This was a worry as the bad guys had AAA [anti-aircraft artillery] emplacements up there. We did not run into much AAA in the Delta as it was too hard to carry. The odd .50 [heavy machine gun] was as much as we normally saw and then rarely, thank God. These flights were usually by single helicopters and without gunship support so when the shit hit the fan you were really on your own. One time when I got into trouble I was very fortunate to be able to get two passing F100's to help me out in quick time.[159]

As the Australians held all the lead pilot positions and all but one of the Command and Control positions within the company, a solution to this ongoing operational Cambodian restriction was found. As a direct result of this Australian limitation, the 135th AHC were moved from the Vung Tau area of operation to the Mekong Delta while another AHC were tasked with neutralising this Cambodian threat.[160]

The 135th initially operated out of Vung Tau which is in Phuoc Tuy province, military region three. This region was also the home base of the Australian Army and the RAAF. The harbour was the focal point of the navy's clearance diving team from 1967 to 1970. It was also of great strategic value to the North Vietnamese as it led

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[157] Stevens & Reeve, *Sea Power,* p. 215.
[158] Fairfax, p. 130.
[159] Andy Perry, cited in Eather, p. 85.
[160] Eather, p. 85.

straight to the Ho Chi Min Trail.[161] John Brown was a navy pilot serving with RAAF's 9 Squadron and was very much aware that the large numbers of allied personnel in the region held little fear for the Viet Cong. Without identifiable uniforms North Vietnamese sympathisers were impossible to distinguish from South Vietnamese civilians. As Brown explains, the lines separating the two factions were very fluid:

> We went to a Chinese restaurant one night and we were sitting there and there's these young fellas across the table and we sort of nodded to them and they nodded to us. The old waiter came over and we said 'who are those blokes over there?' 'Oh VC, VC'. It was a place we used to go all the time and they smiled at us, we smiled at them. Live and let live, we weren't going to cause any trouble and the best part of that was we felt pretty safe eating at the restaurant cause you knew it wasn't going to get bombed.[162]

The RANHFV served in four different locations in South Vietnam between 1967 and 1971 as the 135th was relocated to meet operational needs. As previously stated, the first contingent was based at Vung Tau before moving to Camp Blackhorse, Long Khanh province, in December 1967.[163] Blackhorse had very little in common with Vung Tau; in the midst of a rubber plantation and heavily dependent on convoys for fuel, food and ammunition replenishment they were vulnerable to enemy attack. The seasonal 'wet' and 'dry' conditions caused the maintenance and flight crews some extra problems, namely mud and dust.[164] Alan Winchcombe was a member of the Safety Equipment branch of the FAA and recalls making the move from the more secure base at Vung Tau to their new home at Blackhorse:

> We moved from Vung Tau to Blackhorse. The flight went out on a mission while all the guys packed up the trucks with equipment and all the rest and we drove it all to Blackhorse. We got there safely and I think it was within two nights we got hit for the first time.[165]

Flying combat missions it was inevitable that aircraft were hit by ground fire which in some instances equated to the loss of aircraft rather than lives as Mayo recalls:

> Don Miller was the captain and I was the co-pilot and we were number 6 in the formation of 10. We were about 1000 pounds overweight

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[161] Ham, p. 180.
[162] John Brown, transcript of recorded interview (29 July 2008), p. 6.
[163] Fairfax, p. 135.
[164] Fairfax, p. 135.
[165] Alan Winchcombe, transcript of recorded interview (25 July 2008), p. 25.

climbing through 1200 feet at 60 knots and something went 'bang!' and the thing started falling out of the sky and I was actually flying , Don was sitting beside me and my first reaction of course was to hand over to the aircraft captain so I said' 'you've got it' and he said 'no you're doing it, you've got it'. 'No, you've got it' 'you've got it' and Larry Linebaker the crew chief in the back yells 'one of you fuckers fly this thing!' so we got it on the ground where it broke very badly. I went through the green house, which is that little window above the pilot's head in the Iroquois, I went through that because the aircraft compressed. The door pillars, they used to hang the grenades and stuff on and we had about 16 Vietnamese troops aboard although we were only supposed to carry 14 but the mission was urgent. One of these gooks had wrapped himself around the door pillar and when we hit the ground and went cadoosh! And the pillar went cadoong and flung him sideways about 20 metres, horizontally 20 metres he went between the blades of the rotor, as they were rotating, between these two blades and he got up in the rice paddy afterwards grinning from ear to ear and I still don't know to this day if it was a 'that was fun, let's do it again' grin or a 'thank Christ I'm alive' one.[166]

Landing and extracting troops into areas taking enemy fire, it was only a matter of time until the EMU's suffered their first aircraft loss. Lieutenant Anthony Casadio and his American crew experienced this in November 1967 when they were on a mission near Saigon. Casadio was forced to bring his damaged aircraft down close to an enemy position and were attacked by the Viet Cong. The crew made use of the helicopter's door guns and assistance of Lieutenant John Leak's gunship which remained overhead as long as possible. Pouring withering gunfire onto the enemy, of which two were killed, Casadio and his crew remained unhurt until rescued by another helicopter.[167] Lieutenant Casadio was awarded the United States Distinguished Flying Cross for his courage and leadership that day, believed to be the first for the 135th AHC.[168]

The EMU's move to Blackhorse expanded their area of operations and necessitated the unit supporting a greater number of allied forces rather than in support of Australian troops alone. Based at Blackhorse the EMU's suffered their first loss when American Captain R.D. Freer and his crew were killed when brought down by enemy fire on February 8 1968.[169] On a mission to extract ARVN troops near Xuan Loc on February 22, Lieutenant Commander Pat Vickers was piloting the lead aircraft when he suffered a fatal head wound. His co-pilot was able to fly

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[166] Mayo, p. 13.
[167] Eather, p. 20.
[168] Eather, p. 20.
[169] Fairfax, p. 137.

the aircraft back to Blackhorse but Vickers could not be revived.[170] 'Known as a fair and friendly officer, his loss was deeply felt throughout the 135th'.[171]

The RANHSV was to suffer its next loss six months later on August 21. Nearing Blackhorse and flying at tree top level, Lieutenant Anthony Casadio's aircraft was hit by a rocket propelled grenade (RPG), caught fire, crashed and exploded. Petty Officer O.C. 'Darkie' Phillips was also killed as were two US crewmembers.[172] In total 1968 saw the company lose 14 aircrew to enemy fire and complete 94,363 missions with flight hours averaging 2800 hours a month.[173] Barry Todd reflects on the casualties suffered by the EMU's:

> When it happens you can't do much about it. We would go and have a few beers. It's different to people on the ground, I mean they are right there with people getting wounded and killed and that whereas for us, it might be a helicopter goes down and the whole crew gets killed or it would only be one person in the crew. Our 2 IC, Australian 2 IC, he was the first one killed, they were flying at a couple of thousand feet and he got a bullet through his head.[174]

The second contingent served at Blackhorse from 9 September 1968 and were relocated to Camp Bearcat (under the 222nd Combat Aviation Battalion) in Bien Hoa province in November.[175] Bearcat was situated twenty miles from Saigon and was the base for the Royal Thai Army whose forces were supported by the 135th.

Acting Sub-lieutenant A.J. Huelin and his American crew were killed January 3, 1969 while en route to Chau Doc province. The importance of the mission saw Huelin continue to fly in heavy fog and low cloud, resulting in their aircraft coming into contact with power lines. The ensuing crash left no survivors.[176]

Lost crew members had to be replaced and it was often a very uncomfortable experience for the incoming airmen who were expected to step into the void left by the deceased. American serviceman Michael Guard recalls:

> The guys probably won't like you for a while, but if you make it through a couple of months, well maybe…Hey, don't worry about it, your life as

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[170] Fairfax, p. 137.
[171] Perryman & Mitchell, p. 40.
[172] Perryman & Mitchell, p. 40.
[173] Grey, p. 247.
[174] Todd, interview, p. 14.
[175] Fairfax, p. 140.
[176] Fairfax, p. 221.

a helicopter crewman in Nam is only three months, ninety days is what they say you've got to live. Ain't nobody's gonna get close to you any how. If you get too close with someone they just go and get themselves killed and it just makes you feel bad. You ain't gonna find any friends here, only acquaintances, and they just need you to watch their backs and they will watch yours, that's all there is man, that's all.[177]

Receiving enemy fire was not only an expected consequence of helicopter insertions and extractions; it was also an accepted outcome. Acting as a door gunner, Rasmussen remembers what that unique experience was like:

I don't think you had time to feel anything, it was automatic really if you saw green stuff coming at you, you sent red stuff back at them. Their tracers were green and ours were red and the whole idea of course was to suppress any fire from them. I got hit in the foot one day coming back from Dong Tan, rather funny really. Clive Mayo was flying and it was a spent round hit me in the foot and came up and hit me in the chin and I yelled 'Shit'! Clive said 'what happened?' I said 'I've bloody been hit!' I turned and looked at him and it was like watching cartoons, his head was going round and round trying to see if I was alright. We got on the hooter to headquarters in Ben Long for permission to return fire, you had to ask permission to return fire, and Pat Arthur was there and Pat, who was gunna charge me for trying to kill a snake when we were training at Beechcroft, when told I'd been hit came back with 'waste the fuckers!' So he'd gone from don't kill the snake to wipe 'em all out, just like that![178]

Pilot Clive Mayo recalls his lucky escape and the unexpectedness of getting shot and wounded in flight:

It was May 21st 1970 and it was my American co-pilot Ted Muellers' first flight in country. It was a combat assault in Ben Tranh and we were flying number three, in formation, and I said to Ted, I think you'd better take it because I think I've been hit. He just took the bloody aircraft off me, got on the radio and started screaming; 'the AC's been hit! The AC's been hit!' I said for Christ's sake Ted, shut up! The Iroquois had quick release bolts on the pilots' seats so that if someone got hurt the crew in the back could pull the pins out of the front seats and just throw the pilots' seat back on its arse into the back of the aircraft so they could render first aid. I'd been hit by shrapnel all down my arm although I didn't really feel anything, just looked down at my glove and there's blood seeping through. The next thing I know I'm flat on my arse in the back of the aircraft and I'm bandaged from shoulder to fingers. I couldn't fly and Ted's in a panic and all over the place. I took the cyclic and he's got the collective just to stay in formation and then I got the crew chief to take off most of the bandages so I could take control. When we eventually got back I had a good look at my arm, it was a bit

[177] Michael D. Guard, *In The Sanctity of the Snake Pit* (Bloomington, IN: Author House, 2008), p. 80.

[178] Rasmussen, interview, p. 9.

of a mess with lots and lots of holes. It seems a couple of rounds have come into the aircraft, shattered and picked me up on the way past. There were holes in the instrument panel but nothing life threatening. I finished the day and then saw the medics at Bearcat.[179]

The skills needed to operate and survive in Vietnam were many and Mayo recalls incidents where pilots demonstrated them all:

> We did some awesome formation flying in Vietnam. We got blasé in formation; I mean in 1400 hours I was up there probably at least 1100 hours were in formation of 10. We got so blasé that we would fly with our wings overlapping the bloke next door. There were a few mid airs but no one was killed but a few airplanes got broken. The maintainers with whom we still have a very strong bond, used to say 'for Christ sake you blokes, stop flying so bloody close you keep breaking these bloody things!' You could bring an aircraft back full of bullet holes and they'd patch it up overnight and you could go out the next day and get some more and it was 'can't you blokes stop getting this shit, stop doing this shit!' Sorry. There were some very good days but there were some very bad days.[180]

Pilot Winston James has very clear memories of his most shocking operation:

> I was in the C&C aircraft one day and we'd only been airborne a few minutes and one of the slicks plunged to earth, killing sixteen guys. I was on the ground straight after and running and leaping over all these rocks and logs. I found the crew in there, they were all brittle, all broken and I walked back to my chopper and the bits I'd been leaping over weren't logs and rocks, they were people . My co-pilot had to make the take off because I believe I sounded quite shaky, that probably knocked me around the most. It was getting towards the end.[181]

Mayo recalls the two days he and his crew spent at a Vietnamese artillery base in the western delta of Vietnam, along the Mekong River. Army of the Republic of Vietnam (ARVN) troops often had their families accompany them on deployments, especially the artillery men who would be in one place for many months. The base had been overrun by Viet Cong and Mayo found it very difficult to understand the horror of the mutilated bodies he and his crew were responsible for flying out. 'The mutilation, the damage the Vietnamese are capable of doing to each other!'[182] It is a sad indictment on humanity that Mayo and his crew soon became immune to the horror and found the path of a bullet's trajectory through a human body quite interesting. The door gunner on the helicopter was an American and Mayo was

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[179] Mayo, p. 6.
[180] Mayo, p. 11.
[181] James, interview, p. 26. (C&C is for Command and Control aircraft directing the operation).
[182] Mayo, p. 11.

astounded to see him picking gold teeth out of the 120 bodies of men, women and children they removed from the base. The man had to be threatened with being reported to superior officers and court martialled before he stopped. 'Two days flying bodies out of that place, the helicopter awash with blood. Believe me that's what gives you PTSD. I was 21.'[183]

Pilot John Brown, having served with RAAF 9 Squadron from May 1968 until May 1969, did not share many of the RANHFV experiences with ARVN troops as they were tasked with supporting the Australian Special Air Services (SAS) units as he explains here:

> When you're young and just 21 and don't give a rats, you don't really care. It got a bit nerve racking, the worst part I guess was probably doing the SAS work because we used to go into areas with no protection to put them in and lift them out. When we lifted them out they would usually have gone and poked a hornet's nest and Charlie was chasing them around and so the pull out became a little bit…but at least you knew what was going on. When you put them in they'd look at an aerial photograph and pick a small area of grass in the jungle and say right, we're going to put them in there. And you have absolutely no idea who's actually in there, so anyway we'd go straight in, no warning, no pre bombardment or anything, just go and wack them in the hole. And it worked, I don't think I can remember a time when it didn't work. Oh once. That was Geoff Vidal. I was flying up his arse and as he was about to land in the clearing and we found that the north Vietnamese Army had used it as a camping area for the night and that got a bit exciting. But the worst part is not knowing. If you're physically flying the aircraft you've got a lot more to think about but when you're the co-pilot just sitting there, you've got nothing to do. That's where you've got to sit with your hands and feet near the controls just in case the pilot gets hit. The only time I nearly lost it was when we were climbing out, and I saw this bloke sitting in a tree in front of me and the call; 'sniper in the tree in front!' The gunner swung around and started shooting up the tree. It was a baboon. I didn't know it was a baboon, looked like a person to me, with a big fur coat on. It looked like a person who had draped himself in camouflage, I saw the movement looked up and saw arms and legs and you think, Jesus – a bloody sniper![184]

Brown was one of eight RAN pilots who served with 9 Squadron RAAF from May 1968 until April 1969 and recalls his reaction to learning of his posting:

> The bloody Air Force are friggin' useless. Bloody atrocious. They were more the unit than the job, the Squadron was more important than supporting the Army was the impression I got for the whole lot. The flying side was good and the officers and pilot officers were good

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183 Mayo, p. 11.
184 Brown, interview, p. 6.

blokes but some of the older people well they really didn't want to get mixed up in things. We supported Australian troops. We were in Vung Tau and we had our own compound in the American run base. We were virtually an independent unit using American equipment. We had an exchange thing going where the 135th guys would come down to 9 Squadron for more relaxation, go to the beach, the flying wasn't intense down there and then we'd go up and fly in the 135th for a couple of weeks. Getting used to the American system and the conditions they lived in was probably the hardest to put up with, the flying was a lot more intense and probably a lot more dangerous as well [in the 135th].[185]

Rasmussen was acting as a door gunner for the 135th when he came face to face with the conservatism of the RAAF hierarchy:

It was July and I think from memory it was D company 7RAR, got caught in the Long Hai's on dusk and the RAAF weren't allowed to go and get them, too dangerous, so anyway we rang the boss and told him that a bunch of our blokes were in strife and could we go and get them. He and the American had a conflab and permission was given. They flew in from the west and we rearmed and refuelled them and they'd got everyone out. A mate of mine was one of them.[186]

Ray Opie joined the Australian Army in 1962, the day he turned 17, and served in Malaysia and Borneo before joining the SAS. He was a member of the advance party of the task force, arriving in Vietnam in 1966. Opie was the commanding officer's radio operator and spent between two and fourteen days on patrol and he explains the importance of helicopter support:

Our whole job was to be the eyes and ears of the task force, not to be a fighting patrol, but to see them and have them not see us. There were times when we got off the chopper and wouldn't have moved very far in two hours and been sprung and we would have to call up the choppers to pull us out again. It just depended on where they put you down and what you bumped into. Sometimes we walked in but most times we were flown in by helicopters. We only had 9 Squadron RAAF at first and they flew like they were still in Sydney. They flew by the rule book. They didn't have a very good name initially but I think it was after Tet that things changed.[187]

Tet, or the Tet Offensive as referred to in the above quotation, began on January 31 1968 when an estimated 84,000 communist forces simultaneously attacked 155 South Vietnamese cities, towns and villages.[188] While the offensive was not in itself

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[185] Brown, interview, p. 4.
[186] Rasmussen, interview, p. 10.
[187] Ray Opie, transcript of recorded interview (23 May 2008), p. 9.
[188] Eather, p. 37.

a Viet Cong victory, Tet is considered the turning point in the Vietnam War because it became clear to the Americans and their allies that a clear military victory was unlikely. The unprecedented and graphic press coverage of the Vietnam War in general and the Tet Offensive specifically, shocked the American public during a time when the perception of victory was widespread. Politicians discussed possible alternatives which allowed for a tactical withdrawal of allied forces as a result of the Tet Offensive.[189]

Opie also states in the above quotation that the RAAF flew 'by the rule book' and 'like they were still in Sydney' in juxtaposition to the RAN members who flew with the 135th. Taipan gunship crewman Curran recalls being taken aback by the difference between the two services operating in Vietnam:

> 9 Squadron did nothing like what the others did in the 135th in fact a lot of 9 Squadron wanted to experience it and they came down and flew with us when they had the chance because it was so different. Our aircraft had bullet holes, they were patched up, had sticky tape on them to say that they knew what the problem was and that they would repair it when they could. Our guys would go over to 9 Squadron aircraft and just shake their heads. Hadn't seen anything like it. Pristine. Amazing.[190]

RAAF Aircraftman Alan Lamb flew with 9 Squadron as a door gunner and recalls his tour of duty in Vietnam which is in stark contrast to those of the 135th:

> It was good fun most of the time. We flew in support of the Australian Army and it was pretty quiet most of the time. The slicks would fly about one to one and a half hours a day and gunships for a couple of hours a day, depending. I went to Vietnam because my mates were there and I wanted to get in on the fun. I wasn't patriotic. No one was forced to go, you could have gotten out of it. I had no idea about the politics, I didn't care. We didn't know who the enemy was or where they were, it was all a bit of a game and I have no regrets.[191]

Clearly for the members of the RANHFV, their experiences did in no way resemble a 'bit of a game' and Lamb's statement highlights the contrast between the Australian and the United States government's policies. At least up until the Tet Offensive, the RAAF contribution can be described as half-hearted, as having one

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[189] Commonwealth of Australia, 'The Tet Offensive', *Australia and the Vietnam War,* http://vietnam-war.commemoration.gov.au/tet-offensive/ [accessed 8 December 2015].

