

RAAF Air Power Studies Centre

**THE RAAF IN EUROPE AND
NORTH AFRICA
1939-1945**



The Proceedings of the
1994 RAAF History Conference

Held in Canberra on 20 October 1994

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PREFACE AND ACKNOWLEDGMENTS

Papers have been printed as presented by authors, with only minor changes to achieve some consistency in layout, spelling and terminology. The transcripts of the discussions which followed presentation of the papers have been edited for relevance.

Ms Sandi Seignarack of the Air Power Studies Centre helped plan and organise the conference and also provided valuable administrative support. Pilot Officer Justin Parker and personnel from the staff of the RAAF Staff College also provided administrative support on the day. Building on these sound foundations, the authors delivered interesting presentations; the extent of their personal dedication to understanding and explaining the operational history of the RAAF was abundantly evident. Air Commodore Brendan O'Loughlin's consummate performance as chairperson ensured the success of the proceedings. My thanks to all these people for their contributions; their work was much appreciated.

John Mordike
Air Power Studies Centre
Canberra
November 1994



NOTES ON CONTRIBUTORS

Air Marshal I.B. Gration, AO, AFC assumed the Office of Chief of the Air Staff on 2 October 1992. He graduated from the RAAF College as a pilot in 1956 and acquired operational experience in maritime, transport and instructional flying. Staff appointments included Director of Operations in Air Force Office and Director General Joint Operations and Plans in HQADF, while before being appointed CAS he was Air Commander Australia. Air Marshal Gration is a graduate of the RAAF Staff College, the Joint Services Staff College and the Royal College of Defence Studies.

Associate Professor John McCarthy has been a Teaching Fellow at the University of New South Wales, Resident Scholar at the Australian National University, Lecturer and Senior Lecturer in History at the Faculty of Military Studies, and Associate Professor at the University College, University of New South Wales. His work includes the publication of such books as *Australia and Imperial Defence 1918-39*, *Australian War Strategy 1939-45*, and *A Last Call of Empire*. He is also the author of numerous articles on defence and foreign policy. He was the foundation President of the Association of Historians of Australian Defence and Foreign Policy and is a member of the Australian Institute of International Affairs.

Squadron Leader John Bennett's first posting was as a navigator on No. 2 Squadron, flying *Canberra* bombers in Vietnam. He then became one of the first RAAF members to fly 1 000 hours on F-111s with No. 1 Squadron before resigning from the RAAF to join the RAF in 1979. With the RAF, John flew *Buccaneers* in the overland strike/attack role in Germany, before spending four years as a qualified weapons instructor on the *Buccaneer* Operational Conversion Unit. He also completed the NATO Tactical Leadership Program in Germany. He has 6 000 flying hours. In 1991, John rejoined the RAAF where he is currently the F-111 desk officer in Force Development, HQADF. In addition to magazine articles, John is the author of the following books: *Defeat to Victory* - winner of the 1993 Heritage Award for literature; and, *Highest Traditions* - the history of No. 2 Squadron, which is due for release in December 1994.

Air Commodore Brent Espeland is an experienced commander, having twice held both unit and formation command within the RAAF. In addition, he has held joint commands through his appointment as Orange Force commander during Exercise Kangaroo 92. In this role he was exposed to broad responsibilities in terms of the command and control of land, sea and air units with particular emphasis on special force operations. Other significant 'hands-on' appointments include a tour as wing man, and later leader with the RAAF formation aerobatic team, *The Roulettes*, and a three year tenure as Military Secretary and Comptroller to the Governor-General of Australia. Staff related duties reflect a similar breadth of experience. Air Commodore Espeland has held key advisory roles in the fields of personnel management, military journalism and flying training, while as Director of the Air Power Studies Centre, he was directly responsible to the Chief of the Air Staff for the ongoing development of air power doctrine and the promotion of its understanding within departmental circles and across the community at large. Through all this Air Commodore Espeland has been well served by a diverse professional military education. He is a graduate of the RAAF Academy, Melbourne University, Canadian Forces Command and Staff College and, more recently, the United States Air Force Air War College. He holds a Bachelors Degree in Science from Melbourne University. Air Commodore Espeland was appointed as a Member of the Order of Australia (AM) in 1989 for service to the RAAF.

Wing Commander Mark Lax joined the RAAF Academy in 1974 where he completed his studies graduating Dux of his course. He went on to complete navigator training in 1979. On graduation, he was posted to No. 37 Squadron. After completing a tour on C-130 aircraft, he was posted to fly F-111s and followed this up with an aerosystems course at RAF Cranwell. After a four year tour at Aircraft Research and Development Unit, he was posted to East Sale as Chief Weapons Instructor in 1987. From 1989 he held various staff appointments in Air Force Office and HQADF, primarily advising on F-111 projects. Most recently, he completed Command and Staff Course and was promoted to Wing Commander before taking up a posting as Commanding Officer Base Squadron East Sale in 1992 where he edited and published a comprehensive history of RAAF East Sale and commenced a MA(Hons) Degree in Military History. He is also an avid book reviewer. Wing Commander Lax is currently posted as member of the staff of the Air Power Studies Centre.

Group Captain David Schubert is currently Commandant of RAAF Staff College. He took over command in January this year following some three and a half years as a staff officer in Air Force Office and HQADF. The HQADF attachment was to the Force Structure Review and his appointment in Air Force Office was as Director of Air Force Plans. Prior to this staff appointment, Group Captain Schubert had worked for three years as an inaugural member at Fairbairn on a Chief of the Air Staff project which led to the establishment of the Air Power Studies Centre and the production of the RAAF's Air Power Doctrine Manual. He left the Air Power Studies Centre in 1990 as Director. Group Captain Schubert has held other command and staff appointments and has had a flying career as a navigator in the maritime world. Flying tours included 11 Squadron, an exchange tour with the RNZAF and instructional duties at the School of Air Navigation. He is a graduate of Melbourne University, the RAAF Academy, RAAF Staff College and the United States Air Force Air War College. He is the author or joint author of books and articles and has contributed to other edited works. Group Captain Schubert leaves his appointment as Commandant at the end of 1994 as he has been posted to undertake the first course at the newly established Australian College of Defence and Strategic Studies.

Dr John Mordike was formerly an Army Officer in the Australian Army. In addition to several regimental and staff appointments spanning seventeen years, he served for one year on active service in Vietnam as Officer Commanding 12 Field Regiment LAD. In 1992, he published *An Army for a Nation : A History of Australian Military Developments 1880-1914*. Since July 1993, John has worked at the Air Power Studies Centre. He is a graduate of the Royal Military College, Duntroon, and the Universities of New England and New South Wales.



OPENING ADDRESS

Air Marshal I.B. Gration

Chief of the Air Staff

One of my first public tasks, as Chief of the Air Staff, was to open the inaugural RAAF History Conference, and it was almost two years ago to the day. The theme of that first conference, as most of you will recall, was Australia's Air Chiefs. And it was an outstanding success, especially for an inaugural conference.

Last year, you will recall, we convened another conference on the subject of the RAAF in the South West Pacific Area 1942-45. That conference, too, was a success and there was never any doubt that we would convene a further conference this year.

These history conferences provide a forum for studying aspects of RAAF history, as well as bringing together serving officers, veterans and others with an interest in military history. And I think the full house we have this morning underlines the extent of that interest. It is a chance to learn, to discuss and, for some, to remember. Indeed, one of the most enjoyable aspects of these conferences - last year's being a classic example - is listening to the comments by the participants who were actually there participating in the events that we were studying. I am sure that we will not be disappointed in this regard today and I see many familiar faces who have first-hand knowledge of the subject we are addressing. Thus it is with real pleasure that I open this third conference with its theme of the RAAF in Europe and North Africa.

When Britain declared war against Germany on the 3rd of September 1939, there was no question, as Prime Minister Robert Gordon Menzies put it, that Australia, too, was at war. Within three weeks of the declaration Prime Minister Menzies announced his Government's intention to offer the British Government a force of six squadrons for the war in Europe. On the very day that the Prime Minister made this announcement, the Melbourne Recruiting Depot was besieged by a crowd of 2 000 men eager to enlist in the force. Perhaps some of them are here today.

The initial idea of offering the six squadrons was soon dropped in favour of making a more substantial and protracted commitment to the war through the Empire Air Training Scheme. Under this scheme, Australia would join with Canada and New Zealand in recruiting and training air crew to participate in RAF operations. Together with the contribution of two permanent RAAF squadrons - No. 3 and No. 10 - RAAF

participation in the war in Europe and the Middle East continued for the duration of the war, even in the face of a belligerent Japan in the South West Pacific. About 27 000 aircrew eventually fought, predominantly over Europe, under the allied strategy of 'Beat Hitler First'.

While the South West Pacific theatre quite naturally became the focus of a much larger commitment by the RAAF, we should not forget our contribution to the 'Beat Hitler First' strategy. As I am sure the speakers will remind us today, it was a mighty effort by the officers and airmen who fought in those theatres.

Yet, while we recognise their vital contribution, it is a sad reflection on our national short memory that their efforts in that war are not understood widely, or even known in some cases, among contemporary Australians. This national deficiency alone justifies the holding of a conference of this nature. Nations place huge demands on their servicemen and women during war, and it is therefore fitting that such selfless contributions be recorded and remembered. Next year, when the 50th anniversary of peace is celebrated in this country, we must ensure that people understand that the RAAF not only made its contribution to victory in the Pacific, but also, as we will hear today, to victory in Europe.

This conference will discuss the Empire Air Training Scheme and the RAAF's contribution to Fighter, Bomber and Coastal Commands. We will also look at some of the RAAF personalities who participated in the war. I hope some of the points raised will be contentious, as such provocation should encourage lively debate during the discussion periods which will follow each presentation. Accordingly, I invite you all to contribute actively and share your thoughts with all of us.

At this point, I would like to acknowledge the support given by today's speakers to the promotion of interest in RAAF history. Two of them have presented papers at previous conferences and will be familiar to most of you, and the others I'm pleased to note, are serving RAAF officers. And as an aside, this is a trend which I laud and strongly encourage. One of the features of the RAAF that is frequently commented on adversely by outsiders is the reluctance of Air Force officers to stand up and speak about their Service. There are times when that should not be done, but there are times, and today is one of them, when it should. And I am delighted to see the serving officers participate in this way.

It only remains for me to welcome all of the audience to this third RAAF History Conference. And I know that no one will mind if I extend a special welcome to those here today who actually played a part in that history in Europe and North Africa those many years ago. I look forward to your involvement in a day which I'm confident will not only

be an enjoyable one, but will also make a contribution to the recorded history of the RAAF.

TWO FACES OF THE EMPIRE AIR TRAINING SCHEME : THE EUROPEAN EXPERIENCE

John McCarthy

There was a long precedent for what became the Empire Air Training Scheme. In 1885, New South Wales provided a contingent to counteract what would today be called an 'indigenous peoples uprising' in the Sudan. As the Premier explained, the colony was being defended there just as surely as if 'the common enemy' menaced directly the territory of New South Wales.¹ In the Boer War, the Australian colonies combined to send 859 officers and 15 605 other ranks to South Africa in what was described by a future Australian Prime Minister as '...a piece of the highest political self interest'.² The reasoning seemed plain: a strong defended British Empire meant a secure Australia. For the professional British Army, the Boer War saw early disasters but when they were examined British planners realised the implications of the Australian contribution. For them, the colonies contained '...a reserve of military strength which for many reasons, we cannot and do not wish to convert into a large standing army, but to which we may be glad to turn again in our hour of need...'.³ They did. The newly Federated Australia sent a small force to help suppress the Boxer Rebellion and between 1914-1918, 329 000 Australians served the United Kingdom overseas. More than 60 000 were killed in action or died from wounds. Moreover they served as always under United Kingdom higher control. Australians might command a division, one briefly a corps, but there was no say in the higher direction of war or how Australian troops were to be deployed.

Younger people are often surprised at this. They should not be. Such arrangements were part of the system of Imperial defence which seemed to regard British forces and those of the Dominions as interchangeable. For example: by 1918 some 22 000 Canadians had served with the British flying services. At times perhaps half of the flying personnel scattered throughout British squadrons came from the Dominions.⁴ Little surprise, therefore, that not long after the 1914-18 war, the idea of a centralised and coordinated 'Empire Air Force' became current. As

¹ *Sydney Morning Herald*, 27 February 1885.

² Edmund Barton, New South Wales, *Parliamentary Debates*, 16:9.

³ Papers of the Parliament of Great Britain, 1904, 40, *Command Paper 1789*, 89.

⁴ Denis Winter, *The First of the Few: Fighter Pilots in the First World War*, London, 1982; F.M. Cutlack, *The Australian Flying Corps in the Western and Eastern Theatres of War*, Sydney, 1942.

late as 1926, even that nationalist orientated Australian Chief of the Air Staff, Richard Williams suggested that the British Chief of the Air Staff should become the Chief of the Imperial Air Staff.⁵ In September 1939 there was no individual Australian declaration of war against Germany. The warships of the Royal Australian Navy came under British strategic control and although Blamey as commander of the 2nd AIF received written authority to maintain the unity of that force, Blamey himself remained subordinate to British commanders. It was with such precedent and expectation that the Empire Air Training Scheme was negotiated and signed in November 1939.

At Ottawa, the British negotiators required the Dominions to supply the United Kingdom with some 28 000 aircrew over a three year period. Australia became committed to provide 36% of this total. In brief, once the scheme became fully operational, 432 pilots, 226 observers and 393 wireless operator-air gunners would be sent to operate with the Royal Air Force each month. A percentage would receive training up to brevet stage locally, the remainder would go to Canada. All advanced operational training would take place in Britain. On embarkation to the United Kingdom, the British government assumed responsibility for pay, allowances, pensions and other expenses at Royal Air Force rates. The difficult problem of maintaining some form of national identity was apparently solved by Article XV of the agreement. The distinctive dark blue Australian uniform would be worn and aircrew would be concentrated as much as possible in dedicated Australian squadrons. In return, the United Kingdom would meet some of the costs involved in providing Australia with training aircraft but made no cash contribution. Although the scheme was renegotiated in 1942 and the flow of aircrew periodically increased, as an arrangement it remained remarkably stable. When it ended early in 1944 it had cost Australia £145 000 000.⁶

Throughout most of the war, therefore, the Empire Air Training Scheme combined the training and manpower resources of the Dominions, to a limited extent those of Southern Rhodesia and of course the United Kingdom itself. By mid-1943 it was calculated that about one in four aircrew serving with the Royal Air Force came from one of the Dominions. Although the appointment of a British officer, Sir Charles Burnett as Chief of the Australian Air Staff and principally charged with the task of implementing the local scheme caused some adverse

⁵ John McCarthy, *Australia and Imperial Defence 1918-1939: A Study in Sea and Air Power*, St. Lucia, 1976, p. 30.

⁶ AA : CRS A2671, 20/1940, 'Memorandum of Agreement between H.M. Government in the United Kingdom and H.M. Government in Australia as to the training of pilots and aircraft crews in Australia and their subsequent service with the Royal Air Force, and as to the provision of pupils for training in Canada as pilots and aircrew crews.' For the amended agreement signed in Ottawa 5 June 1942 see AA : CRS 1966/5.

comment, the arrangements arrived at in Ottawa met with considerable enthusiasm. No serious criticism came from the opposition Labor Party led by John Curtin. For Robert Menzies as Prime Minister it was only a matter of the British government turning to 'her children' for help.⁷ By now though, one face of the Empire Air Training Scheme might become discernible.

Evidence suggests that aircrew posted to the Royal Air Force under terms of the Empire Air Training Scheme were literally surrendered to the control of the Air Ministry. One wonders if this were an event unique in even Australia's acknowledged most dependant military history. No rights were retained over aircrew postings, therefore Australia had no say in what theatre or in what capacity its aircrew operated or in what type of aircraft. Australian aircrew could not be concentrated into Australian squadrons although seventeen squadrons were so designated. Rather Australian aircrew were scattered throughout the whole line of battle serving in all types of squadrons and in virtually every theatre in which the Royal Air Force operated. In November 1943 there were just 835 Australian aircrew serving in the so-called Article XV dedicated squadrons compared with 10 040 with other Royal Air Force units. Moreover there was never any question that there should be Australian representation on the higher decision making bodies of the Air Ministry or indeed in many of the lower. Australia endorsed not a single operational sortie involving its nationals. Wing Commander remains still very much an air force operational rank. It may be just a coincidence that this was the highest rank obtained by an EATS graduate.

Governments in wartime assume the gravest responsibility. Did the Empire Air Training Scheme graduates deserve better from their elected representatives? It might be argued that these Australian aircrew were denied protection, had become indeed the forgotten men. When one thinks of the care taken to ensure that the 2nd AIF was properly trained, equipped and supplied before it went into action, the neglect of Australian aircrew once they came under British control might seem remarkable.⁸ Then there remains another question. A nation's armed forces in war if used correctly should secure benefits which may not be immediately obvious to somebody trying to get an aircraft over target or flying yellow four. Did the lack of control exercised by Australia over its own aircrew, did its generosity and freely expressed Imperial sentiment result in British reciprocity when its own immediate interests were involved? There was a point. Once the AIF divisions were returned to

⁷ Robert Menzies, *Empire Air Force : Australia Plays Her Part*, Canberra, 1939, published radio broadcast, 5 October 1939.

⁸ See John Robertson & John McCarthy, *Australian War Strategy 1939-1945 : A Documentary History*, St. Lucia, 1985, Section 4 for the 2nd AIF's prelude to battle.

Australia, participation in the Empire Air Training Scheme was the only significant contribution Australia was making to the European war. Was there some way this could be turned to Australia's advantage?

From December 1941 Australia faced two most difficult problems. The first, of course, was to save Australia from Japanese occupation. The loss of *Repulse* and *Prince of Wales* and the subsequent surrender of Singapore on 15 February 1942 left Australia a hostage to fortune. The task was to convince Winston Churchill that Australia's fate was important. As John Curtin, now Prime Minister told him, if Japan invaded:

History would gravely indict such a happening in a nation which sacrificed 60 000 of its men on overseas battlefields in the last war and at its peril has sent its naval, military and air forces to fight overseas in this one.⁹

Overseas drafts of EATS aircrew were suspended but an act of considerable loyal courage saw them resumed in March 1942. But little was forthcoming from Britain. All Australia got was three squadrons of Spitfires, two of which were nominal Article XV squadrons anyway. These aircraft did not become operational from Port Moresby until January 1943 and by that time the threat of Japanese invasion was considerably more distant. The result of Coral Sea, Midway, Papua and Guadalcanal made sure of that.

It was these very victories, however, which created the second problem. The Curtin government wanted to achieve a diplomatic objective. It wanted to place itself in a position where the eventual peace settlement with Japan would bring Australia some benefit. By 1943, however, it appeared that the Americans with naturally the same objective would get any benefit for themselves. Only employing Australian forces in the field held any hope of securing a meaningful say in post-war arrangements. Thoughts turned to those operationally experienced aircrew operating from Britain. Curtin wanted a steady stream of them back where they could be employed to secure direct Australian interests. To combat the American thrust in the Pacific he also wanted some British troops who working with the Australian divisions would help counteract American predominance. Reciprocity was not forthcoming. Churchill made it very plain that no British troops would be available until the end of the European war. Even then Churchill had his own agenda. Any troops available would be used for the invasion of Japan. Britain too, it seems wanted their share of the advantages of taking part in the Pacific war.

⁹ Curtin to Churchill, 23 January 1942, *Documents on Australian Foreign Policy*, Vol. V, pp. 463-6, for a well known preview of this view.

What then should be the British contribution to an Australian air presence? In November 1943 Curtin told a visiting British general that his problem with the Americans surely justified in asking for the transfer to Australia of at least two Article XV *Lancaster* squadrons. Sir Charles Portal, the British Chief of the Air Staff, flatly refused, however, to even consider the idea. He was unsympathetic also to the suggestion that trained aircrew should return to Australia. In December 1943 he argued:

Australia [should] fulfil as far as she possibly can the obligation under the EATS and for the formation of Article XV squadrons. We cannot agree to any transfers of complete squadrons to the SWPA from British theatres of responsibility and the return of trained men can only take place on the completion of a tour with the RAF.¹⁰

One might be forgiven for detecting a hint of Shakespeare's *The Merchant of Venice*. Churchill obviously agreed with Portal. He refused to consider in January 1944 the proposal to send even a token force of aircraft. Although Curtin argued with him in London in May 1944 that a return of EATS squadrons was vital to Australian interests all Churchill was prepared to do was wish him 'Godspeed' for the journey home.

Viewed thus, and overall, not an acceptable face for a major piece of Australian war policy, the Empire Air Training Scheme. The care which should be taken before a minor state's armed forces are committed in coalition warfare was lacking. Participation in the Empire Air Training Scheme could not be made to work to Australia's local or international advantage. The right to recall aircrew was not written into the original agreement and when Australia had an urgent need to inject operational experience into its SWPA squadrons, the Air Ministry was most reluctant to co-operate.¹¹ Unification of the Australian component should have been an urgent imperative; there should have been provision made for Australians to achieve higher ranks of command over its EATS graduates. This view of the Empire Air Training Scheme might want to suggest that by 1943 Australian overseas air resources should have been fashioned in a way that served Australian rather than British interests. The conclusion might well be that participation in the Empire Air Training Scheme cost a lot of money, a lot of effort, that it depleted an already severely strained pool of talented manpower and that more importantly it cost directly over 6 000 young lives fighting in a far distant war the successful outcome of which was assured by mid-

¹⁰ PRO: Air 20/2024, Portal to Vice-Chief of the Air Staff, 3 December 1943.

¹¹ Robertson & McCarthy, *op.cit.*, pp. 68-69, Drakeford to Curtin, 11 December 1942.

1942 and that how this outcome was obtained was of little Australian concern. After all, Australians were never consulted about it.

Others might want to argue differently. Surely such a presented face of the Empire Air Training Scheme resembles one shown only in a distorting mirror. It tends to view the Australia of 1939-45 through the lens of 1994 and this is grossly unhistorical. Better perhaps to look back to the tradition established in 1885 and to realise that Australia could only be defended by fighting alongside a powerful ally. It followed that Britain's enemies remained Australia's enemies no matter where they were and that a weak Britain always meant a weak Australia. The war was one and Empire Air Training Scheme graduates were defending Australia from bomber bases in Lincolnshire, in India and Burma or the Middle East just as if they were operating from the Fourteen Mile strip outside Port Moresby. To separate neatly Australian and British interests is thus untenable.

The Empire Air Training Scheme, in fact, was a great example of Imperial cooperation. Nowhere else is that better illustrated than in the activities of Bomber Command where the greatest number of EATS graduates served. Modern critics might attempt to discount Bomber Command's contribution to victory but those who actually flew the operations and saw the burning devastation are difficult to convince.¹² Certainly Bomber Command's attacks were a major factor in winning the war: German economy and morale was greatly affected and the D-Day landings would have been either impossible or almost prohibitively expensive in terms of lives without the air campaign. The point is that without Australian participation in the Empire Air Training Scheme these attacks would have been severely weakened and the European war might have resulted in a western stalemate. How this would have affected Japanese ambitions and military endeavours is worth pondering. It is absurd to say, however, that direct Australian interests were not involved.

The critical face of the Empire Air Training Scheme makes much of the fact that Australian identity was lost and that the concept of a united force was pursued with little vigour. But even if it had been possible given the high financial cost if nothing else, would the formation of an Australian group within Bomber Command have made very much difference? There is little evidence to suggest that in pursuing his strategy Air Chief Marshal Harris was particularly concerned with the opinions of his group commanders or indeed with those of the Chief of the Air Staff! Better, perhaps, for Australian aircrew to be more loosely

¹² For some modern views on Bomber Command see, Max Hastings, *Bomber Command*, London, 1979; John Terraine, *The Right of the Line: The Royal Air Force in the European War 1939-1945*, London, 1985; Richard Overy, 'World War II: The Bombing of Germany' in Alan Stephens (ed.); *The War in the Air 1914-1994*, Canberra, 1994, pp. 113-140.

integrated into the finest air force in the world and to gain operational experience under distinguished Royal Air Force officers. Some of these officers were Australian born themselves: there was Mary Coningham and Peter Drummond to say nothing of D.C.T. Bennett. Only an argument driven by a narrow sense of nationalism could find fault with this. For many Australian aircrew themselves, where they served was irrelevant and in fact most enjoyed the mixing of nationalities. Through the Australian participation in the Empire Air Training Scheme, Australians themselves came part of the triumph and vindication of air power. Even without that, however, surely it was enough to have shown the Russians in those dreadful days of 1943-44 that they were not alone in fighting a bestial regime which had to be destroyed and to have given nightly hope to those occupied countries of Europe as they flew overhead.

The argument that local benefits did not accrue from Australia's participation in the Empire Air Training Scheme cannot be sustained. Without it, for example, one wonders how long it would have taken to get an adequate aircrew training system operating when the Japanese did enter the war and it finally came necessary to supply aircrew to over forty operational squadrons operating in the South West Pacific Area. It was Air Chief Marshal Sir Charles Burnett who was responsible for this. Without a Royal Air Force officer as chief executive the RAAF would have been shackled to the antagonism caused by the twenty year feud between Williams and his deputy Goble. There certainly would have been a serious short-fall in training aircraft without those supplied by Britain and it would have been impossible to train aircrew without them.

Neither is there point in referring to the seemingly uninterested attitude of Winston Churchill. There is no doubt that he realised his obligation. As he minuted the Secretary of State for Air in 1943:

The fact that Australia has over here 8 100 Australian aircrews, including some of their very best airmen, and the share they have taken in the Empire Air Training Scheme leaves us heavily in their debt as far as the air is concerned.¹³

There was, however, little he could do about it. American influence was certain after the United States and United Kingdom chiefs of staff had agreed to make the Pacific area a United States responsibility in April 1942 and it remained so until Japan was defeated. It was always going to be difficult therefore for Churchill to have any influence on military action and he had to resign himself to the fact that the United Kingdom was very much a junior partner. Moreover he was committed to the strategy of beating Hitler first. By 1943 the invasion of Normandy was

¹³ Minute, 12 July 1943, in Churchill, *Closing the Ring*, London, 1954, Appendix C.

of first importance and had to be given priority. Even in the most close-knit of families the allocation of resources makes for difficult decisions. The important point is that they should be allocated fairly and in this instance they were allocated to the long-term common good. Only after the defeat of Germany could British forces be turned against Japan and the provision of the British Pacific Fleet which steamed into Sydney Harbour in February 1945 was only a preliminary example of it. When one remembers that it consisted of four battleships, sixteen aircraft carriers, ten cruisers, forty destroyers, thirty-one sloops and frigates, twenty-nine submarines and many other assorted ships it is difficult to argue that Churchill was not interested in the Pacific war.

There is no doubt that Australian participation in the Empire Air Training Scheme shaped the entire Australian air effort in the Second World War and possibly for some time after it. The two faces of it presented here need not perhaps be totally exclusive. Historians can be disparaged because they are seldom definite, but historical analysis is not a precise science. Rather it is a continuing debate which shifts its focus over time in the search for an elusive 'truth'. We know that the Empire Air Training Scheme actually existed. What it actually meant for the Australian experience of war will become different over time and to different people.

DISCUSSION

Editor's Note: At the time of the History Conference, Professor John McCarthy was convalescing after an accident and was unable to be present to deliver his paper. Professor McCarthy's paper was delivered by Dr Alan Stephens of the Air Power Studies Centre. Dr Stephens also dealt with questions and comments arising from Professor McCarthy's paper.

Air Commodore T. Trinder: I have two observations that I'd like to turn into a question on the value of the Empire Air Training Scheme (EATS). Firstly, I don't think any attention has been paid to the post-World War II empathy that existed between the Canadian Air Force, the British Air Force, the New Zealand Air Force and the Australian Air Force, based, I would suggest, on the very great friendships that were formed in those four years amongst the people who went on to senior ranks in those Air Forces. I think it had a lot to do with the way we get on even today, that we understand each other and are quite happy to serve with each other, even though the governments of today might be very different. I think that would be worthy of some study. Secondly, the air crew who went through the EATS and who didn't stay on in the Air Forces went to all walks of life and particularly into the governments and the bureaucracies of their countries. There were friendships formed there and I suggest it would be well worth studying their significance to post-World War II policy making in the countries concerned. And I'm thinking of the vast number of, it seemed to me, ex-aircrew who rose to very senior ranks in their own countries.

Dr Alan Stephens: I think that's an important observation. I would agree with your point that the training organisation, administrative and personal contacts and benefits which flowed from the EATS perhaps haven't been given the credit they deserve. I think in the same context - and the point was raised by Professor McCarthy in his paper - the contribution which the EATS made to getting the RAAF going in World War II has not been widely recognised. The RAAF was a very small, very weak organisation in 1939. And it's very hard to conceive how, without the framework of the EATS, the system which was so effective within two or three years could have been put in place.

I think also your comment about the post-war importance of the contacts made during EATS is useful. And I think it's interesting to look at what happened to the RAAF in the period from 1945-1948. The RAAF fell on fairly difficult times as, understandably, governments and large percentages of the population didn't want to know about armed services or war. The period known as Interim Air Force was a very difficult time indeed. I think when you look at some of the early actions in Korea when the RAAF had to get itself geared up again, there were difficulties associated with that period of neglect. But I wonder how

much worse the case might have been if the foundations from the EATS still hadn't been in place. So I think they're important observations.

Mr T.L. Walkley: You made mention that the RAF authorities governed the rates of pay for our forces serving in the United Kingdom. As a point of interest, I went to the United Kingdom in 1941 as an Airframe Fitter. I was married and my rate of drawing pay was restricted to 2 shillings and eight pence per day. The balance of my 5 shillings was paid to my wife here in Australia. The point I am making is that I tried hard to become a sergeant as soon as I could and I developed a terrific skill at playing darts, otherwise you would never get a beer on that pay.

David Wilson, RAAF Historical Section: I'd like you to make a comment on the role of Air Vice-Marshal Wrigley and the RAAF Overseas Headquarters in London in relation to attempts to administer and to organise Australians serving in the EATS.

Dr Alan Stephens: The question is about what role the senior RAAF officer in London played during the war to get more Australians into the Article XV Squadrons and to get higher command positions made available to RAAF officers. A succession of high ranking Australians held the post of AOC Overseas Headquarters: Air Vice-Marshal McNamara, followed by Sir Richard Williams and then, for the greater period of the war, Air Vice-Marshal Henry Wrigley.

I'm not all that well versed on their performance, I have to say, but I've read some correspondence in archival records which indicates all three kept up a continual stream of correspondence with the Air Ministry, pushing RAAF issues. The responses I've read are fairly dismissive. I'm not too critical of the British approach there though. I think, frankly, they had other more important things on their minds. Personally, I think it would have been good if we could have had more control over our own people; if we could have had consolidated squadrons. But I've got a lot of sympathy for the British position. The RAF wanted people in squadrons doing their jobs. If you started to divide those people into Australians and Canadians and South Africans, and had to move them *en masse* as distinct national groups, the administrative and organisational problems would be very difficult. It's much easier to replace a crew with the next crew off the line from the Operational Training Unit.

So my reading of it is, McNamara, Williams and Wrigley made a pretty fair effort, but really they were backing a losing horse. It was just too much trouble for insufficient benefit. Air Marshal Evans, you wanted to comment.

Air Marshal Evans: Not on that particular question. As you've got me on my feet I may as well continue. CAS made the point that Australians

are really not aware of the contribution of the RAAF during World War II, and that's very true. It irks me to find that everyone that ever sets foot in this country knows about Gallipoli and Tobruk and we have a Prime Minister that makes sure they know about Kokoda. But very few know about the RAAF's contribution - it was quite massive really. However, it's difficult to bring it together for the reasons that you've just been through. But a couple of things we can say, and that is that of the 27 000 air crew that were trained under the EATS, 29% were killed. I don't mean damaged or bent, they were killed. Of those that served in the air war against Germany and Italy 44% were killed. Now they're fairly impressive figures and I think they're the sort of things that we can tell our fellow Australians. It gives an idea of the extent of the Air Force contribution during World War II.

Dr Alan Stephens: I endorse that strongly. I am heartened to hear that there are initiatives underway to make the Australian War Memorial a little more representative of the contribution of the three Services. I hope that's the case. I believe there's an imbalance there, and those kinds of memorials are enormously important in representing everyone's contribution.

Lieutenant Colonel D. McMillan: Dr Stephens, in the first part of Professor McCarthy's paper he refers to what he calls the problems with command and control when you allocate forces to a foreign command. Do you think there are lessons to be learned there for the ADF, particularly with a view to serving in the United Nations in the future?

Dr Alan Stephens: I think there have been big changes on how coalitions run wars, but I think Air Vice-Marshal Fisher is better placed to comment.

Air Vice-Marshal L.B. Fisher: Yes, we have to be extremely careful, but it's up to governments. Initially, the government has to decide whether it's going to participate, and it must then engage in dialogue with the other coalition partners to agree on what the end-state of that particular contingency is going to be. If it can agree on that, and then agree on the size of the force that it is going to commit to the conflict, it should leave it up to the then nominated Operational Commander - no matter what nationality he is - to get on with the job. And the Australian forces should undoubtedly then be under the operational control of that operational commander.

Air Commodore G.H. Steege: At the end of 1941, I was the Squadron Leader commanding the first of the EATS Squadrons to arrive from Australia in the Middle East. It was 450 Squadron. I had been briefed, from memory by letter, but also by Air Marshal Williams. Around that time Air Marshal Williams arrived from Australia and sent for me to go up to Cairo to see him.

He said: 'Look here, Steege. I've known you since you were a cadet at Point Cook, now you've got this first EATS Squadron and you must insist that the pilots posted to you are all Australians.'

'Yes, sir.'

So the pilots who began to drift in were all from the training schools in Rhodesia and the other parts of Africa. There was also a small number from the United Kingdom who'd flown Hurricanes, but had not been in operations. There was one sergeant pilot who was really operationally tired and shouldn't have been sent back again. He and I were the only two who had been in combat. I flew out to Western Desert Headquarters to see Air Marshal Coningham. But he was away at the time and I met Group Captain George Beamish. George Beamish was of that era when, to get into the RAF, you had to be a heavyweight boxer or international rugby star. He had his nose right across his face - and he was a very big man - he had been a rugby international. So I had a talk with him. His personality and mine were slightly different. I told him that I had my instructions from Air Marshal Williams in Australia that the pilots to come to 450 Squadron were to be all Australians who had been withdrawn from RAF Squadrons.

And I said: 'I've only got half the number at present and I don't have any backbone to the Squadron at all, other than myself and one sergeant pilot who's been in combat.'

And he said: 'Well, you'll have to take RAF, or any pilots we can get.'

So I said: 'Yes, sir, but I've had my instructions.'

Eventually, one or two began to drift in until I received a call to go up to Headquarters Middle East to see Air Marshal Coningham, who was to be there for a meeting of the Commanders of the three Services. So I went up there - I flew a new P40 that we were just being equipped with. I waited around outside this committee room at Headquarters Middle East and the staff officers came out and said Air Marshal Coningham will break off shortly and he'll come out and see you. Out came this very attractive, tall, charming man. One of the most outstanding characters I've ever met. He had a slightly different approach to George Beamish, and I told him that I had my instructions from Air Marshal Williams.

He said: 'Look, Steege, the Australians we've got on the squadrons in the desert at present are our backbone. If we start pulling those out and put them into your squadron, that's going to make a very difficult situation. We just can't do it.'

I said: 'I'm in a difficult position as a Squadron Leader because Air Marshal Williams has just been through and he's given me these firm instructions.'

And I remember him saying this very clearly; he said: 'Look, Steege, when Air Marshal Williams goes back to Australia, he'll be less than a pilot officer.'

I thought these were pretty strong terms.

I've mentioned that Air Marshal Coningham was a man of great charm, and I can understand the account of him passed to an elderly lady who's still alive in Sydney who was a great friend of Lady Coningham. Lady Coningham told my elderly friend in Sydney that when she was about to remarry - she was Lady Frank - she told a family friend - a Lord of the Realm - of her plans. His response was that RAF types were people that you had affairs with, but you didn't marry them. However, it was a most successful marriage.

However, Air Marshal Coningham had me eating out of his hands in the Middle East. He said: 'We'll see what we can do but you'll probably have to take a Canadian as the Flight Commander.'

Not long after a young Canadian arrived who was also overpressured from previous tours. And Air Marshal Williams - on his way back from Canada - came out to the airfield where we were. We lined up the pilots for him to meet. As he went down the line he just looked at this character in Canadian uniform and didn't speak to him.

He looked at me and said: 'Who's that?', and I told him.

He said: 'Yes, but what's he doing here?'

So, I explained that he was the only non-Australian in the Squadron and the best we could get under the circumstances. But Dicky Williams was not too pleased. Yet one can understand the problems of an Air Commander in the field. In fact, George Beamish, said we can't have that fellow Steege coming out here and talking politics to us. But at the same time one can appreciate the problem of Air Marshal Coningham who was an Air Commander and had a battle to fight. By pulling out the backbone, as he said, or the essential, best elements in his squadrons to meet a political requirement to fill one Australian squadron was presenting him with a very serious problem.

Dr Alan Stephens: I think you'd have that problem in spades. You're talking about a P40 squadron with one pilot per aircraft. What if you've got a Lancaster with seven crewmen? Just the sheer organisational effort of trying to keep a national identity across seventeen squadrons becomes untenable.

Mr J. Robertson: I'm a graduate of the EATS and I've flown in crews with Canadians, South Africans, Rhodesians, Scotsmen, a Lancashire coalminer, a Gloucestershire farmer and an Australian and they were bloody good fellows. I wouldn't have wished to have been with anyone else in the world when we were on operations.

The second comment I would like to make concerns administration. In 1943 and 1944 under Air Vice-Marshal Wrigley we got tremendous service from Kodak House, the Overseas Headquarters in London. I was in North Africa, Italy, Sardinia, Corsica and then back in the United Kingdom. We got our mail, we got our comforts and we got tremendous service. Not only that, when some cow went and pinched 100 quid from me when I was on leave in London, the next day, with a shaking hand, I was able to sign for another 100 quid and have a good time. By the way, the Australian Pay Book system was the best in the world.

Mr B.G. O'Connell: One of the side effects of the EATS, which a majority of the members here may not approve of, was that without that scheme and its graduates, there would have been no fleet air arm in Australia. About 70 per cent of the nucleus of the fleet air arm were, I would say, people who trained under the EATS.

FIGHTER OPERATIONS

Squadron Leader John Bennett

*What had they gone through? They had only risked being roasted alive, trapped under the blazing remains of a Spitfire, or seeing the earth surge up before them when, imprisoned in the narrow metal coffin of a cockpit with its hood jammed, you count the four, three, two seconds left to live. Three times a day, for months on end, they had hurled their poor shrinking bodies into flak, missing death by a hair's breadth, each time, until the last ...*¹

To cover the RAAF fighter operations in Europe and North Africa during the Second World War involves discussing all of the activities of Fighter Command, the 2nd Tactical Air Force and the Desert Air Force. Not only did the RAAF have five fighter squadrons serving in the European theatre (451, 452, 453, 456 and 457 Squadrons), in addition to several others in the Middle East (3, 450, 451), but virtually every RAF fighter squadron had at least one or two RAAF pilots among its number.

When war broke out on 3 September 1939, there were already some 450 Australians serving with the RAF.² With the introduction of the Empire Air Training Scheme (EATS), most RAAF aircrew who served in the Middle East and European theatres were in fact flying on RAF squadrons. Those RAAF aircrew who served on RAF squadrons called themselves the 'odd bods and sods' (those who remain gather today as the 'Odd Bods Association'), and it is the operations flown by these men and those of the RAAF fighter squadrons that this paper will address.

Preparations

The euphoria of the post-1918 era in Britain had brought the assumption that the Empire would not likely be involved in any major war for the ensuing ten years. This "Ten Years' Rule" became financially convenient for successive governments to avoid the cost of any defence preparedness. Indeed, it was felt the only future aggressor would be France - the only major European country still capable of maintaining strong military and naval forces. The defence of the United Kingdom was considered completely safe in the hands of the Army, and in Britain's traditional first-line of defence, the Royal Navy.

¹ P. Clostermann, *The Big Show*, Vanguard, London, 1953, pp. 165-6.

² D. Newton, *A Few of the Few*, AWM, Canberra, 1990, p. 5.

By 1934, it had been realised that the ultimate potential enemy would be Nazi Germany. The General Staff believed that Germany might be ready for a major conflict by 1938, or at the latest 1939. Intelligence had already gathered ample evidence of Hitler's secret air force, the Luftwaffe - built in open defiance of the restrictive Versailles Treaty - which, by the end of 1934, had at least 22 first-line squadrons of bombers and fighters.³

The resulting preparations for expansion of the RAF in 1935 led to several significant issues. These involved a reorganisation for the expanded service, the acquisition of new aircraft with the need for increased aircraft production, and, parallel to this, was the development of radar. In addition, a factor which was to have immense impact on Australia was the provision of personnel.

Organisation

Since 1925, the major RAF command had been the Air Defence of Great Britain (ADGB), which encompassed all bombers, fighters and air defences (anti-aircraft guns and searchlights). The foundation for winning the Battle of Britain was laid in 1934 when the threat of Germany was taken seriously and the expansion of the RAF was approved. The following year, plans were put into effect to build an efficient air defence system around radar detection, the observer corps network, and centres for the control of fighters under one headquarters at Bentley Priory.

The 1935 expansion program presented difficulties under the ADGB structure, and the RAF was drastically re-organised with the creation in 1936 of four new commands formed on a functional basis rather than regional: Fighter, Bomber, Coastal and Training Commands. At the time of Dunkirk in 1940, there were three fighter groups - Nos. 11, 12 and 13. By the opening of the Battle of Britain, No. 10 Group was operational in the south-west, and two others (No. 9 in north-west England and No. 14 in northern Scotland) were nearing completion and approaching an operational state.

Fighters and Aircraft Production

Up until the second half of the 1930s, RAF fighters were open-cockpit biplanes, little advanced in design from their predecessors of 1918, armed with twin guns of rifle calibre (Bulldog, Demon, Gauntlet). Immediate future replacements envisaged were also biplanes (Gladiator, Fury II). Air Ministry Specification F5/34, issued in January 1935, had called for a high speed monoplane fighter, capable of destroying a bomber with just two seconds' gunfire. This required four or six machine guns, but was later raised to eight wing mounted .303 guns. The AOC-in-C ADGB, ACM

³ C. Bowyer, *Fighter Command*, Sphere, London, 1981, p. 7.

Sir Robert Brooke-Popham, who you will know from his role in the Singapore debacle, expressed the view '...eight guns was going a bit too far, I should have been content with four'.⁴ Brooke-Popham further showed his appreciation of fighter development by stating the guns should be fitted to the cockpit area, and expressed his opposition to enclosed cockpits. It is not recorded whether he was against retractable undercarriage.

Fortunately these views were overridden which led to the Hurricane and the Spitfire, high speed designs which had benefited from the Schneider Trophy air races of the early thirties. Both were armed with eight wing-mounted Browning machine guns, each supplied with approximately 300 rounds of ammunition - sufficient for 15 seconds firing. These fighters were able to enter RAF service over the second half of 1938.

In September 1938, to oppose the Luftwaffe, Fighter Command could only muster 93 of the new eight-gun fighters. All the remainder of its 666 aircraft were outdated biplanes.⁵ Aircraft output rose steadily from 158 aircraft per month in April 1938, until nearly 800 per month at the outbreak of war, which equalled that of the Germans.⁶ 1938 and 1939 were to provide a breathing space, as even these front line Hurricanes and Spitfires had no constant-speed propellers, no bullet-proof windscreens, no armour plate, no gun heating, and no explosive ammunition. Furthermore, the radar chain was incomplete, with only five radar stations working out of the 20 required. The RAF was far from ready to go to war: the respite offered by the Munich agreement allowed the time to build up and modernise the RAF.

Lord Beaverbrook was appointed by Churchill in May 1940 as Minister of Aircraft Production, and immediately instituted an innovative aircraft production system, with fighters as the priority. This enabled the RAF squadrons to maintain their strength over the forthcoming difficult months.⁷ This rate of production of fighters was now twice that of the Germans.

⁴ Bowyer, *op cit.*, p. 18.

⁵ D. Richards, *Royal Air Force 1939-1945*, Vol I, HMSO, London, 1953, p. 31.

⁶ Richards, *op cit.*, p. 17.

⁷ Month Planned	Fighter Production	Actual Fighter Production
Feb 1940	171	141
Mar 1940	203	177
Apr 1940	231	256
May 1940	261	325
Jun 1940	292	446
Jul 1940	329	496
Aug 1940	282	476

Radar

For the fighters to intercept any attacking force, information was gained from two sources - the new radar stations covering an area outside the British Isles, and the Observer Corps, which would trace the passage of aircraft over land.