[190] Curran, interview, p. 9.

[191] Alan Lamb, transcript of recorded interview (28 February 2012), p. 2.

foot in the war and one foot in Australia, much to the disgust of RAN pilot John Brown.

In contrast Max Speedy looks back on his 12 months as a helicopter pilot with the 135th and just how out of their comfort zone the sailors were required to operate:

> We would fly continuously until the bloody job was done, hot refueling as necessary. A fair day was 4 – 6 hours; a long day 8 – 10 and the worst because troops were in contact would be 12 – 15. My longest was 15 ½ hours with the first shut down not occurring for 8 hours. Hurried C-rations and we were back at it with the last extraction and a long flight home in the dark to end it all off. Flying 150 or 160 hours per month was not uncommon – we just ignored the rules stipulating rest breaks; we had to. We flew, we got shot up, and we got shot down. Sometimes it was "Ho hum"; frequently it was "Holy bloody hell" and everyone was taking fire. WO1 Bob Merkley and SBLT Bob Kyle each went down three times - Merkley all before his 21st birthday. Tom Supple and Rick Symons had a running gun fight after they had been shot down. Zork and I went down a couple of times as did Mick Perrott. All of us, American and Australian alike had forced landings of greater or lesser moment. Busy days were called 'EMU shoots" for obvious reasons. The "Battle of Ben Tre" on 23rd October 1968 was probably as intense as they come. Zork was C&C, two aircraft were shot down and destroyed but despite the intense action, all aircrew were rescued. One of the aircraft had an RPG hit the cockpit roof and then take out the whole transmission gear box, engine and rotors leaving the pilots wondering why the collective didn't work. The second slick shot down stopped with a big tree trunk between the two pilots. That crew waited in a bomb crater until another slick hovered in it and took them out. All other eight slicks came home with an impressive array of bullet holes.[192]

Aircrew was a mix of Army and RAN as Rasmussen retells, with either the pilot or the gunner more often than not being the only Australian crew member.

> It was very, very rare that we flew with an all Australian crew but I remember one such day. We were out near the Plain of Reeds and we had to go in and resupply this section of Vietnamese. If we'd come in from the front, straight in we would have been vulnerable to taking fire so we came in under these huge trees, flew underneath them, hovered, dropped the stuff and came out backwards. It was amazing. Ernie Fisher was the crew chief, I was the gunner and Clive (Mayo) was flying. He just sat there watching control and everything and we guided him out. It was a beautiful piece of flying. Really was. Most impressive.[193]

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[192] Speedy, p. 13.
[193] Rasmussen, interview, p. 9.

While the United States Army unit and Australian Naval unit formed a cohesive and very successful combat company, there remained cultural differences that set them apart according to Winston James:

> The Americans are different to us. Our guys are gregarious, like to get into big bunches and drink beer round a camp fire whether it's raining or not. Americans are not gregarious. They like little places with ultra violet lights, glow in the dark teeth, small groups, doing other things. By and large I think the Americans are amongst the most professional people I've ever met in my life. The regulars were great, the conscripts on the other hand were the scum of the earth in a lot of cases. But we all got on, we made it work, it did work, very very well.[194]

Rasmussen lived and worked very successfully with the Americans but was often surprised by their reluctance to try the unfamiliar:

> Living with the Americans was different. Their food was all dehydrated, needed to be reconstructed. I remember we got a heap of legs of lamb, I can't remember if it was from the HMAS Jeparit or Boonaroo but the cook gave us this lamb and the Americans wouldn't eat it. They weren't used to lamb in those days, it was beef or chicken, lamb was alien.[195]

While their reluctance to educate their palates surprised Rasmussen, their total acceptance of the South Vietnamese civilians employed throughout the camp demonstrated a naivety that was quite startling for the Australians. As Rasmussen explains:

> We used to call them hoochie maids. The South Vietnamese women who come in to clean up your cabin; each women would have three or four cabins and there were three [people] in ours because it was a bit bigger as we were over the toilet block. If they didn't show up for work one day you knew someone was going to get hit on the base, they were told to stay away when the base was going to get hit. They used to bring us mud crabs and little Vietnamese bread rolls, they were great.[196]

Mayo, a pilot with the third contingent also recalls just how naive some of Americans could be when it came to women:

> One of the Americans, not with the 135th but on base at Bearcat, got engaged to a hooch maid. About three weeks later there was a Viet Cong assault on Bearcat and his fiancé was found on the wire with

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[194] James, interview, p. 25.
[195] Rasmussen, interview, p. 12.
[196] Rasmussen, interview, p. 9.

hand grenades hanging off her, but she was on the outside of the wire so the whole time she had been working inside the compound she had been gathering intelligence. We were flying out of Vietnam and into Vietnam and you never knew who was on which side of the fence.[197]

Operating in a combat zone where the enemy is indistinguishable from your allies causes trust issues that only add to the stress and tension. But along with the unpredictable South Vietnamese troops the Australians found themselves baffled by the actions of some American troops. On more than one occasion the Australians were shocked by the actions of their allies and Mayo recalls one incident that continues to resonate:

> In 1970 the First American Infantry Division went on strike. They refused to fight. They refused to get on airplanes. They sat down. Sat down on the airstrip and refused to get on the airplanes. The peace mongers back home was the cause and the agitators were rotated home but for a couple of days they sat down, we're on strike, we're not doing this shit.[198]

There is no evidence to suggest this attitude was in any way wide spread and it was not at all evident within the 135th AHA. In contrast James recalls his American colleagues as being loyal, respectful, committed and trustworthy. He uses the example of commemorating Anzac Day in April 1971 alongside his United States Army comrades and recalls it as being 'one of the greatest things of the war'[199]:

> Anzac Day. We fronted up on Anzac Day and I'd almost convinced the Americans that Anzac Day was a religious ceremony of great significance for us… well it is! Most of the guys were flying that day but we had a dawn service, the whole lot, then we got stuck into the booze and we played two up and I got thrown into a trailer and covered with ice and water. I went around the place in a jeep flying the White Ensign fluttering in the breeze. At the end of the day it was time to lower the colour. And amazingly, a few other units came along and 'excuse me sir, can we join you?' And we were all lined up there and I'd swapped my proper shirt for an operating smock that had all the unit badges plastered all over it and I had a white t-shirt on and all these guys had funny things on and we're all standing together and we had a proper sunset with all these foreign troops as well.[200]

This quotation shows that James and the members of the fourth contingent appreciated the respect shown by their American counterparts who were wholly

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[197] Mayo, p. 12.
[198] Mayo, p. 11.
[199] James, p. 11.
[200] James, p.33.

unfamiliar with the Australian Anzac tradition. We can see that this gesture of respect for foreign military commemoration strengthens the bonds that transcend cultural differences and therefore remains a significant memory of James' time in Vietnam.

While James and Mayo's memories have reflected their experiences as slick pilots, the gun-ships crews faced a different responsibility. The Taipans flew the smaller and older Huey C model as they were not required to carry troops, just the crew of four and ample ammunition. As the slicks inserted the troops, the gunships flew low and hoped to draw any enemy fire and neutralise it while the troops deployed. They kept the LZ open for further insertions, usually three or four and repeated it all on extraction.[201] The Taipan crews had a reputation for being hard and aggressive, on the ground and in the air.[202] RANHFV member Andrew Curran served as a member of the Taipans and explains how this aggression is fostered:

> In the Taipans you got presented with a shield with a Taipan thing and a black scarf when you get your first kill. They have my original scarf in the Canberra Memorial. There is a certain satisfaction in swatting a blowfly and a certain satisfaction when you are shooting at someone and you get them. You don't go crying 'oops, I've killed someone'. When a guy hadn't got his black scarf you encouraged him to earn it, we gave him every opportunity. If any enemy were killed while we were protecting the slicks, the company would be credited with the kills but if a pilot was diving on a target and he saw someone running, corrected his flight and shot the running enemy, he gets the kill. But if the enemy is killed with random fire the credit goes to the aircraft not the person. Door gunners get the best chance of kills, when you have a Huey gunship flying over a target you had the two pilots watching what was ahead of them and a man on either side who could cover all directions, so get lots of opportunities. Gunship crews are more bonded to the pilots, everyone trusted everyone else. There is a big difference between slicks and gunships. I take my hat off to the guys in the slicks as they would go in and land and take off and the one behind them would do the same, in the same place, and by then the enemy has you zeroed in.[203]

The two operations, slicks and gun-ships, worked towards the same outcome; the successful insertion or extraction of all allied troops from a designated landing zone. The operation depended on both units having the ultimate trust in the other and working closely together as Curran explains here:

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[201] Guard, p. 81.
[202] Guard, p. 61.
[203] Curran, interview, p. 9

The gun-ships used to fly at 35mph, the slicks twice that speed but they were needed to pick up troops from such and such to go to a certain area. Gunships would go in first and Charlie Charlie (control and command aircraft) who would be Winston or another senior officer would tell the pilots what was needed. While we waited for the slicks we would brass up the area, the tree line in case there were enemy troops hiding there. As the slicks got nearer we flew low and dropped coloured smoke canisters and Winston would direct each aircraft onto a different colour, changing his mind at the last minute to put the enemy off. If we weren't needed again until the extraction we went to a free fire zone and area the Vietnamese government had cordoned off and nobody was allowed in the area and if anyone were there you could kill them. We'd go re-arm etc and the farmers would sneak into the area and pick bananas and get blown away, sometimes they were VC.[204]

It was the gun-ships' responsibility to ensure the safety of the ARVN troops and their helicopter transports during these operations which allowed the slicks to focus on getting in and out of the designated landing zone. Curran makes no bones about the likelihood of innocent farmers being caught up in these operations, particularly in designated free-fire zones. In a war where un-uniformed guerilla participation is the backbone of the enemy force, the loss of innocent lives is an accepted consequence.

In drawing enemy fire away from the slicks, the gun-ships' crewmen were putting themselves in added danger and it was during one such operation that the RANHFV lost their fifth and final member. Leading Aircrewman Noel Shipp and his fellow crewmen were killed in action on 31 May 1969 during an ARVN troop insertion near Dong Tam.[205] Shipp and his American counterpart were seen hanging outside the aircraft directing machine gun fire on the enemy when the aircraft suffered a fatal hit. According to witnesses, Shipp continued firing until the moment the aircraft impacted.[206]

The Australian members of the 135th were a tight knit group; they had served together in aircraft carrier operations, they had trained together for this deployment and they had lived together for the duration and these losses impacted them greatly. For all veterans, coming to terms with the loss of friends is an ongoing sadness and for members of the FAA, a small family within the Australian Navy, any loss is widely felt.

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[204] Curran, p. 10.
[205] Eather, p. 71.
[206] Eather, p. 71.

Obviously for the crews of both the slicks and the gun-ships the stress of operations was intense and American Michael Guard, who also flew as a gunner with the Taipans, trusted his fellow crewmen implicitly. Guard had the utmost respect for the pilots who controlled his destiny which he expresses here:

> From my perspective they were not only brave beyond reproach, they were the ultimate professionals, each and every one. In Vietnam we depended on their cool nerves and flying ability as they depended on our maintenance of aircraft and weapons and our ability to shoot back even when shot at. Helicopters require constant input from the pilot – add to that the mission responsibility, people shooting at you, etc…well, you get the idea. Piloting a Huey is ninety percent mental and ten percent skill. I did then, and would again, fly into hell with any one of them.[207]

The completion of a day's mission or missions often left little time for relaxing so the occasional respite days were taken full advantage of. Clive Mayo recollects one incident when he was called on to fly at the end of one such day when under normal circumstances it would not have been countenanced:

> The first time in my life and the first of only two times I ever flew pissed was in Vietnam and we'd been going for about 10 days continuous and we were given a day off. I had a couple of beers each night but a day off meant we all got into the bar and into the slops. Well about 3 o'clock in the morning a report came in from the Delta that there was a huge shit fight about to happen and they needed the EMU's. Christ! There was a lot of running around trying to find 30 odd sober pilots, not a chance, not a snowballs chance in hell but they managed to scuttle up enough to be able to put one sober pilot in each aircraft, either a captain or co-pilot as there were a few who didn't drink. I got collared with this bloody reasonably new pilot, an American guy, and I didn't know how well he could fly. We had to get the aircraft out of the revetments as they were small and you needed to be precise with your hovering to get them out. Well the EMU's all start up and get them out and lined up reasonably straight on the airfield. Right mate, I said, I'll take off then you can have it. We get up to about 1000 feet and I said, 'you happy now?' Yes sir.' Right off you go' I promptly fell asleep and woke and hour and a half later to rice paddies, it was the thump of hitting the ground that woke me. 'What we doing here Bloggs?' 'We got shot down sir.' 'Fucking what??' and he's flown 5 insertions on his own, pick up and into the landing zone and back 5 times and on the 6th one we got shot down, the flight got shot up. He didn't lose control of the airplane but we got a good few bullet holes and the standard routine is if you get shot then as soon as it's safe you land and inspect the

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[207] Guard, p. 8.

aircraft. He did it all on his own, 'good job son, well done.' I never flew pissed again in Vietnam.[208]

James remembers that, like Mayo, he was ill prepared for one particular mission, although an over consumption of alcohol was not the culprit:

> Used to be we had a malaria pill night and we used to have this giant bloody pill, big orange pill and you'd take it and it would give you a small dose of the squitters. It was Monday night so I took the pill and later on I was woken up and told that the bad guys were trying to bring a ship ashore down south and they've got boys on the beach. So, ok, we scrambled a flight and off we went. We got down there and I couldn't see anything so my stomach was rumbling and Jesus Christ I needed to take a bloody crap. I thought, I'll crap in my helmet bag then throw it out. So I un-buckled and I'm standing on my seat and next thing all hell breaks loose! I strap back in and we had a little fire fight and then we had to break off to re-fuel. We head to the nearest airfield and while it was hovering, taxing to the PLL point, I was out having a small squat beside the thing and here's all these Vietnamese saying 'look what they send to help us!'.[209]

Obviously there were many lighter moments in Vietnam along with all the life and death situations and these light hearted incidents are also recalled vividly by the RANHFV members. James recalls his horror when the realisation dawned that this dirty, smelly, dangerous place bore little resemblance to his usual immaculate shipboard quarters. Here officers shared the same primitive facilities enjoyed by the enlisted men. Gone were the civilities like separate cubicles and flushing toilets. Here was a forty four gallon drum, covered with a plank of wood with holes cut in the top. Men sat shoulder to shoulder, chiacked, conversed or read and did their best to ignore the stench and the flies. Winston James remembers his first time:

> I remember walking in and finding others already seated and walking straight out again, or I pretended to be looking for someone to hide my embarrassment. I kept trying to find the latrine empty but it didn't happen and things being what they are I had no choice but to join everyone else and let nature take its course.[210]

While James came to terms with the total lack of privacy when faced with the call of nature there were other encounters with the natural world which kept the members of the 135th on their toes. Their bases were invariably in jungle settings with all the

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[208] Mayo, p. 21.
[209] James, p. 26.
[210] James, p. 26.

challenges you could expect to encounter. Mayo recalls two humorous incidents that continue to resonate:

> Wet season. We headed into the operations briefing room this day and it was about 20 by 30 foot room and everyone had what was called a helmet box, a huge row of pigeon boxes if you like, where you kept your chicken plate, your helmet and all that sort of stuff with your name and number on it. We came in from flying one very wet day and there's Pat Arthur and his staff up on the counter. Pat's a navy observer and he ran the ops room. What's going on? We've got a cobra. Where? Don't know but it's in here somewhere we saw it come in the door. It's looking for somewhere warm and dry and we've got maybe 50 pigeon holes with helmets. We started at the top and we found him curled up in a corner and not happy to be disturbed. Give me a broom says I, and tried to get it out but it wasn't playing. Eventually we got it out of the hole and I pulled my 38 and I was going to shoot it but Pat said I couldn't discharge a firearm in the ops room so I beat the b'jesus out of it with the broom. The word had got out and the room was crowded as Lofty Kimpton says 'I've got a good idea' and heads up to the medical centre. He came back with a big square biscuit tin filled with formaldehyde and we got him in the tin, all but his tail. He was fighting Lofty the whole time and as Lofty jumped back the snake snapped, I jumped, pulled out the 38 and 'boom'. Then it was dead.[211]

> Everyone slept with a sidearm somewhere near. You had either a Smith and Wesson 38 which was a shocking bloody weapon and the lucky ones had a Browning 9 mil a far superior weapon. There were lots of stories around Vietnam about people committing suicide and shooting each other but it never happened in our organisation. One night at about 2 in the morning; 'BANG!' and everyone thought 'jesus, what the?' a Smith and Wesson is very loud and lights were coming on all over the bloody place. Dick and Peter Clark shared a cabin next door to David Farthing, the boss, and he was first on the scene. Marron was lying on his bed with the light on holding a smoking 38; spread all over the wall at the end of his bed is this fucking rat. He'd woken up and turned on his bedside light, and there on the end of his bed nibbling on his big toe was this fucking rat so rather than kick it off he just reached over and shot this bloody rat off his foot, spread it all over the bloody wall. Two o'clock in the morning, dead quiet then BANG![212]

RAN Safety Equipment branch member Alan Winchcombe recalls his own lighthearted encounter with the wildlife:

> A Python wriggled under the tent, we thought it was a Python but it could have been a Banded Krait so we thought we'd better do something. It was suggested that we blow it to pieces, shoot it, and someone wanted to spray under the bed but it was a living area and we've all got M16's and some guy wanted to throw a grenade but we

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[211] Mayo, p. 19.
[212] Mayo, p. 19.

compromised and threw a smoke grenade. They're acrid sulfa sort of things and we couldn't go into our tent all day cause the smoke was coming up through the floor boards.[213]

For newly deployed American pilot Jim Schueckler, the most humorous memory of his service could have had a much more serious outcome. As it is he recalls his first operational flight with wry humour:

> I was assigned as Peter Pilot to one of the most experienced aircraft commanders. Everything was going just like in flight school; quick briefing, we marked our maps, wrote down the frequencies, pre-flight the aircraft. Just like flight school. Crank up the 'birds', pick up the 'grunts' take off in formation and head for the landing zone (LZ). On final approach the aircraft commander took the controls and said 'stay on the controls with me, but I will be doing the flying, Understand? 'OK, you've got it' (just like in flight school – I think to myself). There's some noise and smoke in the LZ; we drop off the grunts. Neat! Just like flight school. Just like I expected. After the formation was back at cruising altitude, I asked the aircraft commander about the one thing that I hadn't seen in flight school. 'What were those little green bugs'? 'What little green bugs'? 'When we were on final, and down there in the LZ, there were little green bugs'. 'Are you kidding me?' 'No, there were a whole lot of little green bugs and they were going REAL fast' 'You MUST be kidding me'. 'No, they were there, real fast and real straight'. 'Those were tracers' 'TRACERS? But they were coming TOWARDS us!' 'Yes. They were coming 'TOWARDS' us!' 'Do you mean they were SHOOTING at us?' 'Yes, they were 'shooting' at us.'(smugly) 'Oh' said I. While we were refueling, the crew chief said on the intercom, 'Sir, I think we'd better shut down to see how much damage we have, some of those little green bugs bit us back here, (snicker).'[214]

Schueckler and the majority of those who served with the 135th AHC survived their deployment to the Vietnam War. The RANHFV ceased operations on June 8, 1971 in compliance with US policy of withdrawal, having completed four years of service in Vietnam. In excess of 200 Australian Navy personnel served with the 135th during which time 22 were wounded and five lost their lives. RANHFV members were awarded 'three MBE's, eight DSC's, five DFC's, one BEM, twenty-four Mentioned-In-Despatches and numerous Vietnamese and United States decorations. The RANHFV parent unit, 723 Squadron, was awarded the battle honour "Vietnam 1967 – '71" on 22 December 1972.[215]

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[213] Winchcombe, p. 21.

[214] Jim Schueckler, 'Little Green Bugs: My first day as a helicopter pilot in Vietnam', *Slipstream,* 12:4 (November 2001), p. 34.

[215] Perryman & Mitchell, p. 54.

Returning home to Australia and their families is what every serviceman lives for while fighting for their country and the men of the RANHFV were no different. History shows that those men and women who returned from the Vietnam War were treated abominably by the general public, the majority of whom had little or no understanding of the meaning of military service. Shamefully for the members of the RAN whose unique service in the 135th AHC brought international praise and accolades, these men who had risked their lives and pushed the boundaries of flight in true FAA tradition, were shunned by elements within the navy. The public's reaction to their deployment was shocking and hurtful but they were civilians, they did not understand. But the reactions of some members of the FAA who were not deployed were both unforgivable and unforgettable.

Doug Rasmussen remembers the very unexpected and disappointing petty jealousies he encountered on his return from Vietnam:

> I think the saddest part of all was when we got back, the petty jealousies within the fleet air arm for those who didn't go against those who did and it manifested itself in all sorts of ways. One of the officers was told it was probably better if he left the navy, he wasn't really naval officer material and others were passed over for promotion for in my case I was told I wasn't going to pass the exam and they made sure of that, so I got busted and resigned. One bloke was passed over for promotion because, according to the navy, he had never been in charge of a front line Squadron but he had been in command of one of the flights in Vietnam. It wasn't easy to stomach, you were different.[216]

What was different for them was the reintegration into FAA Squadrons whose members had no experience of Vietnam or combat and often no interest in learning according to Barry Todd:

> When you're doing something like that, our whole lives changed. We weren't in the navy anymore, you're doing things that you've never trained to do with people who were totally different to you and things happened to you quite frequently and when you came home, like most people who had been in action, it is very hard to fit into the navy. I found it hard just to get the uniform back on, go down to work, I was apprehensive about everything. Nobody cared at all and you know you have to settle back in, from people shooting at you, the adrenalin rush then back to normal. You can get addicted it's not good excitement.[217]

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[216] Rasmussen, p. 15.
[217] Todd, p. 17.

Another such disappointing incident was related by Keith Taylor and destroyed a pilot's career. RAN pilot Andy Perry served in the RANHFV between September 1969 and October 1970, after which he was posted to 817 Squadron.[218] This Squadron accumulated a vast amount of very intense flying hours during their tour although not in the front line. On their return to Australia members of this Squadron were not accredited with those flying hours before undergoing re-training, only then being issued with their certificates. As a newly joined member, Andy Perry's RN flying instructor, who was far less experienced, reported Perry to the commanding officer for dangerous flying. Perry's experience with the RANHFV was vastly different to that of his colleagues in 817 Squadron. Unfortunately, while demonstrating his close order flying expertise the RN instructor judged he came too close to other aircraft. Perry's demonstration reflected his experience which was with a flight of 10 helicopters flying into a landing zone nose to tail, dropping off troops within 3 seconds and exiting as quickly as possible. If that meant the blades of two aircrafts rotors overlapped, so be it. Perry, a very experienced and brilliant pilot, never flew with the navy again; petty jealousy destroyed his career.[219] Sub-Lieutenant A.C. Perry was Mentioned in Dispatches, received the United States Silver Star and the Republic of Vietnam Cross of Gallantry during his 12 month tour of duty.[220] Many years later Perry still finds this unbelievable, 'what sort of stupid people were they? What stupidity!'[221]

For Clive Mayo too, the return to peacetime flying proved problematic simply because his twelve months in Vietnam placed him higher in experience than many of his superiors. Here he recalls one instance where a total lack of respect for those men who had served in Vietnam was borne out:

> I remember when I got back to Nowra after a year in Vietnam flying up to 140 hours a month. I was taken out to an area near Mt Coolangatta where this Lieutenant Bob Waldron wanted to teach me control of the helicopter! I said 'for Christ sake Bob! I don't need this shit you know, I've got 1800 hours in bloody helicopters! I've been shot at, I've been shot down, I've been wounded, I know how the fucking controls work!' 'Oh well, this is a Wessex it's completely different'.[222]

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[218] Fairfax, p. 222.
[219] Taylor, p. 30.
[220] Eather, pp. 140-144.
[221] Taylor, p. 30.
[222] Mayo, p. 9.

Sadly these stories are repeated by most of the returning Vietnam veterans. Andy Curran remembers::

> It was very hard when we got back. Jealousy in the navy. A lot of them were saying 'oh you didn't do anything anyway - there's nothing going on'. They wouldn't accept what we did. The navy itself is to blame for a lot of it, not only the men. The navy do some weird things. They should have kept up the amazing skills that those who went to Vietnam came home with. They didn't.[223]

Having completed his twelve-month tour of duty by October 1968, Keith Taylor relates his own experience with this discouraging trend and suggests one reason for the hostility they encountered:

> We had gone to Vietnam and served in a war zone which made us eligible for war service, the first ones after the Korean War, there was a lot of animosity towards us because we had achieved something which most sailors would love to achieve. It gave you that advantage and a lot of people shunned you because they thought 'oh you've got it and I haven't,' that sort of reaction.[224]

On entering the mess at Nowra one night after returning from serving in 9 Squadron RAAF in Vietnam, John Brown was met with aggression:

> When I first got back to Nowra I walked into the mess one night with my ribbons on and a commander, not an operational type, he was a supply commander, turned to me and said 'take that shit off! It's not a real war! 'The XO at the time was Norm Lee and I complained to him about it and he went and reamed this commander out and that fixed that. There was a lot of aggro.[225]

Todd recalls an encounter with a much older and wiser civilian while traveling many years after the end of the Vietnam War. The interaction left him feeling surprised and rather taken aback:

> My wife and I went to Vietnam about five years ago and we were on this boat in a small group, about 20 of us. The tour guide was Australian and I told him that I'd served in Vietnam so he was aware of my situation. He said there might be a few places that I might not like to go but he would give me fair warning so I could decide whether to go or not. A woman was standing behind me and overheard what we were saying and she said 'Barry, I've got to say something to ya.' I said 'Oh? What is that?' 'When I was young and living in Melbourne I used to

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[223] Curran, p. 10.
[224] Taylor, p. 30.
[225] Brown, p. 8.

protest at lunch times and on the weekends about you guys. I realise that we were protesting against the wrong people and I'm sorry'. And that was like someone had hit me over the head with a sledgehammer. Nobody had ever said anything like that before. I thought, well, somebody does care.[226]

'Somebody does care.' For Todd these words made a difference; they simply implied that what these men did made a difference and their service was appreciated. Vietnam veterans have finally been welcomed home, albeit very belatedly. There is no doubt that many of these veterans suffer from Post Traumatic Stress Disorder (PTSD) and it could be argued that being 'shunned by society' and 'attacked psychologically by their own people'[227] greatly exacerbates veterans' symptoms. That being the case, the RAN in general, and the FAA in particular, and their treatment of their returned servicemen have a lot to answer for. Many highly experienced aviators, who expected to serve and share their knowledge for many years to come, left the RAN in disgust and protest. For many of the veterans whose memories of Vietnam are recorded here, the anger and frustration at their shameful treatment by some members, (thankfully in the minority), of their own FAA 'family', remains palpable. It therefore took me by surprise when I asked these Vietnam veterans if in hindsight they would join the FAA again, if they would serve in Vietnam again and resoundingly the answer was YES. Winston James responded; 'Do it again tomorrow. It's the most defining time of my life. I don't know whether it was good or bad, not always good but not bad either'.[228]

This chapter has documented a very different type of deployment for the FAA; a unique operational deployment that preceded the demise of the aircraft carrier era. While fixed-wing and rotary-wing modes of operation share little commonality there can remain no doubt that in the Korean War and the Vietnam War, the FAA met, and on many occasions exceeded, every operational commission they were tasked with. In acknowledgment and respect for their training, experience, professionalism and expertise, these unique RAN members held senior positions within the 135th AHC, with whom they supported the Royal Australian Task Force as well as free-world troops. They were first based in Vung Tau until moving to Blackhorse in December 1967, then to Bear Cat in November 1968. September 1970 saw them

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[226] Todd, p. 20.
[227] Wayne J. Scott, 'Post Traumatic stress Disorder (PTSD): A Vietnam Veterans Experience', *Vietnam Veterans Association of Australia,* (2001), http://www.vvaa.org.au/experience.htm [accessed 18 December 2015].
[228] James, p. 27.

in a new home in Dong Tam where they flew in support of Vietnamese Army units in the Delta.[229]

As aviators the FAA demonstrated its adaptability in seamless integration within an American Army unit; a unit that became the most successful Assault Helicopter Company of the Vietnam War.[230] There is little doubt that the RANHFV, having embedded within the 135th Assault Helicopter Company, greatly extended the Army unit's expertise and capability and in doing so significantly raised their collective value. While their mode of operation differed greatly from that of the Korean War, the FAA have made a valuable contribution to both conflicts while strengthening international ties.

Oral historians Alice and Howard Hoffman's experiments in the accuracy of long term or archival memories concluded that if the events remembered are of significant importance to the individual they are recalled accurately irrespective of the passing of time.[231] For the members of the FAA who served in Vietnam the practice of naval aviation took on an entirely new dimension; they operated from the ground and not from atop a naval vessel. They operated within a foreign military unit and although the 135th was an aviation unit, it was a wholly army operation. Using the criteria set out by the Hoffman experiment, memories of their service in the Vietnam War can only be considered accurate and are therefore of historical importance. For Valerie Janesick the value of oral history lies in its individualism; each participant shared in a collective memory but each interpretation of events is individual and therefore not possible to nullify.[232] These interviewees' memories of their service in the Vietnam War remain very clear and precise because they are defining moments in a time and place that belongs only to them.

In the following chapter the more routine nature of the FAA is the focus; aircraft carrier operations and those of the rotary-wing era are examined within the framework of search and rescue, peacekeeping, global security and humanitarian roles during peacetime deployments.

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[229] *135th AHC (EMU),* www.135ahc.net [accessed 13 April 2013].
[230] James, interview, p. 25.
[231] Alice M. Hoffman and Howard S. Hoffman, cited in *Thinking about Oral History: Theories and Applications,* ed. by Thomas L. Charlton and others, (Lanham, MD: Altamira Press, 2008), p. 39.
[232] Valerie J. Janesick, *Oral History for the Qualitative Researcher: Choreographing the Story* (New York: The Guilford Press, 2010), p. 10.

7. It's a Birdie's life

This chapter will contrast the aircraft carrier era with the modern FAA in routine manoeuvres and deployments in which multinational task forces and global security features prominently. This comparison will demonstrate that while the FAA continue to deploy in their traditional roles of fleet protection and anti-submarine warfare, their operational value has developed exponentially as a consequence of their international reputation and proven flexibility.

From its inception the FAA deployed their aircraft carriers on what was termed 'Show the Flag' or Public Relations (PR) voyages which began with HMAS *Albatross.* In 1929 the Governor General, Lord Stonehaven, and his party embarked on a tour of New Guinea aboard Albatross. Port Moresby saw the aircraft carrier entertain the populace during a flying display before she sailed for Rabaul where Albatross's night time illumination proved to be the highlight. According to Vince Fazio in *RAN Aircraft Carriers*, this feat garnered extensive public attention, culminating in the Australian press where it was declared 'the most successful flag showing in many years'.[1] This was the first definitive overseas demonstration of an aviation capability in the Australian Navy.

There is no doubt that introducing an aviation component into the Australian Navy was an arduous process and in its earliest days naval aviation was focused on justifying its existence and the not insubstantial financial expenditure its operations generated; they had to give value for money.

Weather permitting, the fledgling FAA conducted continuous flight training exercises and every opportunity to gain valuable experience was utilised. Seaplane carrier HMAS *Albatross's* visits to Australian capital cities were routinely planned with events like the Melbourne Cup featuring heavily in these Public Relations exercises. The annual deployment to Hobart for participation in the three-day Regatta was an opportunity for both Australian and New Zealand Fleet crews to contest various water-borne events on the Derwent River.[2] These activities entertained the public but they were also an opportunity for the RAN and the Royal New Zealand Navy (RNZN) to interact and build rapport. The RNZN did not acquire an aviation

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[1]   Fazio, p. 12.

[2]   'History of the Royal Hobart Regatta', *Royal Hobart Regatta*, n.d.
www.royalhobartregatta.com/History.html [accessed 12 April 2015].

capability until 1936,[3] therefore *Albatross* and her aircraft provided an opportunity for the RNZN to observe and participate in fleet operations.