In 1935, the Radio Department of the National Physical Laboratory supplied details of the general principles of radio direction finding (RDF), and how an RDF chain could be established for operational use for the RAF. The Air Member for Research and Development, was Air Marshal Sir Hugh Dowding who not only supported this work, but in 1936 enthusiastically took the plans to his new post as AOC-in-C Fighter Command. He described this development as 'a discovery of the highest importance' and as a 'tremendous leap forward'.⁸ RDF - which became known as radar (radio direction and ranging) - was able to provide information on the incoming raids to allow interception by defending fighters. Under Dowding, a chain of twenty RDF stations, with their 80-metre high masts, was commissioned, which provided the nucleus of a much longer chain of units stretching along England's southern and eastern coastlines, all operational by early 1940.

The 'Chain Home' radar towers along England's south-east coast were the eyes of the whole defensive system during the Battle of Britain. They could detect the approach of enemy raiders when they were still 60 miles or more away. RDF could also determine direction and speed, but could only approximate force strength and height.

Dowding's foresight and policies were to have a huge bearing upon the state of Britain's air defences by the outbreak of war in 1939. Radar enabled the RAF to **concentrate its force** into a comparatively small area. However, the radars were only effective over the sea, and as raids crossed the coast they were tracked visually by the Observer Corps. Churchill was to describe this handover from radar to the Observer Corps as 'a transition from the middle of the twentieth century to the early Stone Age'.⁹

Personnel

Personnel shortages were initially to be addressed by an effective use of Reserve forces. The RAF Volunteer Reserve had commenced in April 1937, and by the outbreak of war, 5 000 young men of the Volunteer Reserve had undergone, or were undergoing, training as pilots. However, this was far from enough. The vast expansion of the RAF was to rely on manpower from the Commonwealth, or the Dominions.

⁸ Bowyer, *op cit.*, p. 88.

⁹ AVM J.E. Johnson, *The Story of Air Fighting*, Hutchinson, London, 1985, p. 155.

On 17 December 1939, the EATS agreement was signed in Ottawa to enable the training of Dominion aircrew as a common enterprise of **economy of effort**. Under the terms of the agreement, the United Kingdom would supply nearly all the aircraft and a nucleus of skilled men, the Dominions all other requirements. Australia agreed to supply 36 per cent of the Dominions' EATS aircrew.¹⁰ By mid-1942, when the EATS organisation would reach full size, it was to be capable of producing no less than 11 000 pilots and 17 000 other aircrew each year.¹¹

Another training problem addressed was that of the operational training of aircrew. Operational Training Units (OTUs), large organisations of up to 70 aircraft on a base, were formed from 1940 to provide the final stages of aircrew training on the operational types they would fly on squadrons. This system of training was to be adopted throughout all the operational Commands, and proved the key to efficiency in the air.¹²

EUROPE 1939-1940

From the beginning of the *Blitzkrieg* through the Low Countries and France in May 1940, until the British withdrawal at Dunkirk nearly a month later, the RAF lost no less than 432 Hurricanes and Spitfires.¹³ Dowding's fear of being bled of fighters was coming true. One Australian Hurricane pilot lost during this 'Phoney War' was Flying Officer Leslie Clisby, of No. 1 Squadron RAF, who is believed to have shot down at least 16 German aircraft before being killed on 15 May 1940.¹⁴ The many pilots killed in action were the most grievous losses. These men had become veterans in mere weeks of action, and their experience was now lost forever to Fighter Command's squadrons.

However, the Luftwaffe's mission at Dunkirk to prevent the evacuation of British and French troops had failed. Bad weather, lack of forward airfields and poor training in pin-point bombing had denied its success. During the nine days of the British evacuation, the Luftwaffe could only operate in strength for 2½ days, and that was in the face of stout RAF fighter cover, now able to operate from bases which were relatively close.

The Battle of Britain is regarded to have begun on 10 July 1940. The real attack - *Adler-tag* or Eagle Day - had been fixed by Goering for 13 August.

¹⁰ J. McCarthy, *A Last Call of Empire*, AWM, Canberra, 1988, p. 21.

¹¹ Richards, *op. cit.*, p. 73.

¹² Richards, *op. cit.*, p. 72.

¹³ Richards, *op. cit.*, p. 145.

¹⁴ Newton, *op. cit.*, p. 10.

The Luftwaffe's objective was to subdue Britain by air power alone. The primary target was the RAF, driving it out of the skies as rapidly as possible, and destroying its ground organisation of airfields and coastal radar stations, and the industry that fed it. The goal was therefore clear - the subjugation of the RAF was the first and foremost aim, and with that the elimination of Fighter Command. The Germans planned that a few hard blows over three consecutive days would so reduce the RAF that control of the air - the precursor for subsequent operations - would be won. Weather prevented the main fighter bases being attacked in these first days, and mistakes - poor intelligence and navigation errors on Eagle Day led to wrong airfields being attacked. In addition, continuous attacks were not coordinated, which allowed the defending Spitfires and Hurricanes to refuel and re-arm. Any German crew shot down was over hostile territory, unlike Fighter Command pilots who baled out were hopefully available to fight again. Moreover, the Germans had grossly underestimated Britain's air strength.

From the Luftwaffe's perspective, the battle had been lost in 1938 because the German participants believed it would never happen. Production of a long-range, heavy, four-engined bomber was not contemplated, preferring instead to concentrate resources to the Junker Ju 88 dive bomber. This strategy of no heavy bomber had proved correct for the *Blitzkrieg* through the low countries, but now in the summer of 1940 the Luftwaffe faced quite a different campaign. Suddenly the gap in its equipment was revealed. The Ju 88 proved to be a disappointment, and this and the other existing bombers proved slow, vulnerable and too light.

37 Australians flew in the Battle of Britain.¹⁵ One was Flight Lieutenant Pat Hughes, who had joined No. 234 Squadron when it formed in November 1939. He had destroyed 15 enemy aircraft by the time of his death on 7 September 1940 - eight of these in an eight day period in August. On his last engagement, intercepting a large formation between London and Brighton, he shot down a Dornier 17, only to fly into the wreckage and be brought down.

On 7 September, the Luftwaffe was ordered to switch its target to London, to use the capital as bait and lure Fighter Command to battle. This was the fundamental German mistake. With no attacks on its airfields, the RAF was given time to replenish its fighter defences. Dowding was able to repair his damaged airfields and reorganise and resupply his mauled squadrons. In just a week, No. 11 Group was returned to full strength. Hitler's vengeance attacks on the British capital probably saved Fighter Command from near extinction.

On 15 September - which the RAF remembers as Battle of Britain Day - the Luftwaffe found that the fighter defences appeared stronger than ever (the RAF had committed all its reserves). The Germans were being

¹⁵ Newton, *op cit.*, p. 284.

hampered by the close escort tactics of their fighters, which tied them to the slow bombers, and unable to exploit their flying attributes were in a poor position to repel RAF fighters.

By October 1940, the Luftwaffe had been defeated in its attempts to bomb Britain out of the war by day, and turned to night raids. London was subsequently attacked by Luftwaffe bomber aircraft numbering between 100 and 300 at a time. The darkness protected them - and bestowed control of the air that they never achieved by day.

Between 1 August and 1 October 1940, the two Luftwaffe Air Fleets engaged in operations against Britain lost 500 aircraft. However, on average, the RAF lost two fighters for every German one.¹⁶ Some historians therefore query whether the Battle of Britain was indeed an RAF victory. Perhaps it is on the face value of these statistics they argue their case. But it is undeniable at the strategic level that the victory was indeed Fighter Command's, as 'Operation Sealion' - the proposed German invasion of Britain - never eventuated because German control of the air over south-east England had never been achieved. The Luftwaffe had tried to prove for the first time the dictum of the Italian theorist Douhet, that future wars could be won by strategic air attacks alone. The Luftwaffe had lacked the power to do so. *The RAF had met its 'finest hour'.*

The German failure had been as a result of:

- Hitler's belief, even as late as 1938, that there would be no war with Britain, and as a consequence, German had not developed a heavy four engined-bomber, and their bombers had proved too light and vulnerable, with a limited range and inadequate bomb load.
- An inadequate number of Luftwaffe fighters to engage the RAF in open combat as well as providing close escort for bombers.
- **Surprise** was impossible by the forewarning of the unbroken chain of radar stations, and the astute use of *ground control* enabled the RAF to **concentrate its force**, which enabled **economy of effort** on the part of Fighter Command. (Even after the battle, Germany's leaders had still not fully realised the significance of radar in air warfare.)
- The number of RAF fighters did not reduce during the battle. Production was more than double that of Germany.

¹⁶ Official RAF figures for Aug 40 give 390 Spitfires/Hurricanes destroyed, 197 badly damaged. *Luftwaffe* official figures give 231 German fighters lost, 80 damaged. These figures include losses on the ground.) C. Bekker, *The Luftwaffe War Diaries*, MacDonald, London, 1966, p. 170. However, it must be remembered that RAF fighters were going for the bombers, not the fighters.

- Germany had not **maintained its selected aim**, and changed from one objective to another.
- Day raids were abandoned in autumn 1940 due to insupportable losses, leading to night attacks with the resultant lessening of success against targets of military significance.
- Effects of bombing raids at night were greatly overestimated, and failed to break the **morale** of the populace.
- The decision to open an eastern front, taken in July 1940, meant the west no longer had priority in German plans, and when the Germans halted their offensive in spring 1941, the main strength of the Luftwaffe was transferred east.

It can be seen that some of the failure of the Luftwaffe lay in its leadership. The long-range strategic bomber had not been available. In accordance with Douhet's air offensive theories, the vital economic centres of the enemy far behind his front line must be destroyed. If this had been done, Britain would not have been able to continue the war.¹⁷

OFFENSIVE ACTION 1941-1942

From December 1940, RAF fighters began offensive sweeps over France, searching out targets of opportunity. These *Rhubarb* sorties, flown if there was sufficient cloud cover, were designed for low-level fighters, singly or in pairs, to seek out targets of military importance and strafe them. Such attacks kept hitting at the enemy's air defence system, with constant forays against a wide front with no obvious targets, in poor weather.

The following month, an extension of these activities commenced - the *Circus*, with the aim of drawing German fighters up into combat in circumstances favourable to the RAF. This coincided with German plans for the invasion of Russia - 'Operation Barbarossa' - which was to reduce Luftwaffe fighter strength in Pas de Calais to only two groups. Thus, from the beginning of 1941, the role of the RAF changed. It was no longer primarily defensive. Fighter Command went over to **offensive action**, and operations tended to conform to the following categories:

- *Circus* Fighter-escorted light daylight bombing attacks against short-range or fringe targets (coastal targets in France) to lure German fighters to battle, and maintain a strong enemy fighter force on the particular front concerned

¹⁷ K. Bartz, *Swastika in the Air*, Kimber, London, 1956, p. 76.

- *Rhubarb* Small-scale fighter or fighter-bomber attacks on ground targets of opportunity
- *Ramrod* Operations similar to a Circus but with a primary aim of destruction of a target
- *Roadstead* Operations against ships by fighters or bombers escorted by fighters, to close the Channel to enemy shipping
- *Rodeo* Fighter sweeps over enemy territory

Later offensive operations included:

- *Rover* Armed reconnaissance against chance targets behind enemy lines
- *Ranger* Freelance intrusions over enemy territory with the aim of wearing down the enemy fighter force
- *Intruder* As for *Rangers*, directed against Luftwaffe airfields

In addition, the traditional RAF tactics of aerial fighting were re-assessed. The pre-war rigidly-held Vic formations of three aircraft were abandoned. Fighter Command adapted the Luftwaffe fighting pair, with the No. 1 (leader) being protected at all time by his No. 2 (wingman). No. 1 was the killing partner, No. 2 kept his leader's tail clear. Two such pairs comprised a 'finger four', which offered extreme flexibility and mutual protection. The other significant innovation for offensive action was the adaptation of the 'Big Wing' theory, expounded by 12 Group during the defence of 1940. This involved four or five squadrons being grouped, usually from the same airfield, and led by a Wing Leader.

EATS Squadrons

With the planned expansion of Fighter Command, three RAAF fighter squadrons were formed during 1941.

452 Squadron was formed on 8 April 1941 at Kirton-in-Lindsay, Lincolnshire, with Spitfire Mk Is under an Australian veteran of the Battle of Britain, Squadron Leader Bob Bungey, and began operations the following month in 12 Group. In July 1941, 452 moved south to Kenley in No. 11 Group equipped with Spitfire Vs, and flew *Circuses* until November 1941. Then, as bad weather made the coordination between bombers and fighters more difficult, 452 commenced flying *Ramrod* and *Roadstead* operations. Among its ranks, 452 boasted pilots like the Irishman Paddy Finucane, the legendary Bluey Truscott, Bardy Wawn, 'Throttle' Thorold-Smith and Keith

Chisholm. These pilots enabled 452 to top Fighter Command's score sheet for four months in a row over August-November 1941.¹⁸

457 Squadron was the second RAAF Spitfire unit, formed 16 June 1941 at Baginton, Warwickshire. Becoming operational in August, 457 remained at the 9 Group base at Jurby, Isle of Man, until March 1942, and then finally moved south to 11 Group to replace 452 at Redhill, in Surrey. The weather was now improving sufficiently to allow Fighter Command to resume a full offensive. 457 in its first full month of operations in April 1942, with the Spitfire V, flew 376 sorties, all except 45 were flights over enemy territory.

By the summer of 1941, Fighter Command had been built up to a considerable strength. As the RAF official history states:

...a force of 75 day-fighter squadrons was retained in this country throughout the latter part of 1941. Whether this was a wise allocation of resources at a time when there were only 34 fighter squadrons to sustain our cause in the whole of the Middle and Far East is, perhaps, an open question.¹⁹

In addition to the offensive action taken by the day fighter squadrons in 1941, great changes had developed in the night war. The introduction of an effective Air Intercept (AI) radar - AI mark IV - coupled with a robust and capable airframe - the Beaufighter. This formula was to be repeated in following years by the Mosquito night fighter with AI marks VIII and X. It was in the development of the closely-guarded British AI radars in the centimetric wavelengths that gained the advantage in the night battle.

456 Squadron, the sole RAAF night fighter unit, was formed at Valley, on the Welsh island of Anglesea, on 30 June 1941 under another Australian Battle of Britain veteran, Squadron Leader Gordon Olive. Initially tasked with home defence, 456 Squadron was later to join the other RAF night fighter units with *Intruder* operations, patrolling over German-occupied airfields in France in the hope of shooting down returning bombers, or at least, generally disrupting the enemy's offensive air operations. Other offensive operations carried out by 456 included solo *Ranger* sorties over occupied territory, and *Instep* patrols in the Bay of Biscay against enemy harassment of Coastal Command.

The increasing strength of Fighter Command's daylight offensive did suffer high casualties. The operations involved complex planning and intricate co-ordination with the bombers acting as bait. Moreover, while the Spitfire and Hurricane had provided an adequate defence barrier during 1940, the 1941 offensive over France and the Low

¹⁸ F. Johnson, *RAAF Over Europe*, Eyre & Spottiswoode, London, 1946, pp. 30-1.

¹⁹ Richards, *op. cit.*, p. 387.

Countries, required greatly improved performance from these fighters. In Germany, the principal fighter, the Messerschmitt 109, had been improved to the 109F version, which maintained a slight edge over the latest Mark V Spitfire, and completely outclassed the Hurricane. The RAF recognised the relatively inferior performance of the Hurricane at high altitude, and henceforth used the type as a low-level straffer and light bomber for the rest of the war. During six weeks over June-July 1941, in 46 Circus operations, 123 fighter pilots were declared 'Missing'.²⁰

As the winter of 1941-42 approached, the enemy's new Focke-Wulf Fw 190 was proving much more than a match for Fighter Command's Spitfire Vb, the universal fighter of the time. The formidable Fw 190, had superiority in speed, rate of climb, and heavy armament, and resulted in the improved development of the Spitfire - the mark IX.

1942 saw Fighter Command with sufficient squadrons, aircraft and trained pilots to conduct its *Ramrod* operations, and with the Spitfire IX, had now real supremacy in the control of the western air. This enabled both 452 and 457 Squadrons to be withdrawn to Australia in May 1942, and their place was taken by another RAAF EATS squadron.

453 Squadron, formed in June 1942 at Drem, Scotland, moved into the front line at Hornchurch in September 1942 with the Spitfire IX. Being the only RAAF day fighter squadron in Fighter Command, 453 could not possibly absorb the abundance of Australian fighter pilots, and the available talent of 240 RAAF pilots in 1942 were scattered over 51 day fighter squadrons.²¹

Typical of this talent spread across the RAF was Squadron Leader Hugo Armstrong, an RAAF EATS pilot from Perth, who served on 257, 129 and 72 Squadrons RAF. Awarded the DFC, and shooting down nine German aircraft, Armstrong commanded No. 611 Squadron over 1942-43, before being killed in action on 5 February 1943.

Dieppe

The most notable action conducted by Fighter Command during 1942 was the Dieppe raid of 19 August 1942. There were two motives behind this action. Firstly, in preparation for any invasion, the Allies needed to try a large scale landing with fighter cover. Secondly, by seizing an important objective on enemy territory, all Luftwaffe forces in Northern

²⁰ Bowyere, *op cit.*, pp. 102-3.

²¹ J. Herington, *Air War Against Germany and Italy*, RAAF History in the War of 1939-1945 Vol III, AWM, Canberra, 1962, p. 337.

France and the Low Countries would be lured to the area. Control of the air would be in the hands of 56 RAF fighter squadrons.

The raid was unsuccessful in that British and Canadian troops, in the face of strong defences, failed to capture the commanding points of the terrain. However, the attempt did induce a great air battle. The RAF flew 2 339 sorties over Dieppe, with complete air superiority over the battle area so that the land forces were not seriously impeded by German aircraft, nor the landing-ship fleet seriously attacked. In spite of an almost continuous mammoth dog-fight mounted by the Luftwaffe, the air umbrella held. Dieppe was a fruitful exercise in joint **co-operation** and provided lessons for the successful landings later in North Africa, Sicily and Normandy.

MIDDLE EAST 1940-1943

Fighter operations in the Middle East were of a different nature. Whereas Fighter Command was a static organisation, the Desert Air Force had a mobile character. Indeed, the war in the western desert was truly of a see-saw nature, with neither side being able to exploit their victories due to disorganisation and lack of logistics and communications (that principle of war known as **administration**). These continual ground offensives led to continuous efforts being made to improve direct air support - the air action which had an immediate effect on the operations of ground forces in battle. It is for this close support that desert fighter operations are best remembered.

3 Squadron was the first RAAF unit to the Middle East, arriving in Egypt late in August 1940, and equipping with Lysander, Gladiator and Gauntlet aircraft for the army cooperation role. By the end of 1940, the Italian army was in full retreat, and the Regia Aeronautica was almost a spent force. In January 1941, No. 3 Squadron began to re-equip with Hurricanes, and as enemy forces advanced in March 1941, the Squadron provided air cover for the retreating army (which included the Australian 6th Division). During its first tour as an army cooperation unit, 3 Squadron claimed 47 enemy aircraft destroyed, for a cost of 12 aircraft and six pilots.²²

In May 1941, 3 Squadron moved to Palestine as a fighter squadron to re-equip with Tomahawks. The Syrian campaign against the Vichy French opened for 3 Squadron on 8 June 1941, in support of the Australian 7th Division. Operations in Syria ended in the following month, and although the fighting had been of minor importance, for the first time Australian army, naval and air units had been engaged, and an Australian commander had directed operations.

²² Herington, Vol. III, p. 74.

3 Squadron returned to Libya in September 1941 for operations against the Germans, and re-equipped with Kittyhawks in December. From April 1942, 3 Squadron operated as part of 239 Wing and converted to fighter-bomber operations, while maintaining the **flexibility** of both air-to-air and ground attack roles according to the tactical needs at the time. A notable feat occurred on 28 October 1942, when 3 Squadron achieved its 200th kill, a record for a Middle East squadron.²³

450 Squadron's ground personnel arrived in Egypt from Australia in May 1941 with no aircrew. Initially servicing aircraft for 260 Squadron RAF, as the joint 260/450 Squadron with Hurricanes against the Vichy in Syria, the result was that 450 Squadron RAAF did not become fully operational until February 1942. Ground staff for both 450 and 451 Squadrons had arrived promptly from Australia on the tight EATS schedule, but with Libya and Greece lost, and Crete threatened, the RAF aircraft to equip the new RAAF squadrons were needed elsewhere. As a result, the first RAAF EATS fighter pilots to reach the theatre in May 1941 were posted to the newly formed 250 Squadron RAF.

At this stage, there was also a determined policy of the Australian Air Board to keep apart permanent personnel from EATS airmen, insisting that there was to be no postings between permanent and *Article XV* squadrons, except as a temporary measure. Even when Air Marshal Tedder (AOC RAF Middle East) advised on 13 June that he was unable to form 450 and 451 Squadrons, the RAAF Air Board remained adamant about not mixing aircrew. This prohibition was not lifted until late 1942. This was one of the problems of the integration of EATS personnel.

Another had been the Australian desire that 'RAAF personnel should be grouped together so far as possible' had never been formalised with the RAF.²⁴ There was confusion whether the *Article XV* squadrons were RAAF or RAF units, however, the Australian members of such units were, in fact, lost by the RAAF and were completely under the operational and administrative control of the RAF.

450 Squadron - the 'Desert Harassers' - was finally equipped with the Kittyhawk and joined 3 Squadron as part of 239 Wing. Fighting through the desert campaign through 1942, Allied fighters achieved the air supremacy to enable Montgomery's final victorious offensive from El Alamein. By the time 450 Squadron moved to Tripoli with the capitulation of the German forces in May 1943, the Allies had established control of the air over the Mediterranean.

²³ Herington, Vol. III, p. 371.

²⁴ Herington, Vol. III, p. 119.

451 Squadron began operations in July 1941 as an army cooperation unit involved in tactical reconnaissance (Tac/R). Withdrawn from Western Desert in February 1942 to Palestine, 451 Squadron did not return to Egypt until January 1943, after spending twelve months of unhappy existence as an unwanted army-coop squadron in Syria. Spirits were lifted in June 1943, as 451 Squadron became a fighter squadron. However, the squadron was to be retained in Egypt in the air defence of the Delta, while the other RAAF squadrons went on to the conquest of Sicily. No. 451 Squadron, although re-equipping with Spitfires, was to remain inactive for the remainder of 1943.

The Desert Air Force played a vital part in winning the freedom of the skies, preserving the 8th Army in retreat, and speeding it in advance, by establishing a system of effective air support, which was mobile and in contact by good communications. The Germans had not developed the stripped-for-action mobility of the RAF squadrons, and by 1942, had been completely surpassed in its own special field of tactical support. In addition, Allied fighters had established a high degree of superiority over the forward area. It was in Africa that the Allies learnt how to fight a war of **cooperation** - one in which action by land, air and sea was closely integrated.

After victory in Africa, the next step was the taking of Sicily ('Operation Husky'). On the opening day of the invasion, 10 July 1943, 1 092 fighter sorties were flown to provide air cover, and the Luftwaffe was virtually powerless to interfere with the landings. By the following day, RAF fighters were operating from Sicily.

In Sicily, the Axis powers were beaten, after having every advantage, except one - air superiority. The overwhelming air superiority of the Allies, which included 3 and 450 Squadrons, enabled Sicily to be taken in the short space of 38 days. However, Germany was able to withdraw the bulk of its forces to Italy. Remaining were the shattered hulks of 1 100 enemy aircraft, strewn over Sicilian airfields. The Allies lost fewer than 400 aircraft; the Axis lost 1 850.²⁵ The conquest of Sicily ensured safe passage throughout the Mediterranean, and a stepping stone to Europe had been captured.

The Luftwaffe was now in no position to offer serious resistance to the invasion of Italy - it had been paralysed by the Allied air forces. The invasion began at Calabria, on the toe of Italy, on 3 September 1943. After hard fighting at Salerno during 'Operation Avalanche', by 15 September the Allied hold on Italy could be considered firm. Amphibious landings, on coasts held by a resolute and well-prepared enemy, had been made possible by air superiority. The following day,

²⁵ D. Richards and H. St. G. Saunders, *Royal Air Force 1939-1945*, Vol. II, HMSO, London, 1954, p. 323.

3 Squadron had landed near Taranto, and became the first full Allied squadron to begin operations from a Continental airfield.

A tactic developed for joint operations in the invasion of Italy during the autumn of 1943 was the 'Cab Rank' - a method of sending fighter bombers to immediate targets. This system of operating fighter-bombers involved maintaining patrols over predetermined areas, then directing them by radio from mobile observation posts against specific targets. The advantage was that targets could be attacked within minutes, the disadvantage was that a large number of aircraft needed to be kept in operation. Operations were controlled by mobile observation posts, located with the forward troops at Brigade Headquarters, in direct contact with airborne fighters on call for close support. Targets were designated by a simple grid overlay on a photographic map. The results were to be seen over Normandy a year later. (This method of on-call tasking was the precursor to Forward Air Control by ground controllers in the Malayan Emergency, and airborne controllers in Vietnam.)

EUROPE 1943-1944

Over 1942, Fighter Command had flown 43 000 offensive sorties, for the loss of 915 aircraft, in addition to 73 000 defensive patrols.²⁶ The new year, 1943, was to prove operationally similar to 1942, however, with much of the Allied resources being devoted to North Africa, a major invasion of the Continent could not be contemplated until 1944. With the US Eighth Air Force now in daylight raids, Fighter Command's *Ramrod* commitments increased enormously over 1943. One such low-level *Ramrod* was recorded by a Hurricane-bomber pilot:

The target was a batch of concrete blockhouses near the French coast which, we were told, housed a crack German infantry defence outfit. The Spits flew very high above us, almost out of sight, while we, with our Hurricanes overloaded with two 500 pound HE bombs under the groaning wings, kept as low as possible above the waves in order to stay under any German radar. As we approached land-fall, the leader wagged his wings, which was our pre-arranged signal to start climbing so that we could actually bomb in a dive. At that moment the flak started coming up from somewhere on the coast in bright necklaces of shiny beads which, as they neared you, suddenly whipped by in silver-grey streaks. Within seconds the sky was filled with a criss-cross of tracer shells and red-hearted black ugly bursts from the heavier guns below. The Hurricane I was following - an Australian

²⁶ Richards & Saunders, *op cit.*, p. 145.

pilot also new to ops - started his dive and I eased my nose down, took a deep breath, and prepared to follow him into that Dante's inferno of muck being thrown up at us head-on. As the earth got larger in my windscreen, the Aussie up front suddenly jumped sideways - the flak had found him and sliced his port wing clean off! He hadn't a hope in hell of getting out, and his Hurricane fell in a crazy parabola of spins and fluttering, lop-sided, until it hit the deck and his bombs exploded.²⁷

As no date was given for this operation, the identity of this Australian pilot remains unknown. Maybe it is best that we remember him as the 'Unknown Airman'.

By the beginning of 1943, Fighter Command had 102 operational squadrons, with their Spitfire IXs and Typhoons being able to match the Fw 190, with radar stations in Kent able to provide warning to Allied fighters over the Continent. However, only one RAAF day fighter squadron was serving in Fighter Command, No. 453. (465 Squadron was to have formed with Typhoons, but with a surplus of fighter units, 465 Squadron was not required and never formed.) 453 Squadron flew *Circus*, *Ramrod* and *Rodeo* missions throughout 1943, and a new type of **offensive action** commenced at the end of 1943 against 'no-ball' targets.

'No-ball' targets were sites under construction that were believed to be part of the preparations for the new German reprisal weapons, which eventually turned out to be V1 (the *Vergeltungswaffe*, or reprisal weapons). These launching and storage sites were not very large, about 40 metres long, well camouflaged in deep woods, and very heavily defended by AA fire. Any attacking fighters had to fly straight into these death traps. Sited along the coast from Ostend to Le Havre, and extending inland to Abbeville, the area became known as the 'rocket coast'.

A typical strike was carried out on 20 December 1943, when Hurricanes of 184 Squadron RAF attacked a 'no-ball' site:

The Hurricanes began their dive into a wall of steel and explosive defensive fire around the target. The first Hurricane pilot let go his salvo of rockets, was hit and killed instantly. The next was mown down by a burst of 37 mm. The tail came off, the machine crashed into a wood, scything down the trees, scattering jets of burning petrol. The next two Hurricanes attacked simultaneously. One, struck by a direct hit, exploded, and was soon nothing more than a mass of flame, dragging a long trail of black smoke. By a miracle, Bush the Australian was luckier; he succeeded not only in placing his eight rockets in the control room but even in

²⁷ Bowyer, *op cit.*, p. 129.

extricating himself from the barrage of flak, in spite of an enormous gash in his fuselage, not to mention two bullets in the thigh and one in the side.²⁸

By December 1943, 57 per cent of the 75 known V1 sites had been heavily attacked. This campaign, sometimes involving 1 300 aircraft a day, was successful in delaying the V1 program. One such attack, on 14 April 1944, was flown by the Detling Wing, on a 'no-ball' site at Ligercourt, beside the forest of Crecy. Within a radius of two kilometres around the target there were nine 88 mm guns, together with twenty-four 20 and 37 mm. 602 Squadron RAF attacked first, followed by 453 Squadron, while 132 Squadron RAF provided top cover. As the flak concentrated on the Australian aircraft, there was a flash and a Spitfire turned over, leaving a trail of burning glycol, and crashed into the target:

It was Bob Yarra, brother of the famous 'Slim' Yarra of Malta, also brought down by flak the year before. Bob had got a direct hit from a 37 mm between the radiators as he was diving at well over 400 mph. The two wings of his Spitfire had immediately folded up and come off, tearing off the tailplane on the way and splattering with debris the aircraft behind, which had to take violent avoiding action. Three seconds later the plane crashed into the ground and exploded. Not the ghost of a chance of baling out.²⁹

On 15 November 1943, Fighter Command had been split into two different formations, with two distinctly different missions. Most of the Command was dedicated to the RAF's 2nd Tactical Air Force (2nd TAF), which with the US 9th Air Force, provided the tactical air assets of the Allied Expeditionary Air Force for the invasion of Europe. Home air defence over the United Kingdom became the role of Air Defence of Great Britain (ADGB). A dozen fighter squadrons of 2nd TAF were selected to support the invasion in close **co-operation** with the army, and were submitted to an intensive process of preparation in ground level attack, machine-gunning of tanks, tactical reconnaissance, and dive-bombing. Finally these units had been sent to airfields to complete their training, and for four months the pilots lived under canvas, learning to refuel, re-arm and camouflage their aircraft and defend them, Tommy-gun in hand. One of these units leading this type of Commando life was the RAAF's 453 Squadron.

Intense **security** had surrounded the build up of invasion forces in southern England over the first half of 1944. Fighter cover for the assault amounted to 171 fighter and fighter-bomber squadrons, which was more

²⁸ Clostermann, *op. cit.*, p. 76.

²⁹ Clostermann, *op. cit.*, p. 106-7.

than sufficient to deal with any German attempt to interfere with the invasion from the air.³⁰ It was not considered that by this stage the Luftwaffe could launch any serious offensive against southern England.

On 'D-Day', 6 June 1944, the Allies had complete control of the air, and flew 6 700 sorties. The Germans could only mount 300. The Luftwaffe's Air Fleet 3 had only 300 aircraft available, of which only 100 were fighters. The Allies had nearly 13 000 aircraft supporting the invasion, of which 5 400 were fighters.³¹ In fact, the battle in the air had been won before that on the ground had begun. Although the RAAF had only 453 Squadron involved in providing fighter cover for the invasion, there were over 200 RAAF pilots in the other RAF fighter squadrons of ADGB and 2nd TAF,³² sufficient to have manned a further eight RAAF fighter squadrons.

To provide close air support, the 'cab rank' system developed by the Desert Air Force in Italy, was employed to attack targets pointed out by the army. Targets would be chosen by a fighter controller, riding in one of the leading Allied tanks or armoured cars, and by VHF radio, call in the next fighters from the 'cab rank' stack. The system of army ground liaison officers briefing aircrew before take-off, and air force forward controllers calling in the strikes as required, was brought to perfection in Normandy.

453 Squadron was assigned to low-level beachhead cover, protecting the five invasion beaches and all Allied shipping. The week after the invasion, No. 453, with other elements of 2nd TAF, began to operate from advanced landing grounds in Normandy. The standard strip was 'one runway 1 200 yards long sufficiently smooth to enable a light car to run along it at thirty miles an hour without undue bumping'.³³ During June and July, these primitive and dusty strips were the bases for 453's operations, as the Australians provided close support and defensive patrols for the Allied armies as they fought to break out of Normandy. Then throughout the swift advance, 2nd TAF kept up with the armies. The beachhead strips soon became out of range, and airfield construction wings provided suitable landing grounds. Soon Paris was liberated, and the squadrons followed the advancing armies north into Belgium.

Meanwhile by April 1944, the night fighter defences had forced a virtual halt to German bomber attacks. During the six weeks leading up to the

³⁰ H. St. G. Saunders, *Royal Air Force 1939-1945, Vol III*, HMSO, London, 1954, p. 97.

³¹ Bartz, *op. cit.*, p. 187.

³² J. Herington, *Air Power Over Europe, History of the RAAF in the War of 1939-1945, Vol, IV*, AWM, Canberra, 1963, p. 17.

³³ Saunders, *op. cit.*, p. 140.

Normandy invasion, of the 22 German bombers destroyed by ADGB night fighters, eight fell to the RAAF's night fighter unit, 456 Squadron. Then from a week after D-Day, V1s appeared over south-eastern England, as the 'no-ball' attacks had failed to take out all the launch sites. The first of the V1s, which had now been code-named 'Divers', fell on London on 13 June. The flying bomb was to prove a difficult weapon for the fighters to destroy. They were small, hard to detect on radar, fast at 400 mph, impervious to bad weather, with a warhead which was lethal if detonated while close. Immediately twelve ADGB squadrons (8 day and 4 night fighter squadrons) were allocated to anti-Diver tasks. Fighters were despatched on watching patrols along the French coast in the hope of catching the bombs before they reached England. 456 Squadron during July and August accounted for 24 V1s destroyed. V1s attacked London for eighty days on end, 9 300 in all. 30 per cent reached the target area, 50 per cent were destroyed by defences before the target area, and the remainder lost guidance.³⁴ Most of the launch sites were overrun by early September, as the Allied forces advanced up through France, and the V1 threat to London ended.

SOUTHERN EUROPE 1944-1945

By the end of 1943, the Allied ground offensive towards Rome had been completely halted by a determined enemy defence, and there was hardly any ground made until March 1944. During June 1944, 3 and 450 Squadrons, based near Rome, each flew some 500 offensive sorties, increasing this to 600 during July.³⁵ Moving north, these squadrons attacked enemy transport and gun positions in support of the Allied advance, and air action proved a vital factor in the breaking of the enemy line of defences. With Rimini taken during September, No. 239 Wing, consisting of six fighter squadrons and commanded by RAAF Wing Commander Brian Eaton, soon began operations against Yugoslavia, in addition to fighting the Italian campaign. After the Allied advance had been halted by bad weather in northern Italy over the winter months, the Mustangs of 3 Squadron and Kittyhawks of 450 Squadron then resumed close support operations against enemy forces until the German capitulation in Italy on 2 May 1945.

To the west, the assault in the Toulon-Marseilles area of southern France, 'Operation Anvil', had been planned to coincide with 'Overlord', the Normandy invasion. In preparation for this thrust from the south, 451 Squadron, after virtually being out of the front line for over two years, moved to Corsica and flew operations over north-western Italy. 'Operation Anvil', which had been now renamed 'Dragoon', commenced on 15 August

³⁴ Bartz, *op cit.*, p. 147.

³⁵ Herington, Vol. IV, p. 345.

1944. There was a swift collapse of German resistance in southern France, as enemy forces had been withdrawn to meet emergencies elsewhere. No. 451 Squadron moved to Cuers, near Toulon, but was soon out of range of the front line as any resistance had ceased south of a line from Grenoble to Bordeaux by late August. 451 Squadron was then transferred to Foggia in Italy during October, but the welcoming news on arrival was that the Squadron could no longer be gainfully employed in theatre, and it would move to the United Kingdom to join Fighter Command (as ADGB had become retitled on 15 October).

NORTHERN EUROPE 1945

In the meantime, how successful had Fighter Command been in home defence? Perhaps one measure of this is the fact that the Germans launched no photographic reconnaissance sorties over London from 10 January 1941 until 10 September 1944.³⁶ However, this should not indicate that the Luftwaffe was now a spent force.

In September 1944, the German's fighter arm had received 3 013 aircraft - more than in any other month throughout the war.³⁷ Such a rapid expansion had been made possible by the number of plants still available which had not been in full production. In addition, Speer had taken responsibility for industry earlier in the year, and by further rationalisation was able to maintain a steady increase in production. But to shoot down one Allied aircraft was now costing three German fighters. Even though it was a costly air battle, the German fighter arm was numerically stronger than ever before.

As the V1 menace had subsided, its place was taken by the next generation of reprisal weapon - the V2. In December 1944, 451 Squadron arrived at the Fighter Command base at Hawkinge in Kent to equip with the Spitfire XVI. The unit then joined 453 at Matlaske, in Norfolk, in February 1945, and both squadrons were selected with three other 12 Group squadrons to specialise in attacking the V2 rocket launch and storage sites around The Hague. Fitted with 250 pound bombs, the mode of attack by the Spitfires was a high angle dive to provide target acquisition in the heavily wooded sites and ensure maximum accuracy against small pinpoint targets. The V2 offensive against London was finally eliminated by March 1945.

On the morning of 1 January 1945, the Luftwaffe launched its last big throw of the war, surprise massive low-level fighter raids on 2nd TAF's airfields, hoping to destroy large numbers of Allied aircraft on the ground.

³⁶ R. V. Jones, *Most Secret War*, Coronet, Stoughton, 1979, p. 534.

³⁷ Bartz, *op cit.*, p. 191.

The Germans struck with over 800 aircraft, and although they had some successes with fewer losses, by that afternoon all 2nd TAF squadrons were back to full strength.³⁸

As the Allied forces crossed the Rhine, the tasks of the tactical air forces were now five in number:

- winning control of the air,
- neutralising anti-aircraft defences,
- providing fighter cover of Allied transport aircraft with paratroops,
- providing close support for ground troops, and
- preventing any enemy movement in and towards the battle area.³⁹

As the airborne invasion by glider troops took place, the RAF Typhoon and Tempest fighters softened up any enemy opposition and then patrolled the landing zones, however, the Luftwaffe now made only rare appearances over the battlefield. One RAAF pilot flying the latest British fighter - the Tempest mark V - was Flying Officer Gerry Trayhurn, flying with 274 Squadron RAF, from Volkel in Holland. He recalled of the new fighters:

These beautiful seven-ton beasts ... boasted 450 mph at 10 000 feet straight and level. They were a delight to fly and were formidable opposition to the Luftwaffe. We could catch all piston-driven aircraft, even buzz-bombs [V1s] and the occasional Me 262 in a dive from above.⁴⁰

The Tempest was indeed a quick aircraft, was considered possibly the best aircraft at air combat at low-level in Europe during the war, and provided an ideal cannon platform for the RAF. But it is worthy to note here that developments in British armament had consistently lagged behind German technology, and perhaps only began to catch up with the Typhoon and Tempest. At the end of the war in 1945, RAF fighters were armed with .303 inch calibre machine guns and/or 20 mm cannons - weapons conceived a decade or more previously, and concepts in fighter armament already considered obsolete in the Luftwaffe in 1939. By 1944, Me 262s were attacking the Allied bomber streams with six 30 mm cannons and 48 rockets. The RAF had relied on adapting infantry weapons for air combat. The introduction of the 20 mm Hispano cannon in 1940 had been timely, but there was no progress to parallel advances in airframe design, and the

³⁸ Wg Cdr J. Meadows DFC AFC AE, 'Flying Was Still Fun', Part 5, in *Aeroplane Monthly*, Feb 1993, p. 20.

³⁹ Saunders, *op. cit.*, p. 281.

⁴⁰ G. Trayhurn, 'A Golden Caterpillar with Ruby Eyes', in *Odd Bods at War*, Vol I, Odd Bods UK Assoc, Kincumber NSW, 1988, p. 45.

Hispano remained standard for the rest of the war, and indeed for postwar jet fighters.

Another RAAF Tempest pilot was AVM 'Bay' Adams, serving in the last months of the war with 3 Squadron RAF. The winter of 1944-45 was spent flying interdiction sorties from forward airfields, such as Volkel in Holland, against targets over the north German plain in Hamburg, Bremerhaven and Osnabruck. The Tempests would drop their long-range tanks - empty tanks full of fumes were a danger from groundfire - and return to base following the railways. There were plenty of trains to attack, and seldom did the Tempests return with any ammunition. These patrols were flown typically at 7 000', above the 5 000' lethal range of 40 mm flak. Diving down onto trains, the Tempests would open fire with their four 20 mm cannon at 700 yards range, firing into 300 yards, and pulling out at 100 feet, or below.⁴¹

The Tempests also attacked the bases of the retreating Luftwaffe, and each German airfield was defended by a formidable array of flak positions. AA fire was now feared more than opposing fighters, as this attack against Schwerin airfield showed:

'Hallo, Pierre, Red 3 here. You know, I think the rest had it! Surely Bay couldn't be right! I scanned the 360° of the horizon, and the terrific pyramid of flak bursts above Schwerin right up to the clouds, hanging in the still air. No one. 1304 hours. We had attacked at 1303 hours. The nightmare had lasted perhaps 35 seconds from the beginning of our dive and we had lost six aircraft out of eight...⁴²

These attacks continued into last week of the war, and the high loss rate to AA was again demonstrated in a strike against Grossenbrode airfield on 3 May 1945:

Two Fws tried to engage me in a dog-fight, but I quickly got rid of them by breaking away under them. JF-H, piloted by Bay the Australian, was in difficulties, its engine smoking. He was engaged with a Messerschmitt which was defending itself very cleverly, gradually reducing speed and beginning to get the upper hand. I roared towards the 109 and caught him by surprise, hitting him with at least two shells in the wing-root. The pilot, taken aback, instinctively reversed his turn and Bay, now in position, fired in his turn, hitting him again. Panic-stricken the Hun again reversed - I fired - he broke away - Bay fired - the Hun seemed to hang in the air for a moment, then one of his wings folded up in flames.

⁴¹ Wg Cdr F. R. Lonie, taped interview with Air Cdre 'Bay' Adams, c 1973.

⁴² Clostermann, *op. cit.*, p. 226.

A belated Focke-Wulf had slipped in amongst us and was desperately wagging his wings. Followed by Bay, I immediately went for him. A long burst - then suddenly my guns rattled noisily - no ammunition left. However, the Focke-Wulf had slowed down and was beginning to smoke, so I must have hit him after all. Bay fired in turn, point blank, and pulverised him. He burst like a ripe tomato.⁴³

Out of twenty-four Tempests, only thirteen returned. Flying into the intense AA fire took its toll right up to the end of hostilities.

Up until April 1945, 451 and 453 Squadrons carried out railway interdiction on targets in Holland and Germany. With the surrender on 7 May, the two squadrons were retained, while the other Article XV units were disbanded. In September 1945, 453 was transferred to Berlin for a month's garrison duty, the first British squadron to be based in the defeated capital. 451 followed in November. In January 1946, both units, the last of the RAAF EATS squadrons, were disbanded.

CONCLUSION

It is interesting to note the interplay of the principles of war with the actions that have been described. All of these principles had been successfully employed in fighter operations. Overarching all these principles was the flexibility of air power. However, the war had ended with the Germans failing to apply the correct principles which must govern air power. Made overconfident by its early easy success, the Luftwaffe had not re-equipped with modern aircraft, and 1940 types were still expected to fulfil their roles in 1943. The Luftwaffe was controlled by the German Army, and while army weapons were constantly improved, those of the air force were not, despite the advent of its jet fighters. Apart from the drain on manpower and fuel resources, Allied bombing had also affected the disposition of German air power. In June 1941 with the invasion of Russia, 65 per cent of the Luftwaffe was concentrated in the east. By the beginning of 1945, 68 per cent was in the west for the defence of Germany.

On the other hand, the RAF not only had the benefit of massive US assistance, but had suffered no appreciable deficiencies in resources. Up until the end, aircraft were constantly improved and the RAF enjoyed a constant flow of personnel, particularly from the Commonwealth. By D-Day, of the 487 squadrons under RAF command, 100 were supplied by the Dominions. Furthermore, of the 340 000 men who saw service as RAF aircrew during the war, the Dominions supplied no less than 134 000

⁴³ Clostermann, *op. cit.*, p. 239.

(some 40 per cent).⁴⁴ The number of RAAF aircrew attached to the RAF was almost tenfold those serving in the RAAF EATS squadrons.⁴⁵ This was the great contribution that members of the RAAF had made.

Australians, therefore, played a consistent, but by no means a dominant, part in the fighter operations across Europe and North Africa. The issue to contemplate is how were Australian national interests served by participation in EATS? The RAAF lost command of its formations, and control over their operational use. Most RAAF graduates of the EATS did not represent a national force. There were different perspectives of what had been agreed at Ottawa. Australia thought its distinctly-uniformed aircrew would be grouped in units bearing RAAF identities, and commanded as much as possible by Australians. To the United Kingdom, EATS graduates had purely been RAF enlistees.