Throughout her service *Albatross* interspaced these dual naval training voyages with her commitments to popular PR duties, both within Australian waters and the wider South East Asian region. HMAS *Sydney's* commissioning in 1948 filled the void left by the decommissioning of Albatross in 1933 and naval aviation became an integral part of the RAN. In a peacetime environment the newly commissioned HMAS *Sydney* continued the routine instigated by her predecessor, seaplane carrier HMAS *Albatross*, during the 1930s; flight exercises and PR voyages. In addition to furthering positive public and military relations, these cruises exposed the ship and her air crews to widely varying weather conditions which pushed the airmen and their aircraft to extremes previously unheard of during peace-time exercises.[4]

In July 1950, *Sydney* returned to the United Kingdom to embark the 21st CAG, a trip which coincided with Navy Week celebrations in Portsmouth. This very successful public relations exercise saw an estimated 15,000 people tour the Australian ship alongside her British counterparts.[5] The 21st CAG were disembarked at Royal Naval Air Station *Albatross* while *Sydney* began flight operations to refresh her flight crews.[6] Aircraft carrier flight operations constituted a highly dangerous environment with accidents and fatalities being an accepted part of these early training days. Limits of both aircraft and flight crews were continuously being pushed and in doing so men and aircraft were lost. Aircraft Mechanic Charlie Cifala recalls that the Birdies were determined and wholly committed to proving their worth as a valuable addition to the navy as he explains here:

> The morale was excellent on the flight line and in the flight crews, and very competitive. Everyone wanted to do a better job than last time, or better than anyone else. Everyone took their job seriously, everyone helped everyone else to do their job, stay safe and stay alive.[7]

3   'History of Naval Aviation', *Royal New Zealand Navy,* n.d., http://navy.mil.nz/mtf/na/history-of-naval-aviation.htm. [accessed 5 April 2015].
4   *'Flying Stations'* p. 82.
5   *Fazio, p. 25.*
6   Fazio, p. 27.
7   Cifala, questionnaire, p. 3.

In such a competitive environment there were some very close calls. Veteran FAA pilot Toz Dadswell remembers one particular incident on the Beecroft Range where his efforts to push the aircraft to its limits nearly proved fatal:

> We were doing 50 degree practice bombings in a Firefly, out on the range and in the back of the truck they had an inclinator that they used to tell you the angle that you were coming down at and 50 degrees is very steep. You feel as though you're going vertical. As you come down past 3000 feet you started to pull out and you had a radio altimeter which came on at 3000 to tell you to start pulling out. As you came down it stopped and as you went backup it came back on. You had to switch it off to hear what they were saying on the ground. They were saying that the incline was 37, 38 and I did a really steep one and they still said 38, 39. I said 'I'll give you bloody fifty!' and because I was talking to them I didn't switch it back on. So I got up, said 'cop this!' rolled it, screaming down, got down and thought 'jeez that's getting close!' I instantly knew why and I just pulled back on everything and I could see the spot where I was going to hit the ground, doing about 400 knots in a Firefly. She flattened out and they reckon I was about 20 feet from the ground, and rivets were popping everywhere. The inclinator operator said it showed an angle of 52.[8]

Dadswell remembers that on approaching the landing at *Albatross* he had a moment of concern regarding his landing gear but the aircraft landed safely. A fellow aviator asked if he was ok and on being told that he was, replied 'Jesus! You might be but your aeroplane's not!'[9] On inspection of the aircraft by the Senior Pilot, Dadswell's luck held, with the words 'we'll forget about that one'[10] being the sole consequence of his error of judgement. Observer John Selsmark is another Birdie who recalls moments during operational training when his survival rested with the pilot who, on occasion, was distracted:

> I flew as an observer and I remember training exercises where we had to be very careful we didn't run into each other. The observer had to say things to the pilot like 'starboard hard!' 'OTHER STARBOARD STUPID!' Then grab him by the shoulders and pull him over to the direction you wanted to go. Starboard. The dopey git turned left![11]

Many veterans relate incidents which by their very nature demonstrate the freedom of this bygone era when juxtaposed with the more bureaucratic navy of today. FAA member and pilot Pancho Walters gave one example of the early years of the FAA

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[8] Dadswell, interview, p. 5.
[9] Dadswell, interview, p. 5.
[10] Dadswell, interview, p. 5.
[11] Selsmark, p. 8.

when interviewed in 2008; 'I remember flying over the nudist beach and flying really low and blowing their clothes away'![12]

Walters's statement is indicative of the freedom of this era of naval aviation as one can only assume the nudist beach was not on the official flight plan. Walters flew fixed-wing aircraft and was a qualified instructor but his proximity to the beach during this exercise is an exemplification of initiative and freedom of this era. These qualities were not limited to pilots as can be seen in the following quotation where members of the Safety Equipment branch conducted what by today's standard could be termed an ambitious and somewhat foolhardy experiment. This branch was called upon to test the usability of a new piece of technology, the results of which are recalled here by FAA member Fred Wessel:

> In the mid 50's, the Safety Equipment Section was requested to evaluate the benefits of a new adhesive reflective tape from the 3M Company. Jack (Blitz) Kreig, being a Petty Officer, volunteered to be the 'guinea pig'. So one night, in the middle of Jervis Bay, Jack was set adrift in a life raft with the reflective tape applied to the paddles. The Sea Air Rescue (SAR) motored around for a while, then the searchlight was switched on and we soon had Jack in the beam and picked him up. The Second trial was not so successful but much more sensational. Jack was set adrift for a second time. We went for a run around the Bay in the SAR, then had a smoke and a cup of coffee before looking for our fearless sailor. When we returned to where we thought was the correct area, and with our searchlight probing near and far, no sign was found of Jack. After about a half hour had elapsed there was still no sign of him. 'Panic stations' were starting to set in because during the search clouds had rolled in over the moon and a night wind had started to become a nuisance. After about another 30 to 40 minutes searching, a reflection was seen near the rocks at the entrance to Jervis Bay. Bingo! We had found him. On bringing him back on board, the language he used did not testify to the fact that he was very pleased with the night's proceedings. Anyway, all is well that ends well and the tape was found to be inadequate for our use.[13]

The above quotation typifies the unique inclusivity of oral testimony in the broader sense. These lighter reminiscences endure for different reasons then those related in the previous two chapters but they are significant to the Australian naval aviation discourse because they reflect the day to day routine operations. This experiment clearly caused a physiological response for Wessel, thereby ensuring its inclusion in his long-term memory.

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[12]   Pancho Walters, transcript of recorded interview (28 October 2008), p. 5
[13]   Fred Wessel, 'Just Reminiscing…about the early days at RNAS Nowra', *Slipstream,* 12;1 (February 2002), p. 31.

While these and many other events interviewees recalled of this adventurous era are not featured in any official capacity, it is this larrikinism, the pushing the boundaries of safety and conformity, that typifies these naval aviators. In another example, Selsmark clearly recalls two of his more interesting naval aviation flights:

> We had some very interesting little episodes. We were flying off the coast of Sydney on one occasion and we formatted on an airline which was coming from overseas, watching all the people there drinking their champagne and all the rest of it. We were just right alongside, looking in the windows. It was night time, Sydney's radar probably only went about 50 miles in those days. The ship knew what we were doing, but I can't remember being berated over that particular incident but we got berated over several others. One of which was when we went to Lake Tahoe on one of our cruises to New Zealand, we were in the [Sea]Venoms [jet engine] and we went screaming all over the North Island and of course we ended up down near Lake Tahoe where the big hydroelectric scheme is. Big power lines everywhere and we went whistling under them, around them and over them. We had a marvellous time! By the time we got back to the ship there was a reception committee waiting for us. The New Zealanders were not happy that we'd upset their stud horses, one of which had just won the Melbourne Cup apparently![14]

While Selsmark recalls that the carrier *Melbourne* was aware of his aircraft's position in the first part of the above quotations, we can infer that the civil authorities had no such knowledge. Selsmark has no recollection of any consequences as a result of these actions or in fact what form being 'berated' took, but he went on to have a very successful naval career, followed by many years as a commercial pilot, as such, one can assume any repercussions were minimal.

While training was always a serious affair the lead up to deployment to the Korean War saw these exercises take on an added intensity. *Sydney's* impressive operational record during her combat deployment is testament to this intensive and professional training regime. Returning to the peacetime routine at the end of the Korean War disappointed one FAA pilot who saw PR cruises and public aviation displays in an unbecoming light. Andy Powell explains that the FAA were once again seen through a prism of informality which had unforeseen repercussions:

> Once the truce in Korea began to hold I saw a different attitude to the use of the Fleet Air Arm. Carriers became excellent admiral's barges and aircraft could perform ceremonial service by doing fly pasts. It was that the on-the-water navy did not see the over-the-water navy as being

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[14]   Selsmark, interview, p. 8.

relevant. The Fleet Air Arm seemed to be opposed by intra service pressure (gunnery) and inter service pressures (RAAF).[15]

There is little doubt that Australian Naval Aviation has had to contend with both intra and inter-service rivalry which is often driven by military budgetary restraints, with the RAAF being in direct opposition. Notwithstanding Powell's observation and his perceived cavalier use of aircraft carriers, a peacetime routine which includes public interaction can be an immense morale booster for both the navy and the air arm. One such example is being entertained by Jack Davey, a singer and radio host of some renown.[16] *Sydney* played host to 600 guests in the aircraft hangar which the Handlers had polished with steel pads. Aircraft Engineer John Arnold recalls that to add interest to the atmosphere some 'bright spark' suggested a pond and bridge be constructed. Arnold explains how this was achieved:

> The after lift was dropped down into its recess and filled with water. We then tied two of the ships gangways together which made a bridge over this water to move from one hangar to the other. One of the senior officers said that we needed some palm trees to put around. So a truck arrived on the wharf with all these potted plants which we wacked around the pond. Some other idiot said 'we need some ducks'. So we got the ducks. They arrived on a truck and the crates had been stacked on top of each other so the ducks on top were clean but the ones underneath had been shat on from a great height. We took them into the beautifully cleaned and polished hangar and a Commander said 'you can't put those bloody things in there in that condition! Get them cleaned up!' someone said that's an engineering problem so we got detailed to clean the bloody ducks up. We got half a drum of 100 octane fuel, went like that and gave 'em a quick dry clean, sent 'em out there, they jumped in the water and sank. We had to get in the water and resuscitate these bloody ducks, get them out till we got the oil back into their feathers. They started to load up all the tables, all the finery for the cocktail party and the ducks kept getting out and shitting all over the deck. Again we were detailed to fix the problem. We decided to use locking wire and aircraft nuts and bolts and we tied a weight around one leg so they couldn't get one leg over the lip of the well. Then the Commander said 'why are all the ducks leaning to starboard?' they were all going around and around and around! Great fun![17]

Another example that highlights the informality and public interaction in the era of aircraft carriers was the concept of 'Family Days'.[18] Pilot Anthony Adams recalls

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[15] Powell, questionnaire, p. 1.
[16] Lesley Johnson, 'Davey, John Andrew (Jack) (1907-1959), *Australian Dictionary of Biography,* http://adb.anu.edu.au/biography/davey-john-andrew-jack-9905 [accessed 3 July 2015]. (first published in hardcopy in *Australian Dictionary of Biography,* 13 (1993).
[17] Arnold, interview, p. 6.
[18] Adams, interview, p. 3.

being aboard *Melbourne* when the issue of public safety was brought inexorably to the fore:

> The family days on *Melbourne* when we first had them, on the flight deck all along whilst the flying was going on, there's all these mums and dads and little brothers and little sisters standing on the edge of the flight deck whilst we were flying. Until one day a Gannett lost it and went towards the crowd and nearly got them and ended up in the sponson and after that nobody was allowed on deck but before that, people used to stand around on the deck and watch the flying.[19]

Member Brian Poole recalls that 'morale was excellent' and mateship 'was very strong'[20] in the FAA and events like the ones related by Arnold and Adams played a role in maintaining that spirit in a more innocent age. It was not unusual for the carriers to deploy for months at a time where they lived and worked in constant contact; separated from the general ship's company by more than bulkheads. Adams expresses it this way: 'People don't understand but aviation is a way of life, it's not a job, it's a way of life'.[21]

Currently serving Head of the Helicopter Systems Division, Rear Admiral Tony Dalton, states it is the practice of naval aviation which remains a pivotal aspect of his long career:

> The highlight of my travels overseas remains my time as a member of several embarked flights. The camaraderie and sense of purpose generated by practicing Navy Aviation at sea is extremely satisfying and remains my primary motivator (either getting to sea or facilitating others getting to sea).[22]

This 'way of life' continued when the carriers returned to *Albatross* with the air station housing not only the Squadrons but the airmen's families. Separated from Nowra by only six kilometres *Albatross* was nonetheless isolated more so in the winter months when the only road was often impassable; a situation which ensured FAA wives and families also built strong relationships further strengthening their esprit de corps.[23]

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[19] Adams, interview, p. 3.
[20] Poole, interview, p. 5.
[21] Adams, interview, p. 34.
[22] Dalton, questionnaire, p. 3.
[23] Matterson, p. 35.

While Birdies were part of the RAN, they were not seamen. Some Birdies had served in the navy before joining the FAA, but the majority had little if any knowledge of general duties. Jim Parsons has clear memories of the two occasions when his ignorance of all things naval was on display:

On one of my drafts to *Melbourne* as a PO it was decreed that all of the ships PO's regardless of branch would do certain ships routine duties such as keeping watch in the damage control headquarters, acting as PO of the ships emergency party, who were all seamen and other non specified ships odd jobs. I managed to serve out my watches in damage control HQ without incident, thankfully, but other episodes had their moments. On one occasion I was PO of the emergency party, we were in harbour, it was either a make and mend or the weekend, the day started out fine and sunny and the flight deck awning had been rigged preparatory for a wardroom Cockers P. However by mid afternoon thunder clouds loomed up and in due course emergency party was piped to muster on the after end of the flight deck. I duly mustered my troops and reported in service style to the duty officer, our presence. He then told me to frap the awning. "Frap the Awning!!! Doesn't this idiot know I am a Birdie"? Taking a cue from a very young sub lieutenant from a well known WWII novel, I told my kellick, we had to frap the awning and to get the men started please. He gave me a rather peculiar look but in a trice the awning was frapped. For the nautically disadvantaged frapping the awning simply means removing every second stanchion and dogging down that part of the canvas to make a channel to facilitate water runoff. On completion and after I had dismissed the troops my kellick came up to me and said 'You had no f---ing idea what frapping the awning meant did you?". A fact impossible to deny.[24]

On another occasion I was appointed IC of the shore berthing party, again "don't these idiots know I am a Birdie"? Since the shore berthing party has to be on the wharf before the ship arrives this means a jolly little cruise up the harbour in the sea boat. At the appointed time the berthing party is piped to muster in the starb'd forew'd seaboat space. On arrival I find that the seaboat is already swung out, the restraints removed and the crew already aboard. I am somewhat disturbed to note that the crew moving about doing whatever it is they have to do makes the boat sway about in its falls. I am also concerned that access to the boat is via one of those ridiculous rope scrambling nets. I make it on board without too much drama. Being suspended over the ships side the water appears to be rushing past at a hundred knots and appears to get faster the closer the seaboat gets to the water. The boat falls are released just before the seaboat hits the water and two things happen. First the boat hits the water with a great jolt and splash and the fall blocks are swinging about at head height. Once clear of the ship it becomes a pleasant harbour cruise, the sun shining, the salt tang breeze in our face what could be more pleasant, then we arrive at the wharf. The wharf deck is some ten to fifteen feet above the water line and the only access is via a vertical wooden, slimey, greasy, wet

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[24] Jim Parsons, 'Letter to the Editor', published in *Slipstream,* p. 4.

ladder. By the time I get myself and crew on the wharf and smartly presented the ship is manoeuvreing to come along side and at this point my kellick takes me aside and says 'You're a Birdie right?' and since we are in number 2s with glistening fold rate and rank badges this is hard to deny, and so he then says, 'You stay close to me and leave everything to me and we will be right'. This seems an eminently good suggestion to me. And so after much bellowing from the ship about fore and after head lines, breast lines, springs and such, the ship is secured, the gangways are in place and we are ordered back on board. Ever since that draft I've had a great respect for the professionalism, efficiency and discretion of kellick seamen.[25]

For Parsons these two occasions offered an experience not common to Birdies and are therefore memorable but for many FAA members it is the travel destinations which readily come to mind. Korean War veteran Ron Tate recalls seeing post World War II Japan while deployed to Korea:

I went to Korea on the *Sydney* in 1953-54. The navy, the Fleet Air Arm did a lot for me. I visited Japan and saw where the atomic bombs went off. We used to tie up to a sunken Japanese cruiser. We operated out of Kuru and used to go into Sasabo which is where the Yanks were. Did we mix with the Yanks? If you did you would have the marine police on to you because we'd be brawling! We used to have a few millies now and again because we'd get ashore and get half tanked and pick fights![26]

The end of the Korean War saw *Sydney* return to routine training deployments which commenced again in October when the RAN participated in the first South East Asian Treaty Organisation (SEATO) exercises. As signatories, United States, British, French, Pakistan, Thailand, Philippines and New Zealand naval units also participated.[27] During this extended voyage the flight, maintenance and deck crews were involved in continuous training which greatly enhanced their experience. Pilot Anthony Adams recalls that the experiences were not restricted to flight operations, with cultural diversification having a profound effect which he recalls here:

We did our first SEATO cruise to the Indian Ocean and that's when the education really started. We went to Colombo, Trimcomalee and there were about 60 or 70 other ships. We saw Japan, India, Pakistan, Karachi and Bombay and they were educations in themselves. We visited Hiroshima and saw ground zero and the shadows of bodies on the bridges and that sort of thing that's still there today. We saw Tokyo and we were treated really well, very friendly. A few years later it was different. We went there several times and there was an anti-western

[25] Parsons, *Slipstream*. p. 4.
[26] Ron Tate, transcript of recorded interview, (3 April 2008), p. 4.
[27] Stevens, *Royal Australian Navy,* p. 185.

feeling in the bigger cities, and it's the only time I've struck racism against me and we would, as a group, we would be refused entry to places because we weren't Japanese. Not wanted, just go away. That was in Tokyo, nowhere else.[28]

Deployments are clearly recalled for different reasons as the one which took place in 1952 will show. *Sydney* headed to Darwin where, in company with HMAS *Tobruk, Shoalhaven, Macquarie* and *Murchison*, they sailed to the Monte Bello Islands. This archipelago is made up of 174 islands and is situated 130 kilometres off the north-west coast of Western Australia and was the site of the first British nuclear test where HMS *Plym* was obliterated by an atomic bomb.[29] Prior to the explosion the Australian ships were tasked with ensuring the immediate area was free of foreign shipping or submarines. On October 3 all ships crews who were not on duty gathered on the upper decks to watch the explosion from an estimated safe distance of 60 miles.[30] One unnamed observer describes the effect:

> At the end of the countdown, there was a blinding electric blue light, of such an intensity I had not seen before or ever since. I pressed my hands hard to my eyes, then, realising my hands were covering my eyes. This terrific light power, or rays, were actually passing through the tarpaulin, through the towel, and through my head and body, for what seemed like twelve seconds, it may have been longer. After that, the pressure wave, which gave a feeling such as when one is deep underwater. This was then followed by a sort of vacuum suction wave, to give a feeling of one's whole body billowing out like a balloon.[31]

Aircraft electrician Colin Bushe-Jones was aboard *Sydney* during this test and recalls that the crew were instructed to turn their backs to the explosion as a safety measure. Two aircraft were flying at the time and Bushe-Jones remembers them being washed down with hoses on their return to the ship.[32] These two measures were the only concession to safety during this first of three trials conducted in the area.[33]

Following this deployment *Sydney* sailed to Britain with her embarked Coronation Contingent, stopping off at Tobruk for a service at the War Cemetery. At Malta the ship engaged in training exercises with RN units, including the Mediterranean Fleet. Gibraltar saw the CAG carrying out mock attacks against the rock itself before

28 Adams, interview, p. 6.
29 Fazio, p. 39.
30 Fazio, p. 39.
31 'Operation Mosaic: 1956', *Britain's Nuclear Weapons*, n.d.
    http://nuclearweaponarchive.org/Uk/UKTesting.html (accessed 15 July 2015).
32 Bushe-Jones, interview, p. 4.
33 'Operation Mosaic, n.d.

arriving in Britain for the coronation celebrations.[34] On the homeward journey *Sydney* crossed the Atlantic with visits to Halifax, Baltimore, Jamaica, Panama Canal, Pearl Harbor and Auckland before reaching Jervis Bay eight months after her departure.[35]

International training exercises, in this case with the United States navy, offered opportunities for personal interaction with American sailors and the myriad of differences in technology and service life. Jo Jost has clear recollections of what are some of the most fundamental differences between the two services:

> When we were in Hong Kong with the Yankee carriers, probably twice our tonnage and about two or three thousand people on board. We'd go over to their ship for a meal and they would have about half a dozen choices and then they would come over to the Melbourne and we would start apologising for the lack of choice. They loved it! One night there was a three ringer, vittling officer, and I asked him what he thought about all the yanks coming over and eating our food, 'well at least they appreciate it, not like you bastards, you whinge about everything we cook!' They could not get enough of our straight forward steak and dehydrated spud, mashed up and the gravy over it and maybe mushroom or something. They loved it![36]

Geoff Vickridge began naval life as an apprentice fitter and turner but by his own admission his apprenticeship was not a success; 'from these wrists hang ten bananas'.[37] He moved on to become an aircrew officer in the FAA in 1964 where he flew as an observer. First stationed in Malta in 1965 his recollections are also centred on travel opportunities:

> We swanned around the Mediterranean. We used to take aircraft away, we went to Majorca via Corsica, we went to Libya, and this was before Gaddaffi. It was an idyllic life, I mean it was fantastic. We worked a tropical routine; stated at 6am and finished at 1pm. We used to go diving with the Royal Navy or take a motor fishing vessel up to Sicily. St Paul was supposed to have been wrecked on Malta and there's this huge statue about midway down on the east coast of the main island of St Paul. We used to love flying down there and putting a wing tip under his arm! Of course that excited the locals somewhat. We were there for about five months. I had two years with the Canadians and deployed all over the country. We did detachments down in Puerto Rico and trips to Bermuda as we could just take the aircraft for the weekend, stay within a thousand mile radius and be back by 6 o'clock on Sunday night. We went to New York for a Broadway show, stayed in Times Square and

[34]   Fazio, p. 39.
[35]   Fazio, p. 40.
[36]   Jost, p. 11.
[37]   Vickridge, interview, p. 1.

Rhode Island. With the Trackers in Canada we flew to Sandpit in the Queen Charlotte Islands and to Annett Island in Alaska and Whitehorse in the Yukon Territory. We were coming in to land at Los Alamitos once and I saw Disneyland so the machine went unserviceable for two days while we visited Disneyland! I went to Nova Scotia, San Diego, Colorado, the Grand Canyon, Las Vegas, all with the Tracker aircraft. At one stage I was called in to the Squadron Administration Officers office and he said 'I see you've got your name down to go out to the west coast this weekend'. 'Yes as a matter of fact I have'. He said 'would you mind if a Canadian went so that they could see a bit of their own country?' We would put our hands up to go anywhere. It was fabulous.[38]

Mike Keogh's first memories of life as a young FAA recruit are also centred on travel destinations but what made them memorable changed with the years as he explains:

Travelling in the first few years we went to Singapore, Penang and Borneo and I was only 16, 17 at the time and it was all about fun, the adventure. But then I did RIMPAC [Rim of the Pacific] exercises in the early 70s and they were far more interesting because you tended to mix more with the American navy and you talked to them and learned things from them. I remember going on board the Enterprise and the Long Beach and ships like that, where as in the early days when we went to Singapore as a kid, all you wanted to do was run amuck! Hawaii was magnificent. I think it was the nicest place I ever went to. Pearl Harbor was a fascinating place, geared to either military or tourism. I remember going to Waikiki and going to the Polynesian Cultural centre which was where they filmed Blue Hawaii. It was just fascinating. Why anyone would want to join the Army or the Air Force I don't know. I mean Hawaii is much nicer than Afghanistan I can tell you![39]

At the completion of an overseas deployment the crew were given a period of leave after which the routine of flight exercises would begin again. With *Sydney's* decommissioning in 1958[40] *Melbourne* was the only platform for naval aviation in the RAN and the wider Southeast Asian region.[41] The Cold War was at its height in the decade of the 1960s, but it was the Indonesian Confrontation, 1963-1966 which saw Australian troops, the RAAF and the RAN deploy to this small conflict.[42] Malaya had proposed the unification of Malaya, Singapore, North Borneo and

[38] Vickridge, interview, pp. 7-8. Note: Tracker aircraft are fixed wing propeller driven ASW aircraft and operate with a crew of four.
[39] Keogh, interview, pp. 6-8.
[40] *HMAS Sydney (III),* n.d.
[41] G.VC. Naidu, *ASEAN Navies in A Perspective: Part III,* n.d. www.idsa-india.org/an-oct-8.html (accessed 8 October 2015).
[42] Alistair Cooper, cited in Stevens, *Royal Australian Navy,* p. 198.

Sarawak, an alliance which Indonesia strongly opposed.[43] According to former FAA member John Bolton, 'armed skirmishes occurred between the two nations on land in Borneo and at sea in the Malacca Straits'.[44] Alistair Cooper, in *1955-1972 The Era of Forward Defence* states that the RAN involvement encompassed twelve ships, one of which was *Melbourne*.[45] Operating from the carrier was 816 Squadron, which flew Tracker ASW aircraft but their Squadron history does not include this deployment or recognise the Confrontation in its battle honours. Sonar operator Bolton recalls that an accident occurred on the flight deck at approximately 4am on March 24 in which Sub Lt. John Hutchison was killed, with the incident being recorded as occurring during a routine Far East Strategic Reserve (FESR) deployment. *Melbourne* was in fact patrolling the Malacca Straits in what Cooper describes as 'weaponry and other displays…to send an unmistakable signal to Indonesia of Commonwealth resolve'.[46]

As a member of FESR, ANZUS and SEATO, Australia had secured its geographically and politically isolating position in the Asia Pacific region.[47] As such Bolton is confident that Australia was 'reluctant to antagonise Indonesia' which he proposes as the reason for this anomaly in the historical record.[48] Hutchinson's death and the injuries sustained by his crew had consequences beyond those discussed above; the safety of the aircraft involved, a Fairy Gannett, came under scrutiny. Bolton explains the circumstances:

> I was flying in another aircraft and we were relieving Hutch and his crew. His Gannett landed on the ship and his hook snapped sending the aircraft off the end of the deck. Hutch was killed. The aircraft had only just been through a periodic inspection with Hawker DeHaviland's where they're supposed to sonic test and x-ray the hooks to make sure there were no cracks or anything like that and the story was that the job was given to some back yard metallurgist to test the hook and now of course there will always be this question. I don't know what the truth of the matter was but I do know that there was an undercurrent of unrest in quite a lot of the aircrew about whether or not the Gannett was safe to fly. It was suggested that we should refuse to fly them. This was taken a very dim view of by Toz Dadswell who was CO of the Squadron at the time and he called us all down to the education centre which is

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[43]   Stevens, *Royal Australian Navy,* p. 198.

[44]   John Bolton, *The Anzus Treaty and South East Asia,* (Murdoch University, 2012). (unpublished essay submitted for Australian Foreign and Security Policy unit 2012, pp. 4-5).

[45]   Stevens, *Royal Australian Navy,* p. 198.

[46]   Stevens, *Royal Australian Navy,* p. 198.

[47]   'Appendix B – The ANZUS Treaty', *Australian Treaty Series 1952 No 2* (Canberra: Australian Government Publishing Service, 1952). http---www.aphref.aph.gov.au-house-committee-jfadt-usrelations-report-appendixb%20(2).pdf [accessed 8 January 2016].

[48]   Bolton, pp. 4-5.

down in the bowels of Melbourne. He closed all the doors and in no uncertain terms explained to all those present that anybody who refused to fly the Gannett would be regarded as a mutineer and would be charged with mutiny and face a court martial. At the end of this little talk he turned around to Fred McCrainer and said 'you come with me!' Fred said 'yes boss!' Up they trot to the flight deck, flashed up a Gannett, on to the catapult, got airborne and beat the shit out of the ship. Low flying and beating up the flight deck and doing low passes and the whole bit; just put on a real show. He did this little fly past and landed on and that was that.[49]

There is no evidence to suggest that any other Gannett in the FAA had a tail hook failure and the aircraft was an integral component of ASW until it was retired in 1967.[50] There were two further incidents that involved *Melbourne* during the 1960s, the first occurred in 1964 when a collision with HMAS *Voyager* resulted in the loss of 82 lives.[51] The two ships were 20 miles south-east of Jervis Bay and the *Melbourne* was conducting night flying operations when the Daring class destroyer HMAS *Voyager*[52] doing rescue destroyer duties, cut across *Melbourne's* bows. While chasing wind to allow aircraft to take off and land on the aircraft carrier's deck, the *Melbourne* was at speed and hit the *Voyager*, blowing up her boiler room[53] and killing 82 of the 293 men on board.[54] Twenty-year-old Joe Kroeger was playing Tombola in the forward mess of the *Voyager* when the two ships collided as he recounts here:

I was in the forward café where all the casualties were. We were playing Tombola and I was sitting just to the port side of the entry to the mess deck that I lived in which was just underneath the café. I was sitting next to the coxswain Buck Rogers, I had just won the last hand. It was warm, I was only wearing shorts. I'd organised to go to the ops room to listen to a broadcast fight from Sydney stadium. Never made it up there, thank goodness because that was the time we impacted. Out of the ops room only one guy survived, Banjo Patterson. When we hit none of us knew what was happening, we got one warning 'HANDS TO COLLISION STATIONS! By that time the ship had hit and it was pitch black. I was facing the port side and the ship rolled that way. The water was rushing through and I thought 'Jesus this is fairly bloody serious!' I knew there were escape hatches but sadly a few of those got jammed. The bow where I was, was completely immersed and I was climbing up bulkhead fixtures and found a hatch and belly flopped through it. The bow was gone in about 3 or 4 minutes. It was a nightmare. I still have nightmares about it. I was paddling around in the water for about an

49 Bolton, pp. 4-5.
50 Gillett, *Wings,* p. 160.
51 Frame, *Where Fate Calls,* p. xxvi.
52 Frame, *Where Fate Calls,* p. 46.
53 *Flying Stations* p. 164.
54 Odgers, p. 172.

hour before one of the *Melbourne's* boats picked me up. There were a lot of casualties from my mess. A lot of people got compensation for that night but I didn't, they said I wasn't affected enough.[55]

Toz Dadswell recalls the collision from another perspective as his was the only aircraft in the air at the time:

> We were going out [from *Albatross*] to do touch and go's, I was CO of 816 Squadron and the fleet had come up with a program which was very tight because re-fit had over run and we were short of time. We stated flying on the Saturday and we all qualified for deck landings, Sunday we had off, Monday we flew in the morning and it was Monday night, I was in the second sortie and Adams went unserviceable so I went out on my own and watched the whole thing happen. And I called up here [Albatross] and said I was declaring an emergency. The ship couldn't talk to anyone as the aerials had all been written off so I stayed overhead and relayed messages. We flew all next day, we always had aircraft in the air. It was a dreadful night.[56]

The second pilot, Adams, had trouble starting his Gannett aircraft and before the problem was rectified he heard Dadswell's radio message. Having recently trained in Wessex helicopters Adams abandoned his Gannett and joined Barry Lovitt in a Wessex and they flew to the scene. Working without a winchman in the rear, Adams and Lovitt attempted to save those still in the water but their efforts were hampered as he explains:

> The people in the water didn't know what to do. We were hovering over blokes drowning, lowering the strop down to them and they didn't know what to do with the strop, they'd never been trained or shown and of course we've got the roaring down wash of the chopper and the light and we sat there that night and saw people drown because they didn't know what to do to be rescued. We were trying to call the cutters and the whale boats to direct them to men in trouble but couldn't communicate with anyone. Eventually the men in the boats caught on to the fact that hovering over an illuminated spot signaled someone needing rescue so they started to pull a few people out of the water. We did a few trips like that.[57]

Australian Prime Minister Robert Menzies announced that the circumstances of the collision would be examined by a Royal Commission whose findings were handed down 50 days later.[58] Although the cause of the accident rested with the *Voyager* and Captain D.H. Stevens, *Melbourne's* Captain John Robertson and his bridge

[55] Kroeger, p. 15.
[56] Dadswell, interview, p. 3.
[57] Adams, p. 11.
[58] Stevens, *Royal Australian Navy,* p. 202.

team were criticised for their inability to avoid the collision. The Commission's findings regarding HMAS *Melbourne* and her crew were greeted with derision and eventually public pressure ensured a second inquiry in 1967 which concluded that Captain Robertson was not in any way responsible for the collision.[59] Although there was no evidence to support the first commission's finding and the second completely exonerated Robertson, his naval career ended. The senior historical officer at the Sea Power Centre, John Perryman explains:

> Although too late to recover a once promising career, some compensation was granted for the loss of his retirement benefits. Many felt that Captain Robertson had been let down by the navy and in subsequent years this single event continued to have a major impact on the navy and its values. It was an unfortunate and premature end to Robertson's otherwise remarkable career.[60]

For Adams too the Royal Commission added insult to injury. Submitting a report on the problems with communication during the rescue operations, Adams was critical of the lack of radios aboard *Melbourne's* boats which was a crucial factor in hindering rescue operations. As was the lack of training in helicopter rescue procedures within the RAN; both points were rectified after the collision but for bringing these issues to the attention of the public, Adams was 'hauled before the masters and really given a kick in the guts for damning the navy in the eyes of the public'.[61] Adams goes on to say:

> All I did was tell the truth and their reaction made me very bitter because that was quite unfair. It was a valid criticism and it needed fixing and it was fixed eventually but oh no, you must not tell truth, you must always try and make the navy look good which is the way the people at the top used to think, they didn't care what happened.[62]

Unfortunately for the ship and her crew, *Melbourne* was to again experience a devastating collision on June 3 1969. During SEATO exercises in the South China Sea the accident involved United States designated rescue destroyer *Frank E. Evans*.[63] Once again the rescue destroyer cut across the carrier's bows and was cut in two with the loss of 74 lives.[64] FAA Observer Geoff Vickridge recalls:

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[59]   Stevens, *Royal Australian Navy,* p. 202.
[60]   John Perryman, 'Captain Ronald John Robertson', *Royal Australian Navy,* n.d. www.navy.gov.au/biography/captain-ronald-john-robertson. [accessed 17 July 2013].
[61]   Adams, interview, p. 12.
[62]   Adams, p. 12.
[63]   Stevens, *Royal Australian Navy,* p. 203.
[64]   Stevens, *Royal Australian Navy,* p. 203.