EPILOGUE

A couple of days after the war finished, Bay Adams flew to Kiel, in northern Germany, on a victory flypast. On the transit his Tempest suffered an engine failure, and he forced landed on a disused German airfield. He recalled that the dangers of flying had not disappeared with the ending of war:

I put it down, wheels down ... it wasn't until I was really rounding out that I realised someone had gone across the field with a plough. I came to a halt all right - I thought 'Thank goodness!', and climbed out.

I saw a Brit jeep with two Brits sitting on the edge of the field, so I was surprised they didn't drive over to pick me up. So I walked over, and they both stood there, and I ... finally stepped up to them and said: 'G'day.' They said: 'My goodness, old fellow, you're a lucky chap.' And I said: 'Oh, it wasn't too bad ... a forced landing on an open airfield isn't too difficult.' They said: 'No, not that part. You have just walked through a minefield!'⁴⁶

⁴⁴ Saunders, *op. cit.*, p. 370.

⁴⁵ In April 1945, there were 1 488 RAAF aircrew in Australian Article XV squadrons, and 10 532 attached to the RAF. McCarthy, *op. cit.*, p. 26.

⁴⁶ Air Cdre Adams tape.

DISCUSSION

Air Commodore J.B. MacNaughtan: John, I must admit to some confusion. After the first presentation I got the impression that the Empire Air Training Scheme (EATS) had not succeeded in creating unique RAAF units. Yet the presentation you've given certainly indicates that 451, 453 and 456 Squadrons were basically Australian. Perhaps you could clarify that for me. And the second thing is, you said that there was a distinction between Permanent Air Force and EATS squadrons, mentioning 3 Squadron and the Squadron in the Middle East. Could you tell us whether there was a continuation of that distinction between pre-war permanent Air Force and EATS personnel assigned to EATS Squadrons?

Squadron Leader John Bennett: At the Ottawa Conference of 1939, under Article XV as Dr Alan Stephens has already referred, squadrons were formed with a distinctive national character. No. 401 to 449 Squadrons were intended to be Canadian squadrons. No. 450 to 484 Squadrons were RAAF. No. 485 through to, presumably, 499 were RNZAF. In the end not all of those Squadrons were required and as you've heard, 17 EATS Squadrons were formed, and they were numbers - and this is for the RAAF - 450 through to 467 Squadrons. 17 Squadrons because 465 Squadron was never formed. There was no further requirement to make RAAF EATS Squadrons.

They were Australian in nature, as you've heard me mention. However, they were not always manned by RAAF personnel. For instance, 453 Squadron by 1944 was 100% manned by RAAF and that didn't change for the rest of the war. On the other hand, I think it was either 462 or 466 Squadron formed in North Africa - of which we'll hear maybe during the Bomber Command presentation - had only 10% Australian content with something like 80% Canadian content. So squadrons were RAAF in name only, but the RAF was required to post and look after operational and administrative aspects of those EATS Squadrons.

On the second point, I was describing 1941 when there definitely was a distinction demanded by the Air Board between EATS and the pre-war or permanent squadrons like 3 Squadron and 10 Squadron. I said that that barrier was retained until about 1942. I think then there was no further distinction, but perhaps Air Commodore Steege might be in a position to comment on that.

Air Commodore G.H. Steege: I can't comment on any differences at that time, but, initially, 3 Squadron was an Australian Permanent Air Force Squadron which went to the Middle East on Australian rates of pay and Australian conditions. 450 Squadron came over with ground staff only to pick up pilots who were to come out of RAF squadrons. They were on EATS rates of pay. And I think that, as far as I know from my time in the Middle East at the end of 1942, that situation persisted. What went on afterwards I'm not sure, but I have the feeling that

3 Squadron continued to be on Australian rates of pay and Australian conditions.

However, one or two other points I would like to make very quickly; and I'm thinking about 450 Squadron at this time. 450 Squadron arrived in the Middle East at that time, and I think you mentioned it didn't go to operations until early 1942, but, in fact, for six months it was involved in operations in Syria. While it didn't have pilots, very shortly after it arrived while it was getting together, the RAF said: 'We've got a bunch of pilots from RAF 260 Squadron who've flown off a carrier to Malta.'

So we amalgamated 260 and 450 Squadrons for operations in Syria. 450 Squadron did operate from Transjordan with 260 Squadron amalgamated pilots and also from Damascus, the only squadron to be based in Syria before the operation.

There's one other point about 3 Squadron. I think you mentioned 3 Squadron went to the Western Desert as an Army Cooperation Squadron. Well, it went from Australia as an Army Cooperation Squadron and, in Ismalia in Egypt, it erected its own *Lysanders*. Then Headquarters Middle East said: 'Wait a minute, we've got 208 Squadron, a very experienced Army Cooperation Squadron, already out there, we don't need another Army Cooperation Squadron.'

So 3 Squadron was equipped with Gladiators and went out to the Western Desert as a *Fighter Squadron*. The first operation I did was an Army cooperation reconnaissance of the Italian camp south of Sidi Barrani. So while there was some Army cooperation operations carried out, 3 Squadron did in fact go to the desert as a *Fighter Squadron*.

Squadron Leader John Bennett: That shows the flexibility of air power.

BOMBER COMMAND - THE AUSTRALIAN CONTRIBUTION

Air Commodore Brent Espeland

RAAF Squadrons and Australian aircrew participated in the full range of Bomber Command operations, including city attacks, rail interdiction, the oil campaign, army co-operation, naval targets, V-weapons, the 'Grand Slam', the canals, mining and the Transportation Plan. By May 1945 there were 15 500 RAAF personnel involved in the war against Germany, 12 300 of whom were aircrew.¹

The contribution of these airmen is not in question, nor will it ever be. By any standards their performance, arising as it did out of their training, sense of purpose, determination and team spirit, was quite remarkable; an imperishable record for which the price was extremely high. Bomber Command operations accounted for most of the 6 500 Australian airmen who gave their lives in the European and Middle East theatres. This was some 20 per cent of all Australian war deaths in all services and all campaigns of the Second World War.²

Despite such acknowledgement, though, questions do inevitably remain about their *effective real* contribution or what we would perhaps describe today as the value of their efforts. It is not an easy proposition to undertake the analysis and address those questions.

The Nature of Article XV Squadrons

For a start, the very form of RAAF participation in Bomber Command is open to question. Under Article XV of the Empire Air Training Scheme (EATS) agreement, Australia was to form 18 squadrons, to be numbered 450 to 467. Those units never achieved a genuine Australian identity. Indeed, the United Kingdom's preference had been for all graduates of the EATS to enlist in the RAF. In his definitive analysis of Australia's participation in the EATS, John McCarthy has argued that the United Kingdom bureaucrats and military leaders always intended that the scheme should remain firmly under British control.³ Once the scheme was in full swing, Dominion servicemen would comprise about one quarter of the aircrew flying in the United Kingdom at any one time. With that level of contribution, if they remained in national units, they would soon form national groups, achieve high command, and start to

¹ J. Herington, *Air Power Over Europe 1944-1945*, The Australian War Memorial, Canberra, 1962, p. 462.

² *ibid.*, p. 465.

³ J. McCarthy, *A Last Call Of Empire*, The Australian War Memorial, Canberra, 1988.

demand a voice in the formation of strategic policy. It was to prevent that possibility, that in 1942 Sir Arthur Harris, who had noted a progressive increase in the proportion of dominion squadrons in Bomber Command, opposed any further increase from 'every point of view'.⁴ He succeeded to the extent that, by April 1945, of the 12 020 Australian aircrew in the United Kingdom, 1 488 were with RAAF Article XV squadrons and 10 532 were attached to the RAF.⁵ In the operational RAF units, on 1 January 1945, the 2 621 RAAF aircrew were serving with no less than 214 of the 302 British squadrons; and in 111 cases, there were no less than 10 Australians on a single unit. The 88 squadrons on which they were not represented were primarily Canadian, Polish, Czech, French and Fleet Air Arm, from which they were understandably excluded. The difficulty of separating their efforts from that of the RAF is self-evident.

Some have argued that this would not have been the case had Australia managed to extract the same concessions from the British as the Canadians had. By VE Day 25 per cent of all aircrew in Bomber Command were Canadian and they had operated one bomber group as a national entity since October 1942. The formation of the group certainly allowed for a clearer picture of Canadian activities, but it would be a mistake to think that this brought with it due influence. Like its national sister services the RCAF had little, if any, control over strategic or operational direction. However, while Canadian land and naval forces at least exercised administrative autonomy and control over their personnel, this was not true for the RCAF in Bomber Command. Administrative policy was a matter for Anglo-Canadian consultation.⁶

Administrative Difficulties

Australia had other administrative arrangements which similarly hindered both the effective employment of RAAF personnel and any subsequent analysis of their efforts. The agreement for the Article XV squadrons stated, *inter alia*, that a senior RAAF officer would have access to the higher echelons of the RAF. Yet in 1942 the Air Officer Commanding RAAF Overseas Headquarters in London, Air Vice-Marshal F.H. McNamara, VC, learned that No. 454 Squadron, which he thought was a transport squadron, was in fact a bomber squadron.⁷ When Air Marshal Williams succeeded McNamara in London in early 1943, he found an embarrassing mess. No. 464 Squadron had been moved to

⁴ *ibid.*, p. 24.

⁵ *ibid.*, p. 26.

⁶ W. Carter, *Anglo-Canadian War Time Relations 1939-1945*, New York, 1991, pp. 173-174.

⁷ McCarthy, *op.cit.*, p. 28.

Canada, and seemed to be in the process of becoming progressively Canadian; No. 462 Squadron had been formed for six months but had only one Australian aircrew member; and the RAAF had not been informed that No. 458 Squadron, which had formed as a medium bomber unit, had been converted into a torpedo bomber/general reconnaissance squadron three months earlier.⁸

By the same token, the RAAF did not help its cause. The irregular rate at which the various aircrew categories were graduated placed considerable pressures on the RAF higher command to form the crews from those available, regardless of national sensibilities. It was understandable that they chose to do so. If the RAAF wished to apply the spirit of Article XV, it needed constant supervision of its crews in the United Kingdom and constant liaison with the RAF. As there were no RAAF liaison officers in the operational commands, that objective was improbable.⁹ Prompt Australian decision-making was also essential if postings and manning policies were to meet the needs of the commands. Again, that was not possible, because the RAAF's Overseas Headquarters in London had to refer all policy issues to the Air Board in Melbourne.¹⁰ In what was a dynamic situation, that inevitably tended to remove the RAAF from the decision-making process; by the time the Air Board had considered an issue, events had marched on.

The importance of some of these administrative issues should not be under-estimated. Amongst lay historians in particular, the tendency is to dismiss such matters lightly in the shadow of the more substantial concerns of operations and strategy. For those engaged in a lethal endeavour half way around the world, however, promotion, the award of brevets, pay, commissioning, and repatriation, to name but a few policy issues, are of real importance. To those commanders and staff responsible for mounting operations these same issues go to the heart of morale and, in turn, influence combat effectiveness.

A good example was the practice of giving commissions on a national basis in the face of differences in standard. Were reasonably distinct national air forces in place or, indeed, even likely to emerge, this would have been perfectly fair. However, with all component forces being regarded as comprising one air force with equal opportunities for promotion based on ability, then the fixed proportions for commissioning were clearly political in nature. Thus some Australian sergeants were able to point out that men of other Dominions had received commissions with much lower marks in training, leading to their employment in Bomber Command. Indeed, at No. 8 Service Flying

⁸ *ibid.*, pp. 28-29.

⁹ J. Herington, *Air War Against Germany and Italy 1939-1943*, The Australian War Memorial, Canberra, 1953, pp. 303-304.

¹⁰ *ibid.*

Training School, where, in a composite course, Australians had filled 19 of the first 23 places, commissions were still granted on a national percentage basis. Comparisons of this sort, and the realisation that the South African Air Force gave commissions to all pilots and observers irrespective of merit, simply served to create ill-feeling.¹¹

Even when there was an agreed policy in place, there were likely to be problems of application as exemplified by the matter of tour length within Bomber Command. Originally set at 200 hours of operational flying, a tour was then set at 30 operational sorties which was to be followed by a tour at an operational training unit and a final further 20 operational sorties. While this policy was agreed by Australian authorities, it left the contentious issue of what constitutes a sortie to the determination of RAF officers in the chain of command - a very uneven approach which led to the iniquitous situation of aircraft sustaining combat damage but the crews not being credited with an operational sortie at the whim of the local commander.

Despite the dual impediments of the manner in which RAAF airmen were dispersed throughout Bomber Command and of the many administrative difficulties that often served to worsen the centrifugal tendencies involved, the record still permits a clear determination of the effectiveness of their contribution.

The Early Months

The first batch of EATS-trained RAAF aircrew arrived in the United Kingdom on 24 December 1940. Most of the early EATS-trained RAAF aircrew went to fighter units. The first to go to a Bomber Command squadron was Sgt R.G. Danman, a pilot who joined No. 9 Squadron on 28 March 1941. By 27 April he was a prisoner of war. The first RAAF bomber squadron formed was No. 455, on 6 June 1941, but it was not until 29 August that the squadron became operational when the Commanding Officer flew the only available Hampden as part of a raid on Frankfurt-on-Main.

Australian representation in Bomber Command in the period between the outbreak of war and this time was therefore limited to those Australian-born airmen who had joined or were on loan to the RAF. Their contribution was more than signal, nonetheless. Operations in which those Australians participated included the raid on Wilhelmshaven the day after Britain declared war in Germany, the attacks against the *Scharnhorst* and *Gneisenau* at sea (7 April 1940), the Albert Canal Bridges (12 May 1940), Norway (May 1940), Maastricht (May 1940), and Dusseldorf (June 1940). Australians were also involved in the outstanding attack on the Dortmund-Elms Canal on

¹¹ Herington, 1939-1943, *op. cit.*, p. 127.

12/13 August 1940, while Wing Commander H.I. Edwards was awarded the VC for leading a daylight attack on Bremen on 4 July 1941. Australian aircrew also participated in the attacks on the battleships at Brest, in the Channel and at Kiel.

During this period, perhaps the most important contribution made by an Australian to the efforts of Bomber Command was in the field of photographic reconnaissance. In the early days of World War I attempts to use, and at the same time deny, the advantages of aerial reconnaissance to the enemy had led to the development of air combat. By now, of course, air reconnaissance extended far from the front line, with an attendant increase of risks. Indeed, in the early days of the Second World War Bleinheim aircraft of No. 2 Group tasked with this role were unable to penetrate to objectives without intolerable losses.

It was thus fortuitous that an Australian aeronautical engineer and businessman, with a unique knowledge of flying and photography over Europe, had turned his mind as he toured the Continent in the late 1930s, to the probable photographic needs of any impending war. Now holding an honorary commission with the rank of wing commander, Sidney Cotton worked with an RAF flight lieutenant to evolve the concept of using prototype fighter aircraft, stripped of armament and tuned for maximum speed, for photo reconnaissance tasks. In this way, of course, performance remained superior to that of the contemporary fighter. Initially, Cotton faced considerable opposition to his ideas and he was forced to cut across RAF methods and organisation by using his own two civilian aircraft together with two modified Bleinheims. The turning point came when he was successful in finally obtaining a Spitfire and sending it to France where it was able to operate across western Germany. His persistence paid off. Photographs could be taken successfully at high altitude at a very economical casualty rate. At about the same time the introduction of the Wild stereoscopic machine led to much improved interpretation of high altitude results. As the value of his work was now so readily apparent, it came as no surprise that headquarters elements of Bomber Command pressed for control of his unit, by now known with varying degrees of affection as 'Cotton's Club'.¹²

By the middle of 1941 then, Cotton, Edwards, and others had laid a very solid foundation for the Australian contribution to Bomber Command. From then to the end of the war, very slowly at first and then with rapid acceleration, the Australian effort within Bomber Command expanded until it became and remained a vital part of the Command's organisation for operations in Europe.

¹² Cotton's buccaneering style in this and other endeavours of his life is well captured by John McCarthy in John Ritchie (ed.); *Australian Dictionary of Biography*, Vol. 13: 1940-1980, A-De, Melbourne, 1987.

Agreement and Reality

On 9 May 1941 the Australian War Cabinet endorsed the agreement hammered out in London between High Commissioner Stanley Bruce and British officials that, under Article XV of the Air Training Agreement, 18 RAAF squadrons would be formed for service outside Australia in addition to those already serving in the United Kingdom, the Middle East and the Far East. Mid-1942 was set aside as the target date for the program to be completed. Aircrew in excess of requirements for the Article XV squadrons would be posted to RAF units. Regardless of whether Australians in Europe served in one of those 'RAAF' Article XV squadrons or with the RAF, they would wear RAAF uniforms, a practice which, it was stated, meant that they would 'retain their Australian identity'. Because of a shortage of RAAF ground crew, it had been agreed from the outset that the Article XV units would rely heavily on British technicians. Gradually however, the British ground crew were to be replaced with Australians with a 'view to achieving homogenous personnel in these squadrons'. Once 75 per cent of the aircrew in a designated RAAF squadron were in fact from the RAAF, that unit was to be formally called an 'Australian' squadron. They would, however, remain attached to the RAF for operations and general administration.¹³ The reality, however, was to be rather different.

By late 1941 the fact was that RAAF airmen, while in growing numbers sufficient to man two squadrons, were dispersed as individuals on a large number of Whitley, Wellington and Hampden squadrons and two titular RAAF Bomber Squadrons (455 and 458) had begun to operate with only a small proportion of Australian crews. A third Australian squadron, No. 460, had also formed at this time but was to play no part in operations until the spring of 1942.¹⁴

In part, the problem stemmed from the deeply held sense of unity amongst crews. It had become more and more apparent that, beginning with the advent of the Wellington and Whitley, and to a lesser extent, the Hampden aircraft, a far greater degree of crew discipline and co-operation was required than with previous multi-seat types. The efficiency of a crew and, in turn, the probability of survival, loomed large in the minds of individual men and their superiors at squadron, group and command level. Men crewed together at operational training units, where the throughput worked against national groupings, did not care to be broken up on arrival at squadrons. Their feelings of common purpose transcended national sentiment, a situation openly encouraged

¹³ Empire Air Training Scheme, War Cabinet Agendum, 15/1941, Supplement 1, 9-5-41, CRS A5954, 236/5, AA.

¹⁴ Herington, 1939-1943, *op. cit.*, p. 181.

by squadron commanders who preferred mixed crews of British and Dominion personnel.¹⁵

Perhaps the situation could have been redressed were Australian liaison officers in place within Bomber Command, especially at operational training units where, fully aware of existing and future RAAF requirements and armed with the authority to police the crewing process, they could have achieved a better Australian grouping. Then again, when RAAF Overseas Headquarters did have some success with promoting a more Australian disposition, operational imperatives intervened. After some energetic protests from RAAF senior officers in London, the complement of RAAF air and ground crew in No. 455 Squadron increased to the point where there were high hopes of a truly-Australian squadron in Bomber Command. At that very moment, though, the unit was withdrawn from the line and on 19 April 1942, with eleven crews transferring to RAF squadrons, reformed within Coastal Command.¹⁶

With the mention of operational requirements we have come to a pivotal issue in relation to Bomber command and the Australian contribution. As Michael Howard has noted, the great paradox attributable to historians and their strive for objectivity is that, however great their intellectual and moral detachment, in the last resort they are committed to the values and to the society that enables them to render their work.¹⁷ It is easy for modern historians to overlook the dire circumstances visited upon Allied Forces fighting during that time of the war and the consequences that flowed from that situation. In Bomber Command's case, as the only substantial Allied instrument of war available to take the offensive to Germany, this meant that operational policy and practice were of prime importance and subject to high level and often changing direction.¹⁸ Moreover, there were other factors shaping the operations and hence the structure and disposition of Bomber Command during this period. The replacement of two-engined aircraft by the four-engined Lancaster, concerns over bombing accuracy, the realisation that planners had under-estimated the number of bombs required to cause permanent or decisive damage, the lack of adequate navigation aids, and the growing effectiveness of

¹⁵ *ibid.*, p. 182.

¹⁶ *ibid.*, pp. 300-301.

¹⁷ M. Howard, *The Lessons of History*, Oxford, 1991, p. 20.

¹⁸ In the 13 months before the influx of RAAF EATS personnel there had been no less than eleven major and minor directives passed to Bomber Command. Oil resources had remained the basis of a longer-term offensive strategy governing the operations of the strategic bomber force throughout this period, yet only 8 per cent of the total tonnage of bombs were in fact launched against oil targets. Herington, *1939-1943, op. cit.*, pp. 174-175.

German defences all served to reinforce the dynamic nature of operations within the Command.

Through all this the integrity of the Command was paramount. Only in this way could the flexibility of the Command be preserved to respond to the changing air situation. In terms of national groupings, to have allowed full regard for Australian sensibilities at this time would not have been in the interests of the Allied effort in Europe, or perhaps more significantly, the interests of Australian airmen as individuals. It was also the case that ground crew and senior officers were not available in sufficient numbers to effect a more complete Australian identity.¹⁹ By mid-1942, Australian participation in Bomber Command had achieved a pattern of wide dispersion that was to remain to the end of the war.

The Gathering Weight

In the years ahead, some concentration of Australian effort was to come about. A mass of RAAF aircrew would gravitate towards Bomber Command as it expanded and operated at such a high intensity that, to replace casualties and end-of-tour crew men, it needed to absorb a very high percentage of the output from the training pipe-line. These circumstances were to allow a far greater sensitivity to national groupings without prejudice to crew effectiveness, to the extent that in the late summer of 1944 the RAAF had five heavy-bomber squadrons. No. 460 was at Binbrook with No. 1 Group and, as it had three flights, operated as virtually one and a half squadrons; Nos. 462 and 466 were in No. 4 Group operating from Driffield and Leconfield respectively; and Nos. 463 and 467 were together at Waddington in No. 5 Group.

The RAAF thus had three Lancaster and two Halifax squadrons during the latter stages of the war and attempts to keep them filled with Australian crew were largely successful. The majority of Australian aircrew, however, continued to feed the RAF main-force squadrons and operational training units. In addition, Australians were prominent, not only in numbers, but also in action, in the pathfinder units.

Major interest for the RAAF therefore lay with the last two years of Bomber Command's part in the Combined Strategic Bombing Offensive. As the following table shows, Bomber Command achieved significant striking power in this period.²⁰

¹⁹ During the first two years of the War the CAS of the RAAF (Sir Charles Burnett) had persistently declined to allow senior officers to go overseas lest it prejudice the build up of the training organisation in Australia, *ibid*, p. 278.

²⁰ Taken from the *War Room Manual of Bomber Command Operations*, held by the RAAF Historical Section, Canberra.

Year	Sorties	Tons of Bombs	Mines Laid	Aircraft Missing
1939	591	301		38
1940	22 473	13 033	762	475
1941	32 012	31 704	1 055	923
1942	35 338	45 561	9 574	1 450
1943	65 068	157 457	13 834	2 391
1944	166 844	525 518	17 500	2 770
1945	67 483	181 470	4 582	608
Total	389 809	955 044	47 307	8 655

Table 1. Bomber Command Striking Power.

Of this effort, the Australian squadrons alone dropped 65 000 tons of bombs and incendiaries during 692 raids against 241 targets. To deduce from this a bald figure of six per cent to mark the Australian contribution to Bomber Command over the duration of the war is, of course, misleading. To that must be added the even greater effort of the 6 000 Australians who served with RAF combat squadrons.²¹ Even then, the picture is incomplete - a statement to which the many thousands of Australian airmen who served with non-operational RAF units would testify. It is also the case that, through the nature of air operations, the aggregate of these contributions would offer synergies for even greater effect within Bomber Command.

The Sum of Effort

At this point, we have come up against the notion that the Australian contribution was bound inextricably to the general effectiveness of Bomber Command. This is not to suggest that the Australian contribution cannot be viewed separately but rather that, without the Australians, Bomber Command's effectiveness would have been significantly less than it was. To put a figure on that diminution would be simplistic and inappropriate. Nonetheless there is sufficient evidence, empirical and otherwise, to establish that the prospect of being without the Australian contribution would have been something that the Commanders in Chief of Bomber Command did not care to envisage. In short, the Australian contribution was integral to the performance of Bomber Command.

It can therefore be concluded that Bomber Command's general effectiveness serves as the measure of Australia's *effective real* contribution to the Command. In other words, the value attributable from the Australian contribution can be found in the assessment of the bombing offensive carried out by Bomber Command as part of the

²¹ Herington, 1944-1945, *op. cit.*, p. 464.

Anglo-American campaign. This conclusion may appear self-evident or even perhaps trite, but it is only given effect by establishing the integral nature of the Australian contribution to the activities of the Command.

Assessing the Bombing Offensive

Of course, tackling an assessment of the Strategic Bombing Offensive presents its own difficulties. Fifty years on, there is still no unifying body of thought that we can draw upon to assess the effects on Germany against the great strategic investment in Allied bombing. Indeed, the campaign remains a subject of continued and passionate debate, a fact which often intrigues disinterested observers. In these circumstances, and with a complete analysis beyond the purview of this paper, a wide range of assessments needs to be canvassed to provide something approaching an acceptable historical conclusion.

A good starting point is the United States Strategic Bombing Survey, conducted in the weeks following the end of the war in Europe, which examined the extent of the damage to German Industry. Its conclusion was that bombing cost the Allies more in economic resources than it did the enemy, and indeed that bombing appeared to have run counter to its aims and stimulated greater wartime production and firmer morale.²² Moreover, the eminent American economist, John Galbraith, who served as a senior member of the Survey, has since re-affirmed his belief that all the bombing did was to 'ease somewhat (the) path' of the ground forces.²³

Contrast that judgement with the position taken by Sir John Slessor. The Survey failed to shake his belief, repeatedly put forward during the War that, given the necessary priority to the bomber force and its equipment, Germany's economy (and hence ability to sustain the war) could have been destroyed before the Normandy invasion. Ground forces would have had subsequently to go in, but on a much smaller scale and without a massive operation like Overlord.²⁴ Slessor's claim is all the more interesting as he is not normally associated with the 'bomber barons'. Indeed, he personally wrote the initial Chiefs of Staff paper on the re-organisation of the RAF for the invasion of Europe which proposed that Bomber Command should be put under the orders of the Supreme Commander.²⁵

²² United States Strategic Bombing Survey (USSBS) *Overall Report*, European War, Washington, September 1945.

²³ J.K. Galbraith, *A Life in Our Times: Memoirs*, London, 1981, p. 240.

²⁴ Sir John Slessor, *The Central Blue: The Autobiography of Sir John Slessor, Marshal of the Royal Air Force*, New York, 1957, pp. 434-435.

²⁵ In the event, Bomber Command only acted in support of the invasion, under the direction of the Chiefs of Staff.

On the German side, Albert Speer, the Minister of Armaments during the period of the bombing offensive, even if he doubted the effectiveness of some of the economic attacks, regarded the military confrontation between Allied offensive air power and the German defences as their 'greatest lost battle'.²⁶ For Field Marshal Erhard Milch, State Secretary for Aviation and later Goering's deputy in the Luftwaffe, the real death blow to Germany was delivered by the bombing offensive against the oil and petroleum refineries which started in earnest in 1944. In his view, advances made by the Allied ground forces in Europe were a direct result of the constant lack of available petroleum products as well as the diminishing fighting capability of the air force, which again was related to the lack of petroleum products and its effect on pilot training.²⁷

All of these views have their drawbacks, however, as historical sources. Slessor's claim can only be seen as speculative and while Milch's - and especially Speer's - judgements carry the weight of personal involvement with the effect of the bombing, in the end they are no more than general in nature. In Galbraith's case, his assessment was limited by the nature of the Bombing Survey on which it was based. The Survey was never intended to be more than an examination of the damage done to German Industry and thus took no consideration of German strategy or military effort.

Richard Overy is one who has taken exception to all these views, arguing that there is only one way to assess the effects of the Combined Bomber Offensive and that is to reconstruct the actual impact of the bombing on German strategy, economic power and morale. His research points to the attacks on industrial cities and industrial targets producing a chain reaction which affected the military structure, social life and the political system in a way that was devastating for the German war effort.²⁸

Where does the balance lie, then, in assessing the effect of the Combined Offensive? The reality is that it must lie around the main (Germany first) arch of Allied strategy of which the Normandy invasion was the keystone. Viewed this way, a consensus emerges that the Combined Bomber Offensive was a major factor in winning the war. In essence, it denied German combat forces a very large proportion of the land and air power that Germany could have brought to bear against the Allies. The extent of that shortfall can be catalogued by the

²⁶ A. Speer, *Spandau: The Secret Diaries*, London, 1976.

²⁷ Erhard Milch, 'The Allied Combined Bomber Offensive: Two German Views', in W. Giffen (ed.), *Command and Commanders in Modern Military History*, Washington, 1969, pp. 296-297.

²⁸ R. Overy, 'World War II: The Bombing of Germany' in A. Stephens (ed.); *The War in the Air 1914-1994*, Canberra, 1994, pp. 113-140.

diversion of three-quarters of the fighter force, 56 000 guns and a million men and women to halt the bombing; the breaking of the back of the Luftwaffe in the battle for air superiority to the extent that the skies over Normandy were virtually clear of enemy aircraft; and, the success of the attacks on the synthetic oil industry and the German transportation system.²⁹ Taken together, this was sufficient to pave the way for the Normandy landings and, in the longer term, to deny Germany any chance of victory or even a stalemate.³⁰ It is an assessment hard to discount, although some critics have tried to undermine the strategic and tactical benefits by questioning the morality of the bombing campaign against German cities.

A Question of Morality?

Putting a human face to the utter devastation wrought by the bombing often, and understandably, raises accusations of unconscionable action. There can be no easy answer to those accusations but a considered response often turns on what a 'reasonable man' would say. I am sure that Leonard Cheshire would not have liked to see his views put forward as the embodiment of societal standards, but it is hard to go past an interview he did, shortly before his death, with Mark Laity of the BBC on the subject of Sir Arthur Harris and World War II bombing policy.

After stating his conviction that there could have been no re-entry into Europe in 1944 without the bombing offensive, Lord Cheshire took up the question of the morality of the campaign. He acknowledged that if you look merely at the bombing then it is completely unjustifiable, but moral judgements must be made in context. This was total war. In his view, you had to do everything in your power to bring it to the quickest end with the minimum loss of life. He disputed the contention that the offensive was based on terror bombing, pointing out that the policy was set by the War Cabinet at the highest level and ratified by the other Allies at Casablanca. It follows, Cheshire argued, that if you accept the highest level of the Allied Command launched a campaign aimed at terror rather than creating a platform to enter Europe, then the whole of the Allied Command was immoral and wrong. Cheshire went on to describe the about-face of those politicians who had set the pattern for

²⁹ *ibid.*, p. 133.

³⁰ General Dwight. D. Eisenhower, Supreme Commander of the Allied Expeditionary Forces, saw the overwhelming Allied superiority in the air and the way in which it 'at once undermined the basis of the enemy's strength and enabled us to prepare and execute our own ground operations in complete security as ... indeed essential to our victory.', *Report by the Supreme Commander to the Combined Chiefs of Staff on the Operations in Europe of the Allied Expeditionary Force*, (London, 1946), p. 147.

the campaign when they found that bombing was no longer a political asset but something they would have to justify.³¹

This is a key point. Some have pointed to the near silence about aerial bombing in the six volume war history by Winston Churchill as evidence of his belief in the unconscionable nature of the Combined Offensive. Then there are the matters of Harris not receiving his baronetcy and Bomber Command its campaign medal. Cheshire contends that these and other similar actions were of a self-serving political nature and not born of moral horror or ambivalence on the part of Allied leaders. In this context it is perhaps worthwhile noting what Churchill had to offer Stalin at the Moscow Summit held in August 1942 - at a time when the Allied armies in North Africa were in retreat, the Japanese had cut a swathe across South East Asia and the Germans were virtually threatening the survival of the Soviet Union. 'We sought no mercy and we would show no mercy,' said Churchill as he spoke of the Bombing Offensive. 'That was the only way,' replied Stalin. Churchill then spoke of shattering German cities. Stalin reportedly warmed to his words and finally smiled.³² Total war, indeed.

A Complete Testament

This was the type of war the Australians in Bomber Command strove and suffered through. Whatever misgivings there may be, this nation can look back with satisfaction to the successful role its airmen played in the struggle against Germany in the skies over Europe. Despite never achieving an identity or a degree of autonomy commensurate with the extent of their involvement, the Australians in Bomber Command nonetheless served the Allied cause in a most significant fashion. Their contribution materially assisted a prolonged and unrelenting campaign that was a major factor in winning the war.

That conclusion has been reached by taking, in the main, a comprehensive rather than a narrative approach to analysing the Australian contribution to Bomber Command. In this way, of course, issues can be more readily examined, but often at the expense of putting them in sufficient context. There may well be considerable utility, then, in rounding out the analysis by recounting the following story.

On what was to be the unit's last raid of the war, RAAF Lancasters from No. 460 Squadron ventured deep into Germany on ANZAC Day 1945 to

³¹ Lord Cheshire, Interview with Mark Laitty, in Derek Wood (ed.); *Reaping the Whirlwind*, London, 1993, pp. 80-86.

³² M. Gilbert, *Winston S Churchill, V7, The Road to Victory 1939-41*, Boston, 1986, p. 179.

attack a special target. Repeated German propaganda claims of the existence of an impregnable redoubt in the Harz Mountains area into which retreating German armies could hold out indefinitely had led to calls for a bombing raid against the SS Barracks at Berchtesgaden and the nearby retreat of the Fuehrer. All went well for nineteen of the twenty crews involved as they made the long afternoon flight into the snow-capped mountains and successfully bombed what was a very difficult target, made even more so by the surrounding presence of Czech forced-labour camps.

For Flying Officer 'Lofty' Payne and his crew, though, the circumstances were less kind. Three seconds after releasing its load, their Lancaster was struck by nine direct hits from anti-aircraft batteries; one engine was blown away, two of the remaining three caught fire, wings and fuselage were badly holed and the flight controls were damaged. While Payne struggled to control and his crew abandon the aircraft, the rear gunner's parachute caught on a piece of jagged metal and started to open inside the fuselage. Realising his gunner's plight, Payne decided to stay with the aircraft, which by this time was well aflame, in an attempt to save his fellow airman. In what can only be described as an extraordinary feat of airmanship, Payne somehow managed to weave through the mountainous terrain and make a forced landing from which he and his gunner escaped alive.³³

Flying Officer Payne's story is but one of many that could be cited to exemplify the Australian contribution to Bomber Command. Despite their concerns about the Japanese threat to their homeland, Australian airmen fought with a firm belief in the objectives and the means of their endeavours. As individuals they recorded many acts of distinction and many strove, suffered or died bravely without ever coming to notice. The testament of their struggle is incomplete, however, without proper acknowledgement of the value of their *collective* efforts to Bomber Command and, in turn, the Allied push to victory in Europe.

³³ P. Firkins, *Strike and Return*, Perth, 1985, pp. 172-175.

DISCUSSION

Editor's Note: Due to an intermittent technical malfunction during the recording of this session some of the discussion was unintelligible. Where possible, the discussion has been edited to convey the intended meaning of questions, comments and answers. The record of proceedings commences with a comment by Mr Peter Firkins, a RAAF veteran of Bomber Command who served in No. 460 RAAF (Lancaster) Squadron as a young man.

Mr P. Firkins: I served on 460 Squadron at the age of 18 and the only claim to fame is that I was the most frightened rear gunner that had served in Bomber Command.

I would just like to make a couple of brief comments, the first is in relation to the recognition of the Article XV Squadrons. I get a bit tired of people suggesting that they weren't real RAAF Squadrons or real Australian Squadrons, because they weren't completely manned by Australian personnel. My answer to that is that they ought to go and have a look at the casualty lists on the walls of the Australian War Memorial. I've never made a count, but I think probably the casualties of the Article XV squadrons were greater than the combined casualties of all the so called real RAAF squadrons. So just keep that in mind when you're talking about whether Article XV squadrons were real RAAF squadrons or not.

The only other point that I wanted to make, if I could just talk about 460 Squadron and its contribution as an Article XV Squadron. 460 Squadron dropped a heavier load of bombs on Germany than any other Squadron in Bomber Command. It suffered about 1 000 air crew killed in action; they lost about 200 aircraft. Although it did its first operation in March 1942 on *Emden* and gave a lot of other squadrons in Bomber Command about two and a half years start, it finished up the war about the sixth on the list of total sorties flown. One other notable record was that it was the first squadron in Bomber Command to fly 1000 sorties on Lancasters; and the first squadron in Bomber Command to complete 5 000 sorties on Lancasters. That is quite a record for one Article XV squadron.

Air Commodore Brent Espeland: If I could just follow up on that in the sense that the initial part of my presentation was looking to establish the very dispersed nature of the RAAF personnel within Bomber Command. But as the war progressed there was some concentration, particularly within the Article XV Squadrons. They certainly developed a true Australian identity. The one exception was in relation to Flight Engineers. For a variety of reasons Australia had chosen not to provide sufficient Flight Engineers throughout the war. Thus it was often the case during the later stage of the war that these Article XV Squadrons had complete Australian air crews with the

exception of the Flight Engineer. The contribution of these crews to the five RAAF heavy bomber squadrons made them very much Australian squadrons.

Dr Chris Coulthard-Clark: Could I add another dimension to this debate over the way the Empire Air Training Scheme (EATS) was implemented. The three papers we've heard this morning could give us all in this Conference hall the impression that the problems with the way the scheme was implemented stemmed from the fact that it was a scheme conceived and cobbled together in the early months of the war to meet the special contingencies of the war. Well in fact, the first meeting to discuss the idea of pooling allied or Commonwealth airmen in support of the RAF took place in 1937 and Australia was represented at that. I think that we need to understand that. Perhaps Australia and the RAAF were just a little bit slow in realising the reality of what the Air Ministry had in mind. The Australian representative at that meeting was the RAAF's number two man, S.J. Goble, who at that time was on exchange to the RAF as Director of Operations in the Air Ministry, and subsequently served as Air Officer Commanding No. 2 Bomber Group in the acting rank of Air Vice-Marshal. It's perhaps no coincidence that Goble was Chief of Air Staff in 1939. His preference was for an Australian Air Expeditionary Force which he saw as much more likely to serve Australia's national interests rather than support the Empire Air Training Scheme. Many people here may know that Goble departed the office of Chief of the Air Staff at the end of that year, January 1940. I suggest that we could consider that Goble's departure cost Australia a lot more than historians generally have been prepared to recognise.

The point I'm making in all of this is simply that perhaps it's time to stop blaming Britain for what was done to Australians under the EATS. I suggest the fault lay with ourselves; and perhaps the RAAF, in not realising what was really afoot at that early stage.

Air Commodore Brent Espeland: I think it may be also instructive to add on to those comments the point of view of the Canadians at the time of discussions for EATS. McKenzie King, the Canadian Prime Minister, had in his mind the experience of World War I and the lost Canadian blood on the fields of Europe. In terms of a preferred Canadian involvement for World War II, he looked to the EATS and maximum participation in the forthcoming air battle over Europe. This was at the end of the '30s, when it was believed the bomber would always get through. No one could foresee the absolutely dreadful casualty rates that would come to pass within Bomber Command. Hence McKenzie King saw EATS as a way of avoiding the casualty rates which had triggered the conscription debate in Canada and other Dominions in the First World War. Events turned out to be completely different, of course; so there is more than a little irony in the very strong

push he made to see the major involvement of the Canadians being in an air rather than a ground war

I have not seen any evidence of a similar Australian consideration; maybe Dr Coulthard-Clark or Dr Stephens can talk to the point. Nonetheless, the fact was that, because of McKenzie-King's political imperative, the Canadians pushed very hard and the EATS process gained an impetus which the other Dominions, including Australia, found hard to deny.

Identity of speaker unintelligible: Perhaps on the Canadian point, could you comment further on the 180 degree difference between the EATS and World War I where we saw 8 Australian squadrons in the Australian Flying Corps and no Canadian squadrons formed on an operational basis?

Air Commodore Brent Espeland: They were very different arrangements, that's true. In fact just before morning tea I was talking with Air Vice-Marshal Fisher about the disposition of Australian and Canadian airmen during World War I. Anything that could be drawn from making a comparison of the different situations to which you referred would relate to the particular circumstances that prevailed at the time of the commencement of hostilities, although it is more than likely many pertinent issues were not fully considered in each instance. I don't think I can throw any more light on the question at this time.

Identity of speaker unintelligible: To what extent were the ground staff Australian in those Article XV Squadrons?

Air Commodore Brent Espeland: During the course of the war there were continuous difficulties with getting the required numbers of technicians to man the Article XV Squadrons. It's interesting to note some of the photographs of the time which depicted the very enjoyable parties that were thrown by the air crew for the whole squadron, but more particularly for the ground crew. The parties were very much an all ranks affair and a very strong bonding exercise in terms of developing team spirit within the unit. In the photographs there are many Australians, but certainly the majority of the ground crew are wearing RAF uniforms. So it was the pattern of the war that the numbers of ground crew, as well as the numbers of senior officers that were made available from RAAF sources was insufficient to really round out an Australian identity. In fact it was the Australian Chief of Air Staff Burnett's considered position during the early stage of the war that he would only allow a very small number of senior officers to travel overseas. His preference was that they should remain in Australia and concentrate on the training build up there. Now Burnett was an RAF officer and some may question whether or not there was a hidden agenda. But certainly that was his very clear direction and he made sure it was followed through.

So, as I mentioned, there really were never enough ground crew and senior officers made available to come across from Australia to Europe during the course of the war to really round out that Australian identity.

Air Commodore G.H. Steege: I think the Article XV Squadrons varied from my knowledge and reading and discussion with others. 450 Squadron arrived in the Middle East completely Australian. The highest rank was Corporal but they were all volunteer tradesman who had good backgrounds in their own trades in civil life. Supervision was stiffened, at my request to Air Marshal McLauchlan; I said this Squadron needs a few senior NCOs for a while anyway. He was then Liaison Officer Middle East and organised some of 3 Squadron's senior NCOs to come and join me with 450 Squadron. But they were, in a matter of months, replaced by the very experienced trades personnel at 450 Squadron who were then promoted up the line. But that squadron retained its Australian personnel right through until Italy, as I understand from talking with the members of the very strong association. I think that was probably one of the few which really had, one might say, a purely Australian ground staff identity and until much later in the piece, almost a wholly Australian air crew identity right through. Other squadrons didn't seem to be able to manage it, but whether Australia kept the pure identity of 450 Squadron for any particular reason or whether it was by accident, I don't know. But I do know that personnel at 450 Squadron, even as late as Italy, when they were posted out to RAF Squadrons so that they could be given higher rank, said: 'No thank you, we would rather stay here.' So a lot of those men came back to Australia at the end of the war with virtually not much more rank than they had when they left. So that squadron was one in particular was one that had very strong identity.

THE RAAF IN COASTAL COMMAND 1939-45

Wing Commander Mark Lax

In May 1993, a 50th anniversary slipped quietly by without much recognition in Australia. Winning the Battle of the Atlantic, some observers say, like the Battle of Britain, saved Britain from disaster. Air power's role, it can also be argued, did more than just assist the surface forces. In particular, the efforts of Coastal Command in helping to win the battle is worthy of recognition as is the story of RAAF involvement.

What then was the contribution of the RAAF to RAF Coastal Command? That question is the essence of this paper. I wish to consider several themes. Firstly, I will broadly outline the historical setting that established Coastal Command before the war, and examine the RAAF's contribution to maritime aviation in pre-war Australia. Secondly, I will briefly cover the three RAAF Coastal Command squadrons and the RAAF contribution to other RAF units. Thirdly, some discussion about the crews, aircraft and missions is warranted, and finally, I will conclude with what I see as the value of Australia's contribution and the legacy this left the post-war RAAF.

An immense task faced Coastal Command during the Second World War. War operations commenced the day before the official¹ declaration on 2 September 1939 and continued every day and night until well after hostilities had officially ceased. Operations would involve an area equivalent to a fifth of the earth's surface - the entire Atlantic including littoral waters, part of the Arctic and the Mediterranean. In terms of cost, nearly 12 000 would die from all causes during their service in Coastal Command and over 2 000 aircraft would be lost.

Historical Setting - Coastal Command

Let me begin by setting the scene. I will cover the historical development of the Command in the United Kingdom and the development of maritime air power in Australia. Coastal Command formed on 14 July 1936, with an Australian, Air Marshal Sir Arthur Longmore² as its inaugural AOC. Ever since the end of the First World War, the Air Ministry realised the need for aerial protection of the coast and deep sea approaches. By December 1919, the RAF in the United

¹ In Britain, war was declared on 3 September 1939. Australia quickly followed on 4 September 1939, but allowing for time differences, this was within hours of the British declaration.

² Air Marshal Sir Arthur M. Longmore, KCB, DSO - AOC Coastal Command between Oct 34 - 1 Sep 36. b. Sydney, 8 Oct 1885.

Kingdom had been re-organised into three commands - Northern Area, Southern Area and Coastal Area. The latter, headquartered in London, was further split into two Groups - one at Leuchars in Scotland, the other at Lee-on-Solent in the south. Initially comprising just three squadrons, RAF Coastal Area was overwhelmingly naval in character and outlook in its early years.³ Perhaps because of this, flying boats were the order of the day, and this naval association would continue until long after the Second World War.