Before we sailed Captain Stevenson had got all CO's on board and said, 'look, you know I don't want a repeat of five years earlier and Voyager'. If I remember correctly they weren't allowed to come within six thousand yards, three miles of 45 degrees of the bow when we were at flying stations. There'd been an incident the day before with another American destroyer called the USS Larson where it was almost a blue print of the *Voyager*. Stevenson moved everybody out another mile.[65]

A Tracker aircraft was on the catapult about to begin launch procedures, with observer Geoff Vickridge aboard. He remembers that morning all too well:

We were scheduled to take off at half past three in the morning. It was John Clark, Ian (Wacker) Payne, and Ken Beaton and myself in the back. We were actually in the aircraft, John Green was directing operations and we were just about to start engines about quarter past three in the morning. I can't remember who it was, I actually think it was Ken Beaton from the back seat who yelled something like 'we're going to hit this bugger' or 'we're going to collide' or something. John Clark said 'everybody out!' so we got out of the aircraft fast. Must have been 20 to 30 seconds before we collided, maybe less. And basically we watched HMAS Melbourne plough through the destroyer at past three in the morning.[66]

Vickridge recalls that the bow section of the *Evans* sank almost immediately. 'We could hear the guys screaming, because that was mainly where all the loss was.'[67] The stern section scraped down the side of the carrier and was secured by lines to prevent it sinking and aid survivors. After approximately 100 seamen were helped aboard the *Melbourne* from the stern section, Vickridge and three others boarded and searched the wreckage but found no other survivors.[68]

Ross Sarti was drafted to *Melbourne* in 1969 as an aircraft handler and recalls his memories of the collision:

I was actually on the flight deck and saw the collision and the subsequent mayhem, I suppose it was about 2 o'clock in the morning and the biggest fear was the avgas tanks. Even though there was NBCD, the ship had no real warning and you can't stop an aircraft carrier on a five cent piece. NBCD is Nuclear Biological Chemical Defence. Most things were done quickly, purely and simply because we're trained in that situation and things were shut down very very

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[65]   Vickridge, p. 15.
[66]   Vickridge, p. 13.
[67]   Vickridge, p. 13.
[68]   Vickridge, interview, p. 14.

quickly. The Evans fo'ard section went down pretty quickly, in about 5 minutes but it felt like forever.[69]

The headline in the *Melbourne Sun* on June 4 read, 'How it sank. U.S. destroyer crossed path of *Melbourne.* Reports indicate HMAS *Melbourne* was not to blame.'[70] Official enquiries into the collisions between *Melbourne* and the destroyers *Voyager* and *Frank E Evans* upheld that headline on both occasions the *Melbourne* was not in any way to blame.[71] The enquiry noted that the commanding officer of *Frank E Evans* was absent from the bridge at the time of the collision. In control of the ship during the night was a bridge team considered to be inexperienced and unqualified.[72] A Court Martial convened for *Melbourne's* Commanding Officer, Captain J. P. Stevenson in 1969 was unequivocal in its verdict of 'Honourably Acquitted'.[73] Like Robertson before him, Stevenson resigned from the RAN, another inauspicious end to a fine career.

For the next 13 years *Melbourne* went on to serve without further incident and with her aircrews continued participation in various multinational exercises conducted throughout the Asia Pacific region.

Beginning in the early 1970s, *Melbourne* was involved in Rim of the Pacific (RIMPAC) exercises,[74] which were conducted every year with the intention of:

> …strengthening international cooperation among the participating nations to ensure safety of major sea lines of communication in strategic and tactical maritime operations. The event, conducted bi-annually in the waters around the Hawaiian Islands since 1974, continues to be the world's largest international exercise.[75]

Safety Equipment branch member Mike Keogh appreciated the opportunity to mix with his American counterparts in Hawaii during RIMPAC 1971 and 1972[76] and he recalls here:

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[69] Sarti, interview, p. 4.

[70] 'How it sank: U.S. destroyer crossed path of *Melbourne:* Reports indicate HMAS *Melbourne* was not to blame', *Melbourne Sun News Pictorial,* front page, (Melbourne, 4 June 1969).

[71] Gillett, *Wings,* p. 89.

[72] Stevens, *Royal Australian Navy,* p. 203

[73] Stevens, *Royal Australian Navy,* p. 203

[74] 'RIMPAC 2010', *Navy History Hawaii* (2 July 2010), www.navyhistoryhawaii.blogsport.com/2010/07/rimpac-2010.html [accessed 5 November 2011].

[75] 'RIMPAC 2010'.

[76] Keogh, p. 6.

It was interesting and we tended to mix more with the sailors from the American navy and we learned things from them. I remember going on board the Enterprise and the Longbeach and ships like that. It was like, the Melbourne was like a tug boat alongside them! We were in a bar in the Philippines, drinking with Americans from the Big E and one asked me what ship I was on. I said I was on the Melbourne and he asked which one that was. I said the carrier R21, the ship's ID and he asked what did that mean and I answered; it's the 21st carrier in R division. He turned and said "WOW! I'm sure glad you guys are on our side!' It was the only carrier we had![77]

Various nations participate in RIMPAC exercises with 23 being involved in 2014.[78] As a member nation since its inception in 1971 the RAN and the FAA have derived incalculable experience operating within such multinational forces but their operational experiences are not limited to overseas deployments.

Cyclone Tracy devastated Darwin on December 24, 1974. Capital of the Northern Territory, Darwin had an approximate population of 48,000 with an estimated 43,500 inhabitants in situ who experienced the cyclone's ferocity;[79] inhabitants measured at in excess of 217 kilometre an hour winds.[80] Dadswell and Adams were enjoying Christmas lunch when the news reached *Albatross* that a cyclone had hit Darwin the previous night. According to the Australian Bureau of Meteorology, 'Cyclone Tracy is arguably the most significant tropical cyclone in Australia's history accounting for 65 lives and the destruction of most of Darwin'.[81] All Australian military units were mobilised with Dadswell ordered to report to Richmond Air Force base early on December 26 to board a flight to Darwin.[82]

On arrival he was initially assigned to assist in the airborne evacuation of women and children before the Naval Officer in Charge (NOIC) Eric Johnson redirected his efforts to practicable restoration. Establishing communications, basic shelter, medical supplies and food and water, were priorities. Transportation and distribution of these essentials was greatly hampered by the loss of Darwin's entire infrastructure and the collapse of the majority of homes and buildings. When Dadswell pointed out that he was a pilot and not qualified for the job and 'would need to get the book on how to clean up a city' he was told 'oh sorry, that book go

[77] Keogh, p. 6.
[78] Australian Government, 'Exercises: RIMPAC 2014', *Department of Defence,* n.d. http://www.defence.gov.au/Exercises/RIMPAC14/ [accessed 25 October 2015].
[79] 'Darwin and the Northern Territory in 1974', *Cyclone Tracy Website,* http://ntlapp.nt.gov.au/tracy/basic/1974.html. [accessed 24 July 2014].
[80] Australian Government, 'Severe Tropical Cyclone Tracy', *Bureau of Meteorology,* n.d., http://www.bom.gov.au/cyclone/history/tracy.shtml. [accessed 24 July 2014].
[81] *Bureau of Meteorology,* n.d.,
[82] Dadswell, interview, p. 9.

blown away in the cyclone!'[83] The RAN fleet had also been deployed and the 12 assembled ships signalled that they were at his disposal. As Dadswell recalls:

> I sat down and thought about it and came up with a suggestion on how to proceed which they accepted. I could do anything necessary. I think that in those 12 ships we had access to every sort of trade and expertise that we wanted or needed, including one bloke who had previously worked for an undertaker.[84]

It cannot be over stated that having immediate access to much needed electrical, engineering and construction expertise mitigated the potential for ongoing safety and salvage issues. The ship's crews were organised into groups of 14 who came ashore at five each morning and were assigned an area to clear. The collected debris was then removed from each cleared site on a daily basis and from there transported to the town refuse centre. Security measures were taken to ensure the safety of personal valuables with 'two sailors detailed off to log, in duplicate, each item, bag it and ensure it was locked in a police cell each night.'[85] At the end of January the RAAF arrived bringing with them the heavy equipment needed to extend the initial salvage operations began by Dadswell and the RAN.

While Dadswell and the RAN personnel successfully managed the unusual task assigned to them, Adams recalls his role in the FAA contribution:

> We were at Albatross having just started Christmas lunch, it was about midday when we got the first call asking us how quickly we could get going with the 748's, we need to get people up there in a hurry. They needed the clearance diving team to search for sunken boats and the blood bank as quickly as possible. There were only three 748 captains in captivity at the time, myself and the CO Jim Campbell and the third one was in hospital. No one knew what the hell was going to greet us when we got to Darwin cause (sic) there was so little information coming out so the boss went off first and he picked up the CD [clearance divers] team at Mascot and I followed a couple of hours later with a scratch crew. I had in the right hand seat a bloke called Barry Diamond who was a Sky Hawk pilot. He spoke the same language but he knew nothing and he was in the right hand seat and I just pointed, do this and do that and hang onto this and watch that, talk on the radio and things like that so we were working like one armed paper hangers. We picked up the Red Cross blood bank and all their gear and their nurses and so on and headed up to Mt Isa and fuelled but when we left Mt Isa we still didn't know what the situation was in Darwin. We were told they thought they were going to have some lights for us, and then

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83   Dadswell, interview, p. 9.
84   Dadswell, interview, p. 9.
85   Dadswell, interview, p. 9.

we got the message; yes, there were runway lights on one side and we said - yes, but which side![86]

Landing in total darkness the aircraft was quickly surrounded by all manner of vehicle whose occupants' unloaded blood and other emergency supplies as quickly as possible. Adams remembers that he saw an Air Force Hercules on the tarmac but otherwise they were the only aircraft. The crew slept on the floor of the aircraft that night and woke to the amazing sight of the devastated town. For Adams and his crew the following three weeks were spent in constant flight ferrying food, water and essential equipment from Nowra to Darwin and civilians from Darwin to Brisbane. During this period of intense flying Adams far exceeded his allowed hours and at the end of this initial three weeks, he was ordered to take a few days break. In total, Adams and his crew had exceeded the flight hours quota of the entire Squadron.[87]

For the duration of their participation in the evacuation and supply of Darwin, Adams and his crew were accommodated at HMAS *Coonawarra* on the eastern side of the town. In what can only be described as very difficult circumstance, the personnel at *Coonawarra* ensured that the initial two 748 flight crews, who were soon after joined by members of 725 and 817 Squadrons, did not operate on empty stomachs. Adams had the opportunity to show his appreciation some months later as he recalls:

> When we were up there a few months later I wanted to take as many of the staff as possible for a swan about and so we loaded the airplane with about 20 or 30 cooks and stewards and sailors and we took them down to Halls Creek and stopped there and they went for a stroll around the town. Then we flew over Katherine Gorge and they all came up the front and had a drive, they had a ball. We could do that. My wife Kathy was friends with a bloke who worked with disabled children and on a trip down to Melbourne I arranged for them to be taxied around by the co-pilot. The kids were in the front seat driving the airplane around Essendon airfield for about an hour and a half. We could do that.[88]

The FAA had always fostered an atmosphere of trust and respect in its personnel who were encouraged to use their initiative; a quality which was very much in evidence in the aftermath of Cyclone Tracy. Adams is quick to point out that it is a quality which is not encouraged in Air Force crews. 'The Air Force never DO! They were and still are, very politically correct, straight up and down. No one is allowed to

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[86] Adams, p. 9.
[87] Adams, p. 9.
[88] Adams, p. 8.

operate on their own initiative which in the navy you can do.' Adams shares another example here:

> The navy used to just get on and do things. I was given a Hawker Sidley 748 [Electronic Warfare Trainer] and told to go up north [Western Australia] and find a base for the Trackers to operate out of and I said 'right-oh'. Off we go; me and another pilot, observer and engineering officer. We picked up Toz Dadswell in Darwin and checked out the west coast. Stayed in places and talked to everyone and got back to Nowra and they asked for our report. They had earmarked Derby as a suitable base but I told them no and I went off and wrote the report and convinced them that Broome was the most suitable site. We had other jobs; we carted a band up to Darwin and stayed for 4 or 5 days. I could take the aircraft and do anything I wanted with it whilst I was there. We'd go out and train blokes on bush airstrips and stuff like that and no one said you couldn't do that or go there. The Squadron was required to fly for a set amount of hours and we used our initiative and did just that.[89]

The FAA have weathered many highs and lows since 1948 but one incident in particular stands out strongly for many Birdies. In April 1977 a 19 year old able seaman set fire to an aircraft hangar at HMAS *Albatross* and six Tracker aircraft were destroyed. Kim Ferguson readily recalls the details and the aftermath:

> I was involved with the hangar fire, in fact it was my partner who did it. He had a growth on his brain, a tumor, and when he had a couple of beers his brain would swell, put pressure on his tumor and I'm pretty sure that coincided with him going down and opening all the fuel cocks on the Trackers. Then he opened the door and waited for all the fuel to run out, then he lit a paper plane to throw it in but that kept going out so he got his sailors cap and filled it full of paper, lit it and threw that right in to the middle of the hangar and it went. I was up in the married quarters and heard the big bang that night and I was babysitting cause my wife was working nights and I got my neighbor to come in and I ran down and fought the fire, went into the hangar with a hose and foam and then a magnesium wheel on the Trackers exploded and I was knocked backwards and I was laying in foam with just my nose sticking out. I remember some very brave people getting into the aircraft while they were on fire to let the hand brake off, to tow it out. Detectives from Sydney came down and interrogated us all. They caught up with him after a couple of weeks. He ended up going to Hollsworthy.[90]

While the hangar fire and the loss of six ASW Tracker aircraft had a significant impact on the operational capabilities of the FAA, the outcome was an advantageous one according to the historical record of 851 Squadron:

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[89]   Adams, p. 7.
[90]   Ferguson, p. 5.

The fire had crippled the FAA's fixed-wing ASW capabilities. However, the following months displayed the excellent relationship that the RAN had developed with the USN as the RAN's ASW component was not only replenished but increased in astonishingly quick time. Six more modern second-hand Trackers had already been ordered in October 1976 and delivery was being organised at the time of the fire. This order was expanded to sixteen and the RAN team travelled to the US to hand-pick the aircraft from USN stores. The aircraft were duly supplied and the RAN received them at a massive discount, as much as 97 percent.[91]

The next event to significantly impact the FAA was the change of operational mode brought about by the loss of *Melbourne* and her fixed-wing capability in 1982. This momentous decision saw morale drop to an all-time low as many Birdies saw no future for Australian Naval Aviation and left the RAN. For many others the shift to rotary aircraft offered an irresistible challenge with one pilot, John May, stating 'fixed-wing is good fun but it would bore me to tears.[92] According to May:

It's about variety. Even if you're just doing off shore rig support there's always variations, whether you're doing passengers, freight, medivac off a rig to bring someone back in. Variety.[93]

Unlike May, Brett Dowsing has enjoyed flying both types of aircraft during his career but acknowledges that rotary-wing aircraft offer a greater challenge. 'In helicopters it's the pure pilot control side of flying, a phenomenal feeling. But flying a Macchi low level over the back blocks of WA; that was pretty good too'.[94]

With the shift to helicopters the fundamental work of the FAA continued. Anti-submarine warfare and the protection of Australian waters and interests in the wider region remains an integral function for the FAA as does search and rescue. In the 21st century humanitarian, peacekeeping, policing and global security capabilities have become an increasingly vital FAA capability. May gives one example here:

We did patrols at the top end of the Arabian Gulf, protecting Iraq's oil system. Piracy is getting bigger and they are taking and keeping bigger ships now and going further off shore to find better targets. We were actually running the blockade through the Straits of Tiran, checking all the ships going up to Jordan for contraband weapons and stuff going overland to Iraq. We worked really hard because it was a hot dirty job

[91] Commonwealth of Australia, '851 Squadron History', *Royal Australian Navy* *http://www.navy.gov.au/history/Squadron-histories/851-Squadron-history* [accessed 4 January 2016].
[92] May, p. 1.
[93] May, p. 1.
[94] Dowsing, p. 5.

and occasionally there was a sheep carrier and oh, they stink! Because of the temperatures and the loads we carried we couldn't carry much fuel so we did short trips. We were working for a Canadian ship, French corvette and one or two American ships up there as well as Australian ships. Towards the end we did something like 11 ships before lunch which included our ships boats, about 30 percent of the ships company off on boarding sorties. The merchant ships liked us to board, the Australians were quick and efficient.[95]