In developing their coastal defences between the wars, both the Admiralty, and to a lesser extent the Air Ministry, totally underestimated the offensive nature of the submarine. Consequently, they continued blindly to develop surface vessels and aircraft to counter the 'historical' surface threat - all this despite the U-boat successes of 1916-17. The necessary skills and equipment required to counter what was to become the greatest single threat to Britain in 1942-43 were by the mid 1930's, sadly lacking. Fortunately for Britain, WWI submarine commander, Kaptain sur See Dönitz's⁴ plan for a large fleet of U-boats had also fallen on Adolf Hitler's deaf ears. The result was that Germany only had 56 boats⁵ at the start of the war, yet the *Wolf Pack* tactics employed shortly after declaration took the Admiralty by surprise. Hitler was so impressed by these early victories that U-boat production was increased and the boats became a steadily growing threat for the Allies.

In 1936, partly as a result of years of neglect, and partly due to the growing threat of Nazi Germany, an expansion and modernisation program was embarked upon for the British forces, not least the RAF, who were still operating obsolete wood and fabric fighters, fixed undercarriage bombers and biplane flying boats. With this expansion came a reorganisation of the RAF command structure - Fighter, Bomber, Training and Coastal Commands all coming into existence. By January 1937, three Coastal Command Groups - No. 15 - flying boats, No. 16 - general reconnaissance and torpedo bombers and No. 17 - training - had been formed and together with the Fleet Air Arm - comprised the new Command structure.

Now under the command of Air Marshal Phillip Joubert de la Ferté⁶, Coastal Command underwent an internal reorganisation in which he

³ C. Bowyer, *Coastal Command at War*, Ian Allen Ltd, Shepparton, 1979, p 12.

⁴ Grand Admiral Karl Dönitz planned and commanded German submarine forces in WW II. As Nazi Supreme Commander, he surrendered Germany on 7 May 45. He was subsequently sentenced to ten year's imprisonment as a war criminal.

⁵ Bowyer, *op. cit.*, p. 15.

⁶ Air Chief Marshal Sir Phillip B. Joubert de la Ferté KCB, CMG, DSO - AOC 1 Sep 36 -18 Aug 37 and 14 Jun 41 - 5 Feb 43.

established an Area Combined Naval/Air Headquarters, where naval and air force officers sat side-by-side for all operations. This was a somewhat revolutionary concept which apparently worked! However, the main problem facing Coastal Command was lack of aircraft. Only eight squadrons were in existence rising to twelve by 1937, but they still operated outdated equipment and had no weapons designed specifically for attacking maritime targets.⁷

The original three Groups had now risen to four with Command Headquarters located at Northwood. Each had differing responsibilities. No. 15 Group at Plymouth - anti-submarine patrols, No. 16 at Gillingham - anti-shipping, No. 17 at Gosport - operational training and No. 18 at Pitreavie - anti-submarine and anti-shipping.

The Air Commanders had to fight to establish even this initial structure. In a rather telling conclusion to a 1959 classified report to CAS on RAF Coastal Command operations, Peyton-Ward, the Air Historical Branch Director wrote:⁸

During the years of peace up to 1937, the concept of maritime war was still considered in terms of warships. Air power was almost unrecognised by the Admiralty except as reconnaissance with limited operations against a fleet at sea. The final war plan for RAF Coastal Command was, therefore, virtually confined to this role.

By 1938, new aircraft types were on the way including the Short Sunderland, Avro Anson and Bristol Beaufort. The main strike aircraft still in front line service was the obsolete Vildebeest torpedo bomber, an aircraft that was lucky to fly at 160 knots. However, 200 Lockheed Hudsons were ordered in April and by 3 September 1939, Coastal Command could call upon the strength of 450 aircraft of mixed age and capability.

Historical Setting - Australia

Likewise, Australia has always been a maritime nation and so it was only natural that the newly formed Air Force became involved in the maritime arena, despite the fact that Australia had not had a Naval Air Service in the First World War. Nevertheless, aircraft had operated aboard Australian ships before and during the war⁹ and would continue

⁷ Bowyer, *op. cit.*, p. 17.

⁸ D.V. Peyton-Ward, *The RAF in the Maritime War 1939-1945*, Unpublished manuscript held at RAF Air Historical Branch, London, 1959, p. 55.

⁹ Examples are HMAS Una, Pioneer, Brisbane, Sydney, Melbourne and Australia. See Gillet R., *Wings Across the Sea*, Aerospace Publications, Sydney, 1988, pp. 8-11.

to do so from this time on. Avro seaplanes were amongst the first aircraft to be operated by the new Air Force¹⁰ and one of the proposed five squadrons to be raised was dedicated to Naval Cooperation. Air Force developments between the wars also included a recognised role for seaplanes for use in Antarctic expeditions, reef and islands surveys and for support of fleet exercises and other naval operations.

Two significant early seaplane flights should be mentioned. In 1924, Wing Commander Goble¹¹ and Flying Officer McIntyre¹² flew anti-clockwise around Australia in a Fairy IIID seaplane taking 44 days. The purpose: to reconnoitre the east coast with a view to organise seagoing aircraft defence. Two years later, Williams¹³ also with McIntyre, flew a DH50A across New Guinea and as far as the Solomons, this time as a flag waving exercise for empire defence.

By 1926, No. 101 (Fleet Co-operation) Flight had been established, primarily to support the RAN survey of the Great Barrier Reef and at the end of 1928, the Flight embarked upon HMAS *Albatross* to conduct sea trials and naval exercises. No. 101 Flight later became No. 5 (Fleet Co-operation) Squadron in 1936.

By 1939 a further seaplane squadron, No. 9, had been added to the growing strength of the RAAF as part of a long neglected expansion program now forced upon the Government by the growing threat of Japan. Of the twelve squadrons now formed, two were specifically dedicated to maritime operations and another, No. 10 Squadron, initially a general reconnaissance unit, would shortly form the embryo of the RAAF's contribution to Coastal Command.

In England when war broke out to pick up their new Sunderland aircraft and complete their conversion training, No. 10 Squadron soon found their trip home would be postponed for a while. On 20 October, the War Cabinet considered a cable from High Commissioner Bruce in London suggesting that a detachment from the Squadron be retained to serve alongside the RAF¹⁴. A formal request by British authorities followed and on 31 October, Cabinet approved the retention of No. 10

¹⁰ C. Coulthard Clark, *The Third Brother*, Allen & Unwin, North Sydney, 1991, p. 24.

¹¹ Wing Commander (later AVM) Stanley James Goble CBE, DSO, DSC. Ex-RNAS and later, RAAF CAS. During WWII, he was Australian Liaison Officer to the EATS program in Canada 1940-1945.

¹² Flight Lieutenant Ivor McIntyre CBE, AFC. Ex-RNAS. He was killed in an aircraft accident on 12 Mar 28.

¹³ Wing Commander (later AM) Sir Richard Williams KBE, CB, DSO. RAAF CAS at the time of the record flight.

¹⁴ Coulthard-Clark, *op. cit.*, p. 457.

Squadron in England and arranged for reinforcements which ensured the Squadron remained wholly Australian.

A further 17 Australian squadrons were promised as part of Australia's contribution to the Empire's defence. Two units namely No. 10 and No. 461 were immediately allocated to Coastal Command and these were joined in April 1942 by a third, No. 455 on transfer from Bomber Command. Australians served in at least 55¹⁵ other squadrons in Coastal Command and left a remarkable record of achievement. More of their story later.

The Outbreak of War

Britain declared war on Germany on 3 September 1939, and likewise, Australia on the 4th. Although under-strength and under-equipped, Coastal Command began the war with one small advantage. It had been fully mobilised a fortnight before the outbreak of hostilities¹⁶. The Air Ministry had directed that an exercise be conducted in August 1939 and as a result, all squadrons, including their Reserves, had been called out. When war was declared, Coastal Command aircraft received the news airborne, and thus can rightly claim to be the first Command on air operations for the war. Surprisingly, it would be an RAF Anson that claimed the first action with a U-boat attack on 5 September 1939, but with mixed success.

The Threats

Before discussing war activity, let me first review the threats. Churchill¹⁷ stated that the greatest constant threat to Britain was the German U-boat fleet. The *Unterseeboot* or under water boat and their torpedoes almost succeeded in defeating Britain by cutting its sea lines of communication and trade resupply. The early model of the Kriegsmarine sub was the type VIIC boat which was 67 metres long and displaced 770 tons. It could travel at 16 knots on the surface and about half that when submerged. Its complement consisted of 44 officers and men. It could carry 14 torpedoes and five anti-aircraft guns making her a formidable threat to air and surface vessels alike. Range was about 10 400 kilometres at 12 knots on the surface, but her Achilles heel was she could only travel 128 kilometres at 4 knots

¹⁵ AWM 54 81/4/78 Part 2.

¹⁶ Coastal Command - The Air Ministry Account of the Part Played by Coast Command in the Battle of the Seas - 1939 - 1942, HMSO, London, 1942, p. 34.

¹⁷ Churchill stated: 'The struggle against the U-boat was the dominating factor all through the war.' q.v. Stanley P., *Air Battle Europe 1939-1945*, Time-Life Books, Sydney, 1987, p. 41.

underwater before having to resurface. In 1943, the improved model IX entered service. Slightly longer at 75 metres, it displaced 1 120 tons. Its crew now stood at 50 and the boat could launch 22 torpedoes. Range was now extended to 17 600 kilometres.

The boats were powered by electric engines and remained vulnerable because of requirements to vent on the surface to recharge their batteries and replenish the breathing air. This caused their demise, but by January 1944, the incorporation of the schnorkel once again turned the tide in favour of the submarine. The device permitted air replenishment and cruise at periscope depth - about 14 m under the surface. In addition, it should be remembered that U-boats claimed numerous Coastal Command aircraft shot down with their 20 mm and 37 mm anti-aircraft cannons.

Working in radio contact with each other, and under a unified command, the U-boats operated in groups known as wolf packs and they were devastatingly efficient. By March 1943, when the Battle of the Atlantic was at its height, one in every three Allied convoy ships was sunk by these packs. Dönitz and his boat captains had almost succeeded in cutting Britain's resupply. However, the months of April and May were to prove decisive¹⁸. So much so, that on May 24, Dönitz admitted defeat and recalled all his boats to regroup around the Azores. The worst of the Battle for the Atlantic was over.

The cat and mouse games continued, but eventually, Dönitz ordered his boats to surrender on 4 May 1945. Even so, 221 defiant Captains scuttled their boats rather than hand them over. In all, 1 170 boats were built and they collectively sank 14 000 000 tons of Allied shipping. By war's end, 727 boats had been lost to enemy action and at least 211¹⁹ of these were claimed by Coastal Command.

As far as air threats went, the Ju-88 twin engine fighter, the Focke-Wulf 200 Condor four engined bomber and the Arado 196 single engine reconnaissance floatplane represented the most trouble for shipping and Coastal Command alike. Ju-88s were four-seat long range fighters, ideally suited to the maritime arena. They could fly over 2 500 kilometres at over 260 knots and were armed with two 13 mm and three 7.9 mm machine-guns plus over 4 400 pounds of bombs. They were a force to be reckoned with and claimed a high percentage of Coastal Command's losses.

The Condor on the other hand was an adaptation of a civil airliner pressed into service when a need for long range bomber aircraft became

¹⁸ In May 1943, 41 U-boats were sunk (six in one night).

¹⁹ Bowyer, *op. cit.*, p. 158. This includes 192 sunk by aircraft alone and a further 19 shared.

obvious. Concentrating on building the shorter range Blitzkrieg bomber type aircraft, Germany did not produce the longer range aircraft types in any number. However, the Condor, with a range of over 3 200 kilometres and an endurance of 14 hours was more than adequate. These aircraft could carry one and a half tons of bombs and six machine guns and a single 20 mm cannon also made them formidable air opponents. Numerous Coastal Command aircraft were shot down by them and they caused considerable Allied shipping loss.

The Arado 196 carried a crew of two over a range of about 800 kilometres. Armed with three machine-guns and two cannons, they were used in the reconnaissance and surface attack role and Aussies had several encounters with them.

The other ubiquitous threat was the weather. The North Sea and the Atlantic could turn nasty very quickly, often catching crews unawares:

The winds on one of the trips was well in excess of 60 knots. The navigator had taken some drift readings, but because of the [strength], they were discarded as being unreliable. On the next leg of the patrol, he took more readings. This time he believed them. A short time later, we ran into a fierce electrical storm. Lightning all around us. The skipper ordered the [250 foot] trailing edge aerial to be wound in but just as the wireless operator was about to grab the handle, lightning hit the aerial, raced up the line and earthed on the aircraft framework. The wireless op finished up on his back, yards up the fuselage. Everyone in the plane except me was blinded and we must have dropped 350 feet to about 50 feet above sea level. I shouted out on the intercom for the skipper to lift up the nose as I was looking straight at the crest of a wave. We must have been in a trough. When we returned to base we were accused by the Squadron OC of not winding in the aerial before landing, but when shown the molten blob on the end of what was left, he believed our story.²⁰

The Case of No. 10 Squadron

As previously mentioned, No. 10 Squadron was the first Australian unit offered to the British for war operations. Formed at Point Cook in July 1939, within weeks, the Squadron deployed to Britain to convert onto and accept nine new Sunderland aircraft to be dedicated to Australian coastal defence. After acceptance of the unit for duties in Britain, a second contingent to make up a complete squadron arrived on Boxing Day. The unit, however, commenced flying operations as part of No. 15 Group on 10 October 1939. The first sortie was flown by Flight

²⁰ Sergeant Wal G. Mazey WOP/AG, personal correspondence with the author.

Lieutenant Bill Garing,²¹ who flew to Bizerta in Tunisia with a spare engine for a stranded RAF aircraft. Thus, No. 10 qualified for the right to call themselves the first squadron from all the Dominions to see active service in World War II.

War operations commenced in February 1940, some time before the Battle of Britain, and on this occasion, Squadron Leader Charlie Pearce²² and his crew flew a naval escort sortie over the south-western approaches. During early 1940, the Squadron also flew VIPs over long ocean legs. One hop safely ferried Mr. Anthony Eden and Sir John Dill, the then Chief of the Imperial General Staff, to Gibraltar, despite the worst winter gale in the Bay of Biscay for over 80 years and the constant threat from enemy fighters. In the first year, detachments of the squadron patrolled from bases in Malta, Gibraltar, Cairo, Alexandria and Scotland.

By April, the Squadron had moved to Mount Batten, where but for a short stint at Pembroke Dock, they remained till the end of hostilities. Although the hardened maritime types may not like to admit it, the unit was transferred into Transport Command at War's end until all crews left the United Kingdom for Australia in October 1945.

Credited with the destruction of at least six U-boats,²³ the first came on 1 July 1940 when at 0615, base received a terse message from Flight Lieutenant Bill Gibson:²⁴ 'Have attacked enemy U-boat. Estimate five hits. Surfaced-sunk-survivors.' The boat had already sunk one vessel, but had itself been damaged by a Royal Navy escort and had surfaced to try to escape. Gibson's crew and those aboard HMS Rochester attacked and the submarine was sunk with 41 survivors. Gibson's crew received a half share of the prize.²⁵

No. 10 Squadron was also to cop its share of enemy air attacks, both airborne and at home base. Heavy raids of 27-28 November 1940 created havoc when a hangar was burnt out, two aircraft were lost and the oil storage area set alight. The German aircrew, however, did not

²¹ Flight Lieutenant (later Air Commodore) William Henry (Bull) Garing CBE, DFC, DSC (US). He was one of the first four Sunderland aircraft captains in No. 10 Squadron.

²² Squadron Leader (later Air Commodore) Charles Williams Pearce CBE, DFC. Like Garing, one of the first four Sunderland captains and later CO of No 11 Squadron (1941).

²³ K.C. Baff, *Maritime is Number Ten*, Self published, Adelaide, 1983, p 417. Specifically, U-26, U-243, U-426, U-454, U-465 & U-563.

²⁴ Flight Lieutenant (later Air Commodore) William Norman Gibson CBE, DFC. One of the first four Sunderland captains of No. 10 Sqn.

²⁵ Recounted in *Fighting the Enemy on Sea*, RAAF News, September 1960, p 4.

have everything their own way. In 1941, the Squadron claimed a Ju-88, and Arado-196 and a Focke-Wulf 200 Condor. Sightings and attacks by enemy aircraft rose quickly and on one occasion in August 1943, a Sunderland crew fought off seven Ju-88s for over an hour, sustaining five casualties - one fatal, but the aircraft was returned safely to base.

With the cessation of hostilities, the squadron continued routine training for some months, when all aircraft were returned to store. All personnel returned to Australia towards the end of 1945, coincidentally aboard a ship called the *Orion*, and the unit was reduced to cadre basis in mid 1946. Statistics in this case are worth noting. Nearly 43 000 flying hours, over 3 200 sorties. Seventy-five awards were Gazetted and 19 aircraft lost. Over 150 casualties were also sustained and at its peak strength in 1944, 468 Australians were listed as members of the Squadron.

The RAAF Involvement Through Article XV

Eighteen RAAF Squadrons were promulgated under Article XV of the Empire Air Training Scheme Agreement. In the event, only seventeen actually formed and as I mentioned previously, two of these would end up with Coastal Command. A third, No. 458 Squadron, remained in Bomber Command but strongly contributed to the battle for control of the seas as a torpedo-bomber unit in the Middle-East. The Unit's area of responsibility centring on the central and eastern Mediterranean. However, the actions of this Unit will not be further covered in this paper.

No. 455 Squadron

The first, No. 455, was formed at Williamstown on 23 May 1941 as a cadre of ground crews and technicians, and while they awaited transport, the unit re-established itself at Swinderby, United Kingdom on 30 June 1941 as the first Australian bomber squadron in Britain. Equipped with Handley-Page Hampden Is, the unit remained in Bomber Command until 17 April 1942 when it transferred to Coastal Command with a new role for both the crews and the aircraft - that of torpedo bombing. Much of the squadron's initial effort was spent searching for the *Tirpitz* around the Norwegian Fjords and these operations often took them far into the Arctic Circle.

In a rather strange and little known operation, in September 1942, the Unit including support staff, deployed 16 aircraft (together with an equivalent number from No. 144 Sqn , RAF²⁶) to Murmansk, Russia to

²⁶ This unit also flew Hampdens and had at least 3 Australians serving on it at the time of deployment. See AWM 54 81/4/78 for details.

provide convoy support to the Russians. Operating from Vaenga Two on the Kola inlet, they were tasked to protect Russian shipping against German surface raiders and also to train their Russian Navy counterparts, since the intention was to leave the aircraft behind as part of Churchill's promised support for the Russian Allies. In the event, they saw little action apart from the regular bombing of their airfield and by December, the task had been completed and No. 455 Squadron returned to the United Kingdom, courtesy of the Royal Navy.

By mid January 1943, the Unit comprised 237 personnel of whom 70 were aircrew. The year was spent patrolling the North Sea, and despite the dated technology, the Hampden aircraft performed admirably. Although a considerable amount of enemy shipping was sunk, the highlight of these rather mundane operations, no doubt, was the sinking of U-227 by FSGT J.S. Freeth,²⁷ north of the Shetlands on 30 April 1943. Throughout the summer, shipping *Rovers* and anti-submarine patrols were to be the norm.

The Hampdens were eventually retired in December 1943, the squadron taking three months to re-equip on Beaufighter MkXs. Now with formidable firepower, the squadron's role again changed to that of anti-shipping. Initially operating off the Dutch coast against Flak ships, the Squadron had involvement with D-Day, clearing the sea lanes of enemy E-Boats and armed trawlers. Once the Allies had obtained mastery of the Channel Coast, squadron operations swung back to Norway in October and these lasted until the end of the war. After hostilities officially ceased, the squadron continued on war operations, flying U-boat patrols up to 21 May 1945 - searching for submarines that had not surrendered. Four days later, the unit disbanded with a final tally of nine ships sunk, seven damaged, one U-boat sunk and two damaged.

No. 461 Squadron

The Other Article XV Squadron was No 461. By 1942, enough Australian Sunderland crews had been trained that on 25 April, a nucleus from No. 10 Squadron was posted to RAF Mount Batten to form this new unit. Operations commenced in June, initially involving Air-Sea Rescue, and later, anti-submarine work.

The move to Poole Harbour in September saw the first two attacks on U-boats, but in October, the squadron was re-directed to conduct transit and ferry flights to and from Gibraltar in preparation for the North Africa landings under *Operation Torch*. Normal operations resumed the following month. By mid-January 1943, unit strength was 35 officers and 80 other ranks, 35 of whom were aircrew. The unit's operating area was the Bay of Biscay and as those who were there may recall, all operations in this area were well within range of German Ju-88 long

²⁷ Flight Sergeant J.S. Freeth. Killed in an aircraft accident on 24 May 1943.

range fighters. Numerous encounters with these formidable aircraft were to see higher than normal loss rates for this squadron and for several months in 1943, enemy vessels including U-boats sunk and Sunderlands destroyed were evenly matched.

In May 1943, the squadron again moved, this time to Pembroke Dock where they were to be involved in many interesting encounters. The first confirmed²⁸ U-boat kill of the many claimed came on 2 May when U-boat U-332 went to the bottom and in early June, a Sunderland was intercepted in the Bay of Biscay by eight Ju-88s. In the melee that followed three fighters were shot down, another three damaged and the remaining two forced to retreat. The bullet riddled flying boat, with several wounded crewmen, just managed to reach the Cornish Coast. One reason for such successes against a superior enemy was that true to form, the Australians modified their aircraft with additional guns firing forward and through the side hatches. They were to earn the German nick-name 'flying porcupines' for obvious reasons. During this period, an amazing coincidence occurred which must be mentioned. On 30 July, a Sunderland from No. 461 Squadron, serial number U/461 sunk the German submarine U-461!

With the advent of newer, more capable aircraft, the Leigh Light searchlight, better radar and knowing the U-boats needed to recharge their batteries, the Squadron converted to night search and strike operations. During August 1944, Patton's Army threatened the U-boat pens at Brest and Bordeaux. The result: escaping U-boats were hunted down, 20 being sunk during the month, and the No. 461 was involved in the destruction of at least two of these.

At the end of January 1945, operational tasking again changed, this time to protection of the Western Approaches to the United Kingdom. Apart for a short stint off Norway, the squadron remained on patrol duties till the end of the war. Like her sister units, No. 461 continued sorties after war's end and on 4 June 1945, the unit was withdrawn from operations and disbanded on the 20th. Their final tally was seven U-boats sunk and five damaged with 64 awards gazetted. However, it cost the unit 83 operational casualties.