FAA pilot Commodore Geoff Ledger served in Iraq as the Commander of Joint Task Force 633 in 2005 and his experience of Iraq differs from May's as he explains here:

> The job is fantastic with many challenges – both militarily and politically. The team over here is doing a very professional and commendable job. Whether it's the Birdies embarked in Newcastle (Buster Bailey's flight) in the Persian Gulf (previously Darwin flight); the CTF58 Australian Navy team in USS *Normandy* commanding all the coalition units in the Gulf; the Al Muthanna Task Group (AMTG) down south or a host of other good people doing their job in an operational environment. Aviation assets are vital in Iraq because it's extremely dangerous to travel by road during the day. I am impressed in the airmanship and skill of the coalition aircrews operating in the Middle East. Not only do they operate in hot, dusty and gusting winds but also with high all-up weight in high density altitude that really makes life difficult.[96]

While various Australian ships have deployed to the Middle East for the past 20 years now, 816 Squadron have maintained a continuous helicopter force in situ in excess of that period.[97] Ryan Jose explains the circumstances:

> After the war Iraq was in a rebuilding phase and their economy was based around two oil platforms, they had a permanent ring of steel around them and it was our job to keep surveillance on them. We patrolled the area, keeping a picture of what was going on. Now it's the Horn of Africa and it's all about piracy and trafficking between Africa, Afghanistan and Pakistan. Over the years we've had to adapt and go with what's needed and it's got very little to do with ASW, which is our core business. Having a flight up there sucks up enormous resources as of the 4 or 5 flights at sea, one is always there while the others are either rotating in or out or on leave. We've had significant roles to play in various operations there's very little written about them or about us.[98]

The versatility of the FAA is again highlighted when deployments to Iraq are juxtaposed with those to the Solomon Islands in 2003. Political unrest saw 20,000

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95   May, pp. 10-11.
96   Geoff Ledger, 'Dress of the Day', *Slipstream* 16;3 (2005), p. 21.
97   Jose, p. 5.
98   Jose, p. 2.

people displaced, essential services and infrastructure destroyed amid rising tensions and threatened armed conflict.[99] The RAN deployed nine ships; primarily to support the regional police forces to quell violence and protect civilians. They were also tasked with the evacuation of Australian nationals. Jose recalls that they operated two helicopters from one ship during this deployment which was an unusual occurrence:

> There was a requirement to have a 24-hour medivac capability when in the Solomon Islands and we needed to get our guys in and out very quickly if required. This is not at a time when we were using night goggles and we had to have a day or night capability and the Solomons is quite a rugged country with mountainous areas so you had this mountain popping up out of this island and a narrow coastal strip. At night time we had to find some way of extracting our guys from known locations without running into hills because you couldn't see at night.[100]

The advantages of night vision goggles for FAA flight crews clearly is a necessity as this quotation shows but incredibly their introduction took five years of negotiation. According to Jose:

> The attitude was that we've been doing it for years without these things – we need to operate at sea unaided, so without the use of any night vision capability. We could do it therefore we could keep doing it. But there is an element of safety obviously, you can see where you're going and you can also clearly see a submarine periscope wake without turning your radar on; when you do that, people know you are there. I was involved in getting them introduced and training guys in their use.[101]

The deployment of the FAA in search and rescue operations can present in many guises as Cyclone Tracy and the Voyager tragedy attest. The 1998 Sydney to Hobart Yacht Race is another example when the professionalism of the FAA flight crews limited the loss of lives. Six FAA helicopters and their crews winched many of the disabled yachts' crews to safety and recovered the bodies of the six crew members who drowned. Mick Curtis, co-pilot of one of the aircraft described the wind conditions as being 'between 60 and 70 knots. We think it was a Force 9 gale.

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[99] 'The Royal Australian Navy and the Restoration of Stability in the Solomon Islands', *Semaphore,* 13 (August 2005), https://www.navy.gov.au/sites/default/files/documents/Semaphore_2005_13.pdf (accessed 8 January 2016).

[100] Jose, p. 7.

[101] Jose, p. 8.

We hovered for about 30 minutes'.[102] Wacka Payne was operating in the rear of the aircraft and states: 'basically we're operating the aircraft on its limits and probably the aircrew at that stage'[103] 'Visibility is virtually non - existent, we haven't got any night vision aids so we are just using our own eyes.'[104] So stated RAN Dr. Tanzi Lea who was aboard one of the helicopters in the hope of helping any survivors amongst the 8 missing yachts and the 70 people initially unaccounted for. Six crewmen, some suffering broken bones, were winched to safety during this one of several dramatic rescues which began at first light. The first FAA helicopters arrived at 8pm on the 27 December and began what was a tense three-day rescue.[105]

Being an island nation Australia is apportioned one of the world's most extensive search and rescue areas which incorporate the Southern, Indian and Pacific oceans which is estimated at one tenth of the world's surface.[106] As such, search and rescue operations are now a shared responsibility with police, volunteer groups and civil contractors often being called in before the ADF and particularly the FAA as Jose explains:

> We tend to be called in very late, particularly Australian national disasters and things like that. It always frustrates us because we're always sitting there watching and going; 'We're here!' We've seen people sitting on their rooftops in the Queensland floods, we got called but probably 24 hours too late in my book. I was fielding calls from some of the guys who work for me going 'what's going on? Are we going?' 'No. I haven't had a call yet!' It can be very frustrating! I guess the governments gotta go through its processes and get tasked by the right channels and we're always at the end of that chain. It may be that way because we're geared up for a different role, the Army's very good at that because they've got an open cabin in the back of their helicopters and we can only take five passengers in a Sea Hawk, strapped in, we can throw a lot of guys in there if it's really required. We've got a lot of gear hanging off the bottom of the aircraft so we've got to be careful where we put it down, in paddocks and things like that, so we've not ideal for that role. But if it's just winching guys off the top of roofs and things like that, you need every helicopter there and our

[102] Graham Davis, 'RANtastic', *Navy News,* 42:1 (25 January 1999), http://www.navy.gov.au/sites/default/files/documents/Navy_News-January-25-1999.pdf [accessed 8 January 2016].

[103] Wacka Payne, interviewed by Debbie Whitmont, 'A Race to Survive', *Four Corners,* (Australian Broadcasting Corporation, 22 September 1999), www.abc.net.au/4corners/stories/s10357.html. [accessed 7 January 2016].

[104] Tanzi Lea, interviewed by Debbie Whitmont, 'A Race to Survive', *Four Corners,* (Australian Broadcasting Corporation, 22 September 1999), www.abc.net.au/4corners/stories/s10357.html. [accessed 7 January 2016].

[105] Davis, January 1999.

[106] Sea Power Centre – Australia, 'Search and Rescue: A Miracle in the South', *Semaphore,* 3, (January 2007), https://www.navy.gov.au/spc/publications/semaphore/semaphore-2007-issue-3 [accessed 8 January 2016].

guys are well trained so they can get in under low weather. We're willing and able to go up there and do that and that's why we get a little bit frustrated.[107]

While the FAA are called on when conditions are such that civilian assets are unable to operate, when time is of the essence or the operation is long range, this is what the FAA train for, it is what they do. As FAA pilot Brett Dowsing states:

Our first job as a naval aviator was search and rescue on the Iroquois. We cut our teeth on that, that basic utility work that you start with. Out there on shitty nights, flying in shitty weather, operating to the limits of the aircraft, to pull people to safety.[108]

This was seen when the New South Wales towns of Dubbo, Maitland and Narribri experienced extensive flooding in 1955. The crews of 723 Squadron were responsible for saving the lives of 100 civilians.[109] In May 1966 two of 723's Iroquois helicopters rescued four seamen stranded when the dredge *W.D.Atlas* capsized in ten metre waves. The helicopter's courageous crew hovered in 45 knot winds to complete the rescue.[110]

There are many examples of peacetime deployments and rescues by the FAA which illustrate their professionalism which owes much to their advanced training. Coupled with their versatility the shift in operational mode brought about by the loss of fixed-wing aircraft and the carriers they operated from have not lessened their value. This chapter has illustrated that in either mode the FAA have done, and continue to, serve Australian interests. In conflict and in peace their ability to meet any challenge has been demonstrated and the shift to helicopters has perhaps enhanced their operational value. Today's FAA are 'multi-role in nature which enables them to undertake these tasks while configured for warfighting.[111] Naval aviation is unique and the men and women who serve in the FAA also bear that very successful distinction.

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[107] Jose, p. 4.
[108] Dowsing, p. 7.
[109] Gillett, *Wings,* p. 159.
[110] Nally, p. 67.
[111] *Semaphore,* (January 2007).

8. Conclusion

The Australian Fleet Air Arm is a small, but significant, branch of the navy which, for over 60 years, has contributed not only to the defence of Australia, but also contributed internationally in both war zones and on peacekeeping missions. This thesis has recorded the beginning of the AFFA in 1948, and followed its extensive training regimes and operational deployments which have utilised both fixed-wing and rotary aircraft. Replicating the Royal Navy, the Royal Australian Navy (RAN) was established in 1911 with Australian ships contributing to the allied victories in World War I. Throughout the war Australian naval aviators had taken their place beside their British counterparts as members of the very successful Royal Naval Air Service (RNAS). The RAN had watched the development of naval aviation with great interest; the naval battles of Jutland and Heligoland Bight in 1917 highlighted the strategic, offensive and defensive advantages offered by naval aviation. While the practical implications of naval aviation were not lost on the Australian government, establishing the Royal Australian Air Force (RAAF) in 1921 was a much higher priority during the immediate post-war years and the introduction of a fleet air arm was not considered necessary.

From its inception the RAAF took responsibility for all military flights and incorporated members of the RAN who chose to be trained as aviators. This composite group became 101 Flight of the RAAF, while the RAN continued to lobby, unsuccessfully, for a separate naval air arm. Substantial air arms were by now firmly established in many of the world's navies, including the United States navy and the Royal Navy. The collective focus of these navies had shifted to designing and building purpose-built ships from which to operate their modified aircraft. At this time the Australian government showed little enthusiasm for following suit.

When war was declared again in 1939 both the British and United States' air arms were under-equipped, but there is little doubt that the expenditure needed to increase production of ships and aircraft, along with the training of flight crews, was justified. Once again, in the absence of an aviation component in the RAN, Australians served with the by now wholly naval-controlled British Fleet Air Arm. Indisputably the combined allied naval air arms turned the tide of World War II in

the Pacific theatre, with the Japanese advance initially being halted, and eventually repulsed, by allied naval aviation. As a consequence of this success the RAN increased pressure on the Australian government to establish an Air Arm as a separate service, as opposed to an ancillary of the RAAF. Agreement was reached in 1947, after which enlistment and training began in earnest.

From this point, 'Show the flag' voyages were undertaken by the RAN's two serving aircraft carriers as a component of routine deployments around Australia, and throughout the Asia Pacific region. Also, as a member of the South East Asia Treaty Organisation (SEATO), the RAN and the FAA participated in multi-national training exercises throughout the aircraft carrier era and, as a consequence, FAA personnel became highly-skilled professionals. The higher profile of the largest ships to serve in the RAN captured the public's attention during the 1950s and 1960s when press coverage of the carriers and their aircraft was at its height. When the last aircraft carrier was de-commissioned, public relation exercises were no longer part of routine deployments and FAA visibility suffered. As a consequence, the FAA today remains largely unknown outside aviation circles.

This invisibility was never more evident than during a number of highly visible rescue operations which are often accredited solely to the RAAF despite the FAA being instrumental in each one. It was the FAA who responded to the devastated town of Darwin in the aftermath of Cyclone Tracy in 1974, undertaking evacuation and supply duties. Restoration of the town was a critical need, and the FAA was tasked with re-establishing communication lines, providing basic shelter for the townspeople, bringing in medical supplies, and crucially, food and water supplies. The rescue of around-the-world yachtsman Tony Bullimore from the Great Southern Ocean in 1996 did bring the importance of a highly skilled aviation facility to the public's attention, but again, the RAAF was often attributed with the rescue. The disastrous Sydney to Hobart Yacht race of 1998 was another occasion when the FAA used their unique skills to rescue injured yachtsmen and women during appalling weather conditions but again, most of the general public had no idea it was naval aviators who put their lives on the line during the rescue mission. The RAN has never courted publicity or sought to highlight its triumphs or tragedies and as a consequence the FAA and their broad variety of operational capabilities are not widely known. This thesis has attempted to correct this invisibility by providing evidence of the many varied operational tasks undertaken by the FAA.

The major role of the FAA since its inception has been anti-submarine warfare and while this aspect reached its pinnacle during the Cold War, this capability still remains critical to Australia's defence capability. The use of Sonar (Sound, Navigation And Ranging) technology in a modern helicopter, such as the new RAN long-range Romeo MH60, greatly enhances the capabilities of the modern FAA. This multi-functional helicopter makes it possible for submarines to be found, tracked and destroyed by highly armed aircraft. Modern helicopters are equipped with Doppler radar, which enables all weather operations and automatic hovering, a vastly improved anti-submarine capability from previous decades. Even though anti-submarine warfare is not currently the core of FAA operational duties owing to the fact Australia is not enmeshed in a global war, it remains at the heart of operational requirements.

Undoubtable the FAA has met every operational challenge during its more than 60 years of service but it faced its most significant challenge in 1982. This was the year the Labor government made the controversial decision not to replace the aging FAA's means of operation, the aircraft carrier. A number of factors influenced this decision, including the end of the Cold War and the prohibitive cost of replacing both aircraft carriers and aircraft. This loss was seen by many members of the FAA as leading to the demise of their small branch of the RAN, and morale was at an all-time low. Many enormously experienced aviators and their support crews prematurely separated from the navy in pursuit of civilian fixed-wing opportunities because of this decision. For those who stayed it meant re-training on rotary-wing aircraft which would operate from the navy's guided missile frigates and destroyers.

This study has shown that many professional naval aviators were undaunted by change and eager to meet any challenge head on, and this change of operational mode was no exception. Although it was a testing time, this major transition from fixed-wing to rotary wing aircraft was ultimately very successful and the role of the FAA was expanded rather than curtailed by the metamorphosis.

As an island nation Australia's first line of defence is the navy and an aviation component can only enhance the effectiveness of the RAN but today deployments are not limited to defensive posturing. The shift from fixed-wing aircraft to sophisticated helicopters has greatly expanded the FAA's level of expertise and professionalism in an ever-changing global environment. Serving aboard the most modern aircraft-capable ships has further enhanced the FAA's reputation within global multi-national forces. The RAN currently has 14 aircraft-capable ships, the

newest acquisitions being two Amphibious Assault Ships (LHD) or Landing Helicopter Docks. As land, air and sea capable, LHDs are one of the most technologically sophisticated ships in the world, designed to operate from shallower minor harbours, to blue water. With the ability to operate six types of aircraft - all Australian Defence Force (ADF) assets including the Chinook - these ships can transport and deploy up to 1000 troops and their equipment. In addition, Sikorsky Seahawk helicopters are deployed on the eight Frigate Helicopters (FFH) currently in service, and the RAN's three Guided Missile Frigates carry two helicopters each. Commissioned in 2012, HMAS *Choules*, a Landing Ship Dock (LSD), can carry and deploy two Army Chinook aircraft to move men and heavy machinery ashore.

In addition to these latest naval acquisitions, the sophisticated Romeo MH60 helicopter has taken its place as the penultimate naval aviation asset. This technologically advanced machine is a 'multi-mission and multi-target precision strike' helicopter with 'cutting edge mission systems' according to Rear Admiral Stuart Mayer, Commander of the Australian Fleet.[112] The introduction of the MH60 into the FAA takes the 'Navy's aviation combat capabilities'[113] to a new level of sophistication and is a 'quantum leap over Navy's current combat helicopter force – both in numbers and capability' in the opinion of the head of Helicopter and Guided Weapons Division in the Defence Materiel Organisation, Rear Admiral Tony Dalton.[114] To be based at RANAS *Albatross* and operated by 725 Squadron, these helicopters will be deployed on the *Anzac* class frigates and the *Hobart* class destroyers. Armed with the AGM-114 Hellfire air-to-surface missile, 'one of the most powerful and widely used air-launched missiles in the world'[115] It was developed by the United States Army in 1974. This very successful weapon is used extensively by the world's military today and it came to public prominence during the media coverage of the 1991 Gulf War.[116]

In addition to the MH60 helicopter and its advanced weapons systems, the RAN has introduced a joint Australian and American developed missile decoy called Nulka. This decoy is deployed from the RAN's frigates and will be incorporated into

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[112] Stuart Mayer, interviewed by Lauren Rago, '*Hellfire Missile Firing a First for New Navy Helicopters*', Navy Daily. http://news.navy.gov.au. [accessed 8 January 2016].
[113] Mayer, p. 3.
[114] Tony Dalton, interviewed by Lauren Rago, '*Hellfire Missile Firing a First for New Navy Helicopters*', Navy Daily. http://news.navy.gov.au. [accessed 8 January 2016].
[115] Blacktail, *AGM-114 Hellfire*, Military-Today.com, www.military-today.com/milliles/hellfire.[accessed 8 January 2016].
[116] Blacktail.

any future acquisitions. Nulka, made in Australia by BAE Systems, is designed to hover in midair and entice an enemy missile away from its intended target.[117]

Increasingly operating within multi-national forces, today's FAA deploy in many diverse modes; assisting in humanitarian and disaster relief, operating as a global security force, and providing international policing. While piracy in the worlds busiest commercial waters, the Straits of Malacca and the Singapore Strait, have greatly increased, it is into the Gulf of Aden and the Somali Basin that NATO have greatly extended their counter-piracy operations. As a consequence of ongoing maritime aviation and surface ship patrols, the incidence of piracy has been reduced, with regional defence forces expected to take complete responsibility for commercial traffic by 2016. The FAA's contribution to the global environment needs to be publicly recognised and acknowledged, not just within the multi-national forces where it operates.

This thesis has demonstrated the contribution made by members of the FAA in its many operational guises. The primary source for this study has been the men who served as flight, ground or maintenance crews from 1948 until the early twenty-first century. Personal interviews were conducted where possible and, together with completed questionnaires, un-published memoirs and reminiscences, a record of this small naval branch has been possible. The validity of memory and the recording of remembered incidents is no longer examined exclusively within the prism of historiography; physiology and in particular neuroscience has sought to trace the way a particular incident in time and place is remembered. This collective memory of service in the FAA is reflective of each individual's recollection of life's changing moments; those that are archived as 'I will never forget'. Their service in naval aviation has had a significant impact on each life and according to Cognitive Psychological and Neuroscience research, these unique experiences are retained in the brain as long-term memories. This research has concluded that memory and its retention and its accurate recollection is always coupled with its intitiial emotional impact. Valerie J. Janesick explains that the hippocampus is the centre for emotions and memory and it is the 'number of neurons that are dedicated to a particular memory which help to strengthen the memory traces within the cortex.'[118]

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[117] Nulka, *Navy. Serving Australia With Pride,* www.navy.gov.au/weapons/nulka. [accessed 8 January 2016].
[118] Hamilton, pp. 11-18.

These long-term memories become archival over time; an active process of creating a meaning for each remembered incident. Ulric Neisser stated that 'the consistency and accuracy of memories is therefore an achievemnt not a mechanical production'.[119] If oral history can be said to 'expolre the history of emotions and the senses'[120] then by its very nature the act of rememereing strengthens the neural pathways between the hippocampus and the cortex. This consolidation process takes place over time and as new information is added, the rememberance is strengthened and preserved and can be recalled accurately for an indeffinate period while healthy brain function is present. For each individual the memory is created, stored and recalled according to their physical, emotional and intellectual reaction to sensory stimuli. Therefore, memories are intensely personal. In inviting veterans to recall aspects of their joining, training and service in the FAA these interviewees have shared memories that were preserved because they were intensly different from previous experiences. In articulating these long ago experiences the emotions present at the time are often brought to the forefront and in doing so their responses to a traumatic incident or incidents can be palpably felt.

In using oral history as the basis for this thesis the human experience is in clear focus; these veterans' personal recollections strengthen the collective history by an expanded inclusivity not present in a more tradtional presentation.

The limited secondary texts that chronicle the operations of the FAA began with Defence Department official Ross Gillett in 1988 with naval historian Colin Jones publishing his *Wings and the Navy* 1997. There have been a small number of books published by former members of the FAA with two published in 1998 and 2008, written by retired FAA members, and which focus solely on the Vietnam War. Australian Naval Aviation has been acknowledged in a limited sense in official studies of the RAN, the Korean War or the Vietnam War. This dearth of official reference material has ensured a heavy reliance on oral history, the use of which can be contentious. Questions regarding the accuracy of long term memories and their basis for an historic record have been addressed, with the inclusiveness, vibrancy and authenticity of personal accounts proven to add a human element not present in more traditional sources.

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[119] Hamilton, pp. 11-18.
[120] Ritchie, p. 82.

The Korean War has been referred to as the 'Forgotten War' in terms of both public interest and historical research and within that paradigm the FAA contribution has gone largely unnoticed. The same cannot be said of the Vietnam War, which has had a plethora of books and periodicals published on the subject, but once again the unique part played by the FAA has not been well recorded. This thesis has demonstrated the important contribution made by the FAA in the Vietnam War as part of the 135th Assault Helicopter Company, an American aviation unit.

The reasons for this scarcity of historical interest in one of the most dangerous and intense forms of military service is perplexing, but perhaps understandable when we consider that the foremost authority on Australian military history, the Australian War Memorial, did not acknowledge the role of the FAA until 2004. However, an FAA memorial now exists in the grounds of the Memorial and a dedicated naval aviation section has now been incorporated into the museum. Further study of the modern FAA and their position within global policing units, which focus on anti-terrorism and the fight against piracy, would ensure welcome exposure for these quiet achievers.

This thesis has demonstrated that the initial reluctance to introduce a naval aviation component in to the Royal Australian Navy was short-sighted. There is no doubt that the FAA has weathered many operational and political storms and has made, and continues to make, a valid contribution to Australia's military history. While acknowledging that its role has been one of support to all ADF deployments, the FAA continue in that tradition within an aircraft-capable small ship paradigm. The contribution of the FAA to Australian naval historiography has been established, as has their shift in operational mode, which has been viewed in terms of their value as an effective naval weapon. The FAA is undoubtedly a small component of the RAN but its greatest strength lies in its competence, professionalism and adaptability in meeting any challenge, notwithstanding their modus operandi. Its extensive operations have not attracted the attention of the wider community, an issue that needs addressing, and for Veteran pilot David Farthing, the lack of acknowledgement in official circles is frustrating as he elucidates here:

> Our contribution is a very significant one but not well appreciated. In our strategic setting maritime air is much more significant than land based air but the RAAF keep winning the political battles. Notwithstanding billions of dollars expended, we have not used an Australian fighter since Korea. Even in Vietnam RAN helicopters flew

nearly twice as many hours as Air Force helicopters, but you cannot find any reference to that in the Australian War memorial.[121]

The completely self-sufficient FAA operate in the deep waters of the world's oceans, working and operating in dangerous conditions that often push the boundaries of both men and machines. This thesis has compared and contrasted the prior age of fixed-wing aircraft and purpose-built aircraft carriers with the more modern aircraft-capable small ships from which rotary aircraft operate. It has been demonstrated that the FAA did not lose its defensive capability with the demise of the aircraft carrier and the introduction of rotary wing aircraft. In fact, it still provides a defence capability in the protection of Australian interests, but has also diversified to ensure its viability. The FAA continues to deploy in support of Australia's defence forces, irrespective of their modus operandi, as this is their raison d'être.

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[121] Farthing, p. 3.

Appendix A.

Aircraft Carrier Commanding Officers.

HMAS *Albatross* Commanding Officers

Captain D.M. Bedford RN
Captain H.J. Feakes
Captain C.J. Pope
Commander H.L. Howden
Captain Dyke-Ackland RN

HMAS *Vengeance* Commanding Officers

Captain D.M.L. Neame RN DSO
Commander C.M. Hudson
Captain H.M. Burrell
Captain O.H. Becher DSC

Flag Officers

Rear Admiral C.H.J. Harcourt RN CB
Vice Admiral C.S. Daniel RN CBE DSO

HMAS *Sydney* Commanding Officers

Captain R.R. Dowling DSO
Captain D.H. Harries CB CBE
Captain H.J. Buchanan CBE DSO
Captain G.C. Oldham CBE DSO DSC
Captain W.H. Harrington DSO
Captain J.S. Mesley DSC MVO

Flag Officers

Rear Admiral H.B. Farncomb CB DSO MVO
Rear Admiral J.A.S. Eccles RN CBE
Rear Admiral J.W. Easton RN DSO DSC
Rear Admiral R.R. Dowling DSO

Rear Admiral H.M. Burrell CBE

HMAS *Melbourne* Commanding Officers

Captain G.G.O. Gatacre CBE DSO DSC
Commander W.F. Cook MVO
Captain O.H. Becher DSO DSC
Captain T.K. Morrison OBE DSC
Captain J.S. Mesley MVO DSC
Captain V.A.T. Smith DSC
Captain R.I. Peek OBE DSC
Captain R.J. Robertson DSC
Captain D.H. Stevenson CBE
Caption D.C. Wells CBE
Captain A.M. Synnot
Captain V.A. Parker
Captain J.P. Stevenson
Captain G.V. Gladstone DSC
Captain G.J. Willis
Captain N.E. McDonald
Captain J.D. Goble
Commodore G.R. Griffiths DSO DSC
Captain T.A. Dadswell
Captain A.R. Horton
Commodore P.H. Doyle OBE
Commodore R.C. Swan CBE
Captain N.J. Stoker
Commodore D.J. Martin
Commander J.D. Foster
Commodore I.W. Knox
Commodore M.W. Hudson
Commander W.E. Rothwell

Fleet Commanders

Rear Admiral H.M. Burrell CB
Rear Admiral D.H. Harries CBE

Rear Admiral G.G.O. Gatacre CBE DSO DSC

Rear Admiral W.H. Harrington CB DSO

Rear Admiral A. McNicoll CBE GM

Rear Admiral O.H. Becher CBE DSO DSC

Rear Admiral T.K. Morrison CB CBE DSC

Rear Admiral V.A.T. Smith

Rear Admiral R.I. Peek CB DSC

Rear Admiral G.J.B Crabb CBE DSC

Rear Admiral H.D. Stevenson CBE

Rear Admiral W.J. Dovers CBE DSC

Rear Admiral A.M. Synnot

Rear Admiral D.C. Wells CBE

Rear Admiral G.V. Gladston DSC

Rear Admiral N.E. McDonald

Rear Admiral G.J. Wallis

Rear Admiral D.W. Leach CBE MVO

Rear Admiral P.H. Doyle OBE

Rear Admiral J.D. Stevens

Rear Admiral M.W. Hudson

Appendix B.

ROYAL AUSTRALIAN NAVY FLEET AIR ARM

ROLL OF HONOUR

19-Mar-30   [LTAG] Leading Telegraphist Air Gunner D.O. McGowan

25-Sep-40   [LCDR(O)] Lieutenant Commander Observer
F.K. Fogarty

25-Sep-40   [POTAG] Petty Officer Telegraphist Air Gunner C.K. Burnett

06-Apr-41   [LEUT(A)] Lieutenant Air J.J. Hoath RNVR

20-Nov-41   [LCDR(O)] Lieutenant Commander Observer J.C. Bacon RN

20-Nov-41	[LTAG] Lieutenant Air Gunner W.S. Fibbens
23-Feb-42	[LEUT(O)] Lieutenant Observer F.G. Gordon
01-Mar-42	[LEUT(O)] Lieutenant Observer McWilliam
21-Oct-44	[LCDR(O)] Lieutenant Commander Observer H.B. Gerrett
29-Nov-45	[SBLT(A)] Sub-Lieutenant Air L.J. Norton RANVR
12-Mar-46	[SBLT(A)] Sub-Lieutenant Air N.F. Faulks RANVR
17-Nov-49	[P/PILOT] Probationary Pilot K.J.B. Sheridan
22-Feb-50	[LEUT(P)] Lieutenant Pilot N.S. Ferris
23-Jun-50	Pilot 4 G.K. Eldering
10-Jul-50	[LEUT(P)] Lieutenant Pilot K.F. Wilson
16-Feb-51	[LEUT(P)] Lieutenant Pilot R.E. Smith
03-May-51	[LEUT(P)] Lieutenant Pilot R.W. Barnett
25-Jun-51	[LEUT(P)] Lieutenant Pilot M.B.A. Brown
25-Sep-51	Pilot 4 D.S. Slater
25-Sep-51	[OBS4] Observer 4th Class E.J. Edmonds
18-Oct-51	[SBLT(P)] Probationary Naval Airman N.F. Sweeny
01-Nov-51	[SBLT(P)] Sub Lieutenant Pilot R.W. Williams
05-Nov-51	[LEUT(P)]Lieutenant Pilot K.E. Clarkson DFM
07-Dec-51	[SBLT(P)] Sub Lieutenant Pilot R.R. Sinclair
02-Jan-52	[SBLT(P)] Sub Lieutenant Pilot R.J. Coleman
03-Feb-52	[LEUT(E)(P)] Lieutenant Engineer Pilot F.A. Strugess
19-Feb-52	[SBLT(P)] Sub-Lieutenant Observer D.H. Saunders
19-Feb-52	[LEUT(P)]Lieutenant Pilot B.H.F. Wall
22-Feb-52	[SBLT(P)] Sub Lieutenant Pilot D.P.E. Small
22-Feb-52	(O) Observer 1 J.G. Sharpe
16-Jul-52	[LCDR(P)] Lieutenant Commander Pilot D.R. Hare
26-Feb-53	[ASLT] Acting Sub-Lieutenant B.D.A. Wren

17-May-53	[LCDR(P)] Lieutenant Commander Pilot R.A. Wild DFC
20-Nov-53	[ASLT(P)] Acting Sub-Lieutenant Pilot R. Roberts
09-Dec-53	[ASLT(P)] Acting Sub-Lieutenant Pilot N. Boden
29-Dec-53	[ASLT(P)] Acting Sub-Lieutenant Pilot M.J. Beardsall
15-Jan-54 RN	[ASLT(P)] Acting Sub-Lieutenant Pilot J.H. McClinton
21-Jul-54	[LEUT(P)]Lieutenant Pilot E.C. Gray
16-Sep-54	[LEUT(P)]Lieutenant Pilot R.G. Owen
09-Jun-55	[PNA] Probationary Naval Airman K. Roberts
21-Jul-55	[LEUT(P)]Lieutenant Pilot R.J. Leeson
19-Oct-55	[ASLT(P)]Acting Sub-Lieutenant Pilot K.C.W. Henry
10-Nov-55	[SBLT(P)] Sub-Lieutenant Pilot J.P. Van Gelder
10-Nov-55	[LEUT(O)] Lieutenant Observer D.P. Padgett
10-Nov-55	[ACMN(T)] Air crewman Telegraphist N.J. Self
05-Jan-56	[LEUT(P)]Lieutenant Pilot P.H. Wyatt
05-Jan-56	[LMDR(P)] Commander Pilot G.F.S. Brown
11-Apr-56	[ASLT9P0] Acting Sub-Lieutenant Pilot B.J. Howe
06-Aug-56	[LCDR(P)] Lieutenant Commander Pilot W.E. Dunlop
09-Aug-56	[LEUT(P)] Lieutenant Pilot B.Y. Thompson
09-Aug-56	[LEUT(O)] Lieutenant Observer K.C.M. Potts
08-Oct-56	[CMDR] Commander Pilot D. Buchannan
27-Nov-56	[ASLT(P)] Acting Sub-Lieutenant Pilot A. Arundel RN
27-Nov-56	[MIDN] Midshipman N.F. Fogarty
19-Mar-57	[SBLT(P)] Sub-Lieutenant Pilot W.J. Browne
19-Mar-57	[MIDN] Midshipman I.T. Caird
30-Jan-59	[LEUT(E)(P)] Lieutenant Engineer Pilot P.J. Arnold
20-May-59	[LEUT(P)] Lieutenant Pilot S.R. Carmichael
20-May-59	[ASL(O)] Acting Sub-Lieutenant Observer M.C Williams
28-Dec-59	[ASL(P)] Acting Sub-Lieutenant Pilot L.A Mauritz

11-Feb-60	[ASL(P)] Acting Sub-Lieutenant Pilot F.G. Hodgson
11-Feb-60	[EM(A)] Engine Mechanic Airframes M.W. Holloway
10-Feb-64	[LASE] Leading Airman Safety Equipment B.M. Schmidt
03-Dec-64	[ASLT(P)] Acting Sub-Lieutenant Pilot G.J. Geerlings
23-Mar-65	[ASLT(P)] Acting Sub-Lieutenant Pilot J.M. Hutchison
20-Jan-66	[MIDN] Midshipman A.H. Hammond
28-Apr-66	[LEUT(O)] Observer E.G. Kennell
11-Oct-67	[SBLT(P)] Sub-Lieutenant Pilot M.D.L. Lynch
22-Feb-68	[LCDR(P)] Lieutenant Commander Pilot P.J. Vickers
05-Jun-68	[LEUT(P)] Lieutenant Pilot P.C> Ward
05-Jun-68	[PO ACM] Petty Officer Aircrewman D.J. Sanderson
05-Jun-68	[NAMAE] Naval Airman Airframes and Engines P.K. Smith
21-Aug-68	[LEUT(P)] Lieutenant Pilot A.A. Casadio
21-Aug-68	[PO ACM] Petty Officer Aircrewman O'B.I. Phillips
03-Jan-69	[ASLT(P)] Acting Sub-Lieutenant A.J. Huelin
31-May-69	[LACM] Leading Aircraftman N.E. Shipp
16-May-74	[LEUT(P)] Lieutenant Pilot R. McMillan
17-Jul-75	[SBLT(P)] Sub-Lieutenant Pilot M.K. McCoy
04-Dec-83	[LSA] Leading Seaman Aircrew G. Macey
20-Dec-95	[LEUT(P)] Lieutenant Pilot G.M. Brooks
02-Apr-05	[LEUT(P)] Lieutenant Pilot P.J. Kimlin
02-Apr-05	[LEUT(P)] Lieutenant Pilot J.C King
02-Apr-05	[LEUT(O)] Lieutenant Observer M.P. Goodall
02-Apr-05	[LSA] Leading Seaman S.A.C. Bennett

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