Other Article XV Squadrons

Although not technically members of Coastal Command, three other Article XV squadrons had a coastal connection. No. 451 Squadron flying Spitfires in the tactical reconnaissance role and No. 458 Squadron flying Wellingtons as night torpedo bombers at one stage, both belonged to what was known as the Mediterranean Allied Coastal Air Force. Their sister unit, No. 459, was a general reconnaissance unit

²⁸ Others credited to the Squadron included U-461, U-106, U-571, U-385 and U-270.

flying Hudson bombers in the naval cooperation role. All three conducted anti-shipping and coastal patrol operations and supported Allied operations in the Mediterranean, flying from Gibraltar, Malta, Lybia and Egypt.

The RAAF in Other Squadrons

As stated previously, members of the RAAF served in at least 55 other RAF and Commonwealth squadrons, mostly as aircrew. In many cases the particular unit only had one or two Aussies but in others, 20 to 30 was the norm. According to Air Marshal Williams' private papers,²⁹ by mid-January 1943 at the start of the build-up, just 58 officers and 92 airmen served in RAF Coastal Command squadrons. They were all aircrew. These numbers grew steadily throughout the war, but the extant records show that the larger numbers served in late '44 and early '45, no doubt because of EATS output.³⁰ Table 1 denotes the growth of the contribution.

There is little point at this stage considering RAAF service, squadron by squadron, suffice to say their contribution was considerable and these men flew in every aircraft type and mission undertaken by the Command. They operated from Britain to the United States, from Africa to Iceland and from Norway to the Caribbean.

Table 1 - Australian Involvement in RAF Coastal Command Squadrons

DATE	PILOTS	OTHER AIRCREW
13 January 1943	52	98
1 April 1944	80	422
1 January 1945	78	529

Source: Williams Papers and Herington J., *Air Power Over Europe 1944-1945*, AWM, Canberra, 1963, p 17.

²⁹ Williams AM Sir R., Private Papers, RAAF Museum.

³⁰ See Appendix at the end of this paper. Source: AWM54 81/4/78 Pt2.

Perhaps I can best illustrate how integrated into the RAF system some RAAF members were. Typical was the experience of Wal Maizey.³¹

We were an all Australian crew. The course lasted until 4 July [44] when we were posted to No. 179 English Leigh Light Coastal Command Squadron which had recently [moved] from Gibraltar and was based at Predannack on the English Channel in Cornwall. At that time, they [were] flying Mk XIV Wellingtons. There was one other all Australian crew on the squadron as well as a number of other Australians scattered among other crews.

Depending on the type of aircraft flown, each and every member had to log 800 operational flying hours to complete a 'tour' and that translated to about 70 sorties. This compared with 30 sorties required of Bomber Command crews. The individual stories of the Aussies who served in other RAF squadrons are too many to mention but for completeness, Annex A at the end of the paper contains a listing of RAF units and the numbers of Aussies who served in them.

Coastal Command Aircraft

Coastal Command operated a many and varied assortment of aircraft types. As the war progressed, these became more efficient, complex and certainly capable of longer range with improved payloads. Such General Reconnaissance aircraft included the Vildebeest, Anson, Hudson, Wellington, Whitley, Hampden, Beaufort, Beaufighter, Blenheim, B-17, Warwick and Liberator. Incidentally, one Mk 1 Liberator deserves special mention. It sank five U-boats, damaged a further three and flew over an incredible 180 000 operational flying hours. Flying boats included the Stranraer, the Saro London, Supermarine Walrus and the Shorts Sunderland at the start of the war and later, the ubiquitous Catalina, which entered RAF service in March 1941. One of these aircraft remained in the air for 26 hours during operations which ended in the sinking of the *Bismark*. Other types included the Lerwick and Northrop float-plane.

I would like to illustrate life on operations and I will use the example of the Sunderland. It was flown by as many Aussies as flew in all the other Coastal Command types combined. It had an all up weight of about 22 tons, endurance of 12-13 hours and a cruising speed of 155 kts at 6 000 ft. Eleven crew and two pigeons made up its complement. Armament was light on in the earlier models prompting the Aussie crews to add their own extra firepower. The production Sunderland was fitted with four .303 guns in the tail, one .303 each side of the fuselage or two .303 Brownings out of the mid-upper turret and one .303 gas

³¹ Maizey, personal correspondence with the author.

operated Vickers out of the nose turret. Later models had two .303 Brownings fitted to the nose with a rate of fire of 1 150 rounds per minute. Two 250 lb bombs and six depth charges meant that the aircraft packed a decent punch when operated against the subs. The crew would attempt to straddle the target with depth charges thus causing the maximum amount of damage.

These flying boats were 'board and lodging' to the crews. The cockpit was large enough to be called a bridge and included in the fuselage was a rest room for off-duty crew members, a wardroom, a small workshop and a galley. The galley was used for the serving of meals. One report stated that the aircraft was so comfortable that on one occasion a Sunderland dropped depth charges on a U-boat and the second pilot, at rest and asleep at the time, knew nothing about the attack until he came on watch again an hour or so later. Cynics would suggest otherwise and state that the aircraft were so noisy and uncomfortable that it was a wonder the pilot was asleep at all let alone miss a sub attack!

At the start of the longer flights, three or four large vacuum flasks filled with hot food were brought on board. Fresh water was also brought aboard in four gallon cans. There was a small stove fitted in the galley and heating for drinks was supplied by two kero filled Primus burners. These Primus burners were to be used after approximately one hour's flying so all the fumes from the refuelling would have time to dissipate. According to one crewman:³²

it was not unusual to have gallons of fuel pouring out of the trailing edges of the wings after refuelling overflows. We lost one Sunderland when it blew to pieces about ten minutes after take-off with only two bodies ever recovered. With this explosion it was thought that the Primus had been used too soon, maybe to make a hot drink for the crew.

Despite such hazards, the crews soon adapted to these homes away from home and made do with the discomforts.

The Crews

Now I would like to briefly cover what the crew positions actually did, again using the Sunderland as an example. Each individual was a member of a team and each faced several enemies. First and second was the military might of Germany, both in the air and on the surface. The third enemy was complacency. The air and the sea are unforgiving masters and many unfortunate accidents arose from not paying either due respect.

³² Flight Sergeant Robert Keith Scott, DFM of No. 10 Squadron.

Coastal Command aircraft were usually crewed with airmen and officers of ranks ranging from Aircraftsman to Wing Commander. Pilot and co-pilot, navigator, wireless operator and gunner were the most common positions. In the Sunderland case, the usual crew was three pilots, a navigator, two engineers, two gunners, two wireless operators and a flight rigger or armourer. Let me briefly examine each of their duties.

The ability to fly and operate a large aircraft was not the only skill required of the pilot and co-pilot of the aircraft. The responsibility for the lives of his crew and the control of a powerful weapon should also be considered. The ability to navigate accurately, as an AOC's annual report³³ stated, 'is I consider, one of the most important qualifications of the General Reconnaissance pilot'. Furthermore, the pilot of the flying boats had to have seaman skills, since these aircraft were also surface vessels. This required a knowledge and understanding of Admiralty charts, weather patterns, wind and tide interpretation and ship recognition skills. In many cases, the pilots doubled as the bomb aimers, a skill requiring accuracy and nerve.

There are no landmarks 500 nautical miles out to sea, and as such, the position of navigator was essential for track keeping, rendezvous, reporting and guidance home. Although only one was carried, he had to maintain aircraft position at all times to ensure correct position reporting and safe return. Aided by the pilots, air plot and astro shots were the main skills used before long distance direction finding was introduced.

As today, the flight engineers were primarily responsible for monitoring engines, hydraulics, electrics and fuel usage and in some cases, fault rectification. They would double as air gunners in crisis situations and generally monitored the pilots, particularly when flying below 100 feet.

The air gunner was more than just a gun operator. In many cases he was a trained wireless operator and occasionally, trained in navigation, thus adding built-in redundancy to the crew. This proved especially useful when one or more crew members were killed or wounded. Some squadrons such as No. 10 regularly flew their ground staff and trained them up as air gunners. On passing this course, they flew as Fitter IIEs and IIAs, and also as armourer air gunners. Promotion was dependent on mustering so many members flew as LACs and Corporals, but they added additional skills, particularly when the aircraft landed away from base.

The wireless operators maintained continual radio watch. This included links with home base, the Navy, convoys and they also maintained watch over a new system, the ASV. The Air-to-Surface Vessel system was in fact an airborne compact radar that could detect surfaced

³³ *Coastal Command*, Air Ministry Publication, p. 27.

submarines albeit at a ranges of only a few miles. Later variants operating at shorter wavelengths had much improved range. Regulations permitted only 30 minute shifts on the radar screen, so the WOP as they were called would rotate every half an hour or so.

The Ground Staff

Credit must also go to the ground crews who kept the aircraft serviceable, particularly when they themselves were under air raid conditions and often facing major repairs to damaged aircraft. In addition, often they had to work in the most appalling conditions - foul, miserable weather and long hours of darkness during the winter months. According to the Official Publication, *The Coastal Command Review* of February 1944:

Several maintenance and flying hour records were held by No. 10 Squadron - a tribute to the work of the ground staff. Perhaps the finest achievement was the removal of an old engine and the testing and fitting of a new one in seven hours - all under black-out conditions.³⁴

These ground crew were trained in the full range of mechanical and technical trades and in the case of the Article XV Squadrons, were almost entirely Australian. In comparison, few Australian ground crew personnel served in RAF Coastal Command Squadrons.

The Secret War

The secret war also played an important role in the cat-and-mouse game of hunter and hunted over the vastness of the ocean. By late 1941, scientists and code-breakers at the top-secret Bletchley Park had cracked the German Enigma codes. Known as *Ultra*, this capability gave British and Allied planners details of German submarine movements and counter-intelligence regarding the convoys under threat. *Ultra* combined with new and improved aircraft systems such as better bombs and depth charges, ASV radar, new bomb sights and the Leigh Light once again gave the Allies the edge.

The Leigh Light was a two-million candlepower searchlight fitted to longer range Coastal Command aircraft which allowed submarine attacks at night. The U-boats would use the cover of darkness to surface and recharge and thus escape detection. The ASV would put the crew onto the sub, the Leigh Light would be turned on and the sub attacked, all in the matter of minutes. Within the first few months of operations, 27 U-boats went to the bottom under such conditions.

³⁴ *Coastal Command Review*, The Air Ministry, February 1944, Vol III, No. 2, p. 24.

However, it was not long before the German scientists had produced an early warning receiver for ASV known as *Metox* and the tide once again turned in favour of the subs. Such development and counter-development continued to the end of the war.

The Missions

The environment under which the crews had to operate was very different from that of the crews of other commands. Long flights in all kinds of weather, day and night flying and accurate track keeping were the norm. Whereas the targets of bomber command were stationary and usually large, those of Coastal Command were usually moving and small.

Coastal command did more than chase submarines. Although some of the work was not considered as glamorous or exciting as that of their Fighter and Bomber Command cousins, the crews were often in as much danger and under as much stress as every one of those flying over the enemy lines.

Ops were not confined to the North Atlantic. Far to the south, the U-boat war off the West African coast was being prosecuted by RAF West Africa Command. Two flying boat and one landplane squadron provided support to convoys between Congo and Gambia, together with air sweeps to 400 miles from the coast. Here, the U-boats did not operate in packs, but individually against the numerous and random traffic. Not surprisingly, these boats were hard to detect and shipping losses by late 1942 were heavy.

Operational tasks set Coastal Command included anti-submarine warfare, anti-shipping, convoy escort, aerial reconnaissance, photographic reconnaissance, air-sea rescue and meteorological flights. To best illustrate these, I would like to quote from a number of various eye-witness accounts to give you a better idea of the sort of work each mission involved.

Firstly, I will deal with anti-submarine warfare. Churchill wrote 'The only thing that ever really frightened me during the war was the U-boat peril ... our lifeline, even across the broad oceans, and especially in the entrances to the Island, was endangered.' Let me quote for you the account of one U-boat attack:

At 10.40 hours on the 28th of May 1942, we took off from Gibraltar in Sunderland W3983/R for anti-submarine patrol in the western Mediterranean, with pilot Flight Lieutenant

Graham Pockley³⁵ in command. During our patrol, the crew sighted a fully surfaced Italian submarine. The boat was 600-850 Tons and our aircraft dived to attack, with the skipper taking violent evasive action in the face of very heavy gunfire from the submarine which had no intention of submerging. After we broke off the first attack, it was discovered that only four depth charges had dropped from the starboard bomb racks, the port rack still having its full load because of a faulty circuit. Another attack run was executed with all air gunners concentrating on 'knocking out' the U-boat gun crews.

During this second bombing run, again the depth charges failed to drop from the port bomb racks. After a conference, it was decided to attempt a bomb change over from the unserviceable racks to the good racks. With the help of another crew member and while the skipper kept the U-boat under close observation, we succeeded in about an hour. A final attack was set up and through very heavy and accurate hostile gunfire, the skipper pressed home the attack, dropping our aircraft to a height of about 50 feet over the top of the boat before releasing the four remaining depth charges which resulted in maiming the boat.

The final attack was so low, we could see the upturned faces of the boat crew. As this particular action had lasted five hours, our aircraft was very low on fuel and we had to break off the engagement. A coded radio message was sent to Gibraltar and three Hudsons were dispatched to finish the job. No member of the crew was hurt and the skipper awarded the DFC. For my part as armourer of the aircraft, I was awarded the DFM.

LAC Bob Scott DFM of No. 10 Squadron.

A second, equally important task for Coastal Command was that of anti-surface shipping. In another incident,³⁶ Flying Officer Jack Cox flying a Beaufighter of No. 455 Squadron turned to make an attack on German shipping which had taken cover near some coastal flak batteries:

I wheeled around with the formation and that put me closest to the shore defences. As the formation straightened, we got the order to attack and my plane was hit straight away. The

³⁵ Flight Lieutenant (later Squadron Leader) Harold Graham Pockley DFC*. Known as 'the U-boat Magnet', Pockley was involved in a number of U-boat attacks. He was killed in action on 25 March 1945.

³⁶ I. Gordon, *Australian Strike Squadron*, a short paper held by RAAF Historical Section, Canberra.

leading edge of both wings were smashed by the high explosive flak. I lost all my instruments except the compass and air speed indicator.

Committed, Jack pressed on ...

I had four ships to my front and I fired my cannons on our way in. By the time we were on to the third and fourth ship, we'd come down so low we were looking up at their bows. I headed for the open sea but we started to take hits on the wings from these boats also. I was too low to take evasive action.

They made it home but crash landed, writing off the aircraft but not themselves. Jack was later awarded the DFC and earned the nickname 'Flak Jack' from then on.

Thirdly, convoy escort. Allied convoys made regular crossings of the Atlantic, often unescorted for part of the journey. There could be as many as 40 ships making up the convoy and the constant threat of subs and enemy aircraft made these trips hazardous. Likewise for Coastal Command, the escort missions were often more hazardous than first expected. Such duties, although often mundane, occasionally brought their own flying hazards as this incident recalling the attack on a No. 10 Squadron Sunderland by a Focke-Wulf Condor:

I was of course using standard drill flying at about 50 ft above the surface of the water, and with full power must have been doing every bit of 150 knots. The shells, from my position, were lobbing just over my head into calm water. The navigator, Ted Cocks who was in the astrodome doing the fire-control act, did an excellent job. He told the gunners to hold their fire and suggested that on command, I haul back on the throttles and do a flat turn to the left to bring the Condor in and confuse him in laying off deflection. On Ted's say so, I closed the throttles and stood hard on the left rudder. The Sunderland with its built-in headwinds seemed to stop dead in its tracks. Ted calmly gave the range as the FW-200 rapidly approached. Apparently the Condor came to within 300 yards of us and Ted gave the order to fire.³⁷

The crew opened fire badly damaging the Condor which turned tail and withdrew.

Aerial reconnaissance was also a mission of primary importance. In August 1939, the Command adopted an aerial reconnaissance grid system, which was put into force to prevent a break-out by enemy

³⁷ Flight Lieutenant Vic Hodgkinson's action recalled in Baff, *op. cit.*, p. 165.

surface raiders, but with mixed success. *Deutschland*, *Scharnhorst* and *Gneisenau* escaped observation and in the early days, 26 aircraft were lost on these sorties. As the war progressed, the virtual elimination of the German ability to send capital warships against the Atlantic convoys confined these reconnaissance missions to watching patrols off Brest, precautionary patrols in the Bay of Biscay and to northern patrols into Norwegian waters to monitor German surface movements into and out of the fjords. In late 1942, Hitler apparently feared a British landing in Norway and the battleship *Tirpitz* along with several destroyers and light cruisers was deployed to the northern waters around Trondheim with the dual purpose of interdicting British landing parties and protection of the northern and Russian sea approaches.

Such reconnaissances continued to war's end with photographic support no more evident than that provided to Eisenhower just prior to the D-Day landings. The whole enemy coast was photographed and new maps created to support the amphibious and land operations. Without these photographs, the ground forces would have failed to receive the latest intelligence regarding site suitability and enemy dispositions. Over 16 000 sorties were generated on this task alone.

Minelaying by aircraft had been considered well before the outbreak of war, but the magnetic mine was still in its infancy. It was not until March 1940 that the mine and its parachute system were perfected for use in Beaufort, Hampden and Swordfish aircraft and not until April that adequate stocks had been procured. Initial operations were conducted by Bomber Command on 14 April but these operations were complemented by Coastal Command two days later using Beauforts and Fleet Air Arm Swordfishes loaned for the purpose. The role reverted back to Bomber Command in early 1942 and they retained it to war's end. In tally, 86 vessels were sunk by air delivered mines for the loss of 31 Coastal Command aircraft.

The Battle of Britain had taught the RAF the value of air-sea rescue. Coastal Command formed dedicated ASR squadrons who picked up hundreds of surviving civilians, seamen and downed aircrew, which no doubt contributed to a significant number of lives saved, particularly when considering the icy waters of the North Atlantic and North Sea. I now quote an incident from early on in the war which was recalled by the pilot of the rescuing aircraft:

Through my glasses, I could see the people in [the lifeboat] quite clearly. Most of them were prostrate, obviously pretty well exhausted. Yet as I watched, a little chap in what looked like a boy scout's uniform who was lying down amidships, suddenly spotted us. He looked up at once and began waving his arms. Then he picked up something white - probably a handkerchief - and began to wave it. I did not get the idea for

a second, then it dawned on me what he was up to [-semaphore]. C...I...T...Y... O...F...

And so were saved the survivors of the ill fated child refugee ship *City of Benares*. A warship was quickly dispatched to the location and the survivors rescued. I should add, the captain of the RAAF *Sunderland* which located the lifeboat was Squadron Leader W.H. Garing.

Finally, I must discuss the meteorological flights. Much ceremony was made recently of the 50th Anniversary of D-Day and of how important accurate weather forecasting was for the timing of the landings. There was an arm of Coastal Command that few knew about, the Meteorological Squadrons. Five 'Met' squadrons were formed in 1943, numbered 517 to 521 consecutively, and special met observers were trained to fly with the patrol aircraft. These Met observers were later to be issued with their own M wing and numbered only about 100. Aussies served in all these units. According to Flying Officer Lambert:³⁸

Australians attached to the RAF served, and some lost their lives, in these Met Squadrons. I was a member of 518 Squadron based on the Isle of Tiree in the Western Hebrides. I made 52 Met flights over the North Atlantic as a Wop/Air flying along the Mercer and Bismuth tracks. Our crew took off at 0115 on the morning of the 6th of June 1944 on a Mercer Met Flight, one of many other aircraft of Coastal Command Met Flights flying that morning, sending back up to the minute weather observations back to Central Met Office. At 0630 I took a message from base, the wording of which I have never forgotten. "Allies landed 0430 this am Normandy".

Such Met Flights were not easy. The aircraft were climbed to 18 000 feet then slowly descended to sea level, often in sea swells of 100 feet. Regular observations were transmitted back to base and used to produce weather charts, especially for the planning of Bomber Command operations.

Costs and Casualties

So just what did the Battle for the Atlantic cost the Allies? One source, by comparing cost of U-boat production against cost of building ASW forces and cargo ships lost, claimed:

... the Allies had to outspend the Germans by a factor of 15 to one. ... In effect, the German *guerre de course* forced the world's two greatest maritime powers to divert extensive

³⁸ Flying Officer Les R. Lambert, personal correspondence with the author.

resources to their navies and to deploy most of their warships defensively in order to maintain control of the seas.³⁹

We can only imagine the actual cost figure regardless of the high cost in human life.

Not all who served with Coastal Command lived to see the end of the war. Statistics listed in the Official History⁴⁰ indicated that by war's end, 408 RAAF personnel had died and a further 113 were injured on war operations with Coastal Command. The deaths represented 7.5 per cent of the total RAAF losses in the European War. This may seem small compared with Bomber Command's 3 500 Australian deaths, but by comparison with numbers who served, the percentage is high.

The Value of Coastal Command

Well what of the value of Coastal Command? Certainly the total casualty list from air operations came to 5 866 men, including 1 630 Dominion and European allies.⁴¹ But how can we assess their contribution to the war effort? In terms of their missions, some interesting facts emerge.

In November 1945, Rear Admiral Godt, Dönitz' Chief of Operations, was interviewed by naval intelligence and provided some telling clues as to the effectiveness of the anti-submarine campaign. He stated that at the beginning of the war German assessment of Britain's weaknesses was based on two premises. Firstly, England is dependent for her whole existence on sea communications. This highly sensitive spot must be attacked and secondly, the battle must therefore be carried out by means of 'the little man'. [Logically then], Germany's most important weapon in this war must be the U-boat.⁴²

Potentially, a U-boat blockade of Britain's sea lines of communications would have effectively starved her of raw materials, food and oil. RADM Godt went on to say:

I under-estimated the danger from the air to U-boat activity, both as regards the eventual covering of the whole Atlantic by

³⁹ M. Poirier, 'Sea Control and Regional Warfare', *US Naval Institute Proceedings*, June 1993, pp. 64-5.

⁴⁰ J. Herington, *Air Power Over Europe 1944-1945*, AWM, Canberra, 1963, p. 509.

⁴¹ Probert AIRCDRE H., *Support Skies was Crucial Factor in Eventual Victory, 50th Anniversary of the Battle of the Atlantic - Official Souvenir*, Brodie Publishing, London, 1993, p. 92.

⁴² AWM 54 81/4/78 Pt1.

air patrols and especially in connection with location instruments, the importance of which was recognised for the submerged U-boat as regards surface vessels, but not for surfaced U-boats as regards patrolling aircraft.

In March 1944, The First Lord of the Admiralty, the Rt. Hon. A.V. Alexander stated:

I cannot speak too highly of the skill, the courage and the endurance which the crews of Coastal Command have shown in succouring convoys and developing offensive operations against the U-boats.⁴³

Further, extracts from a report by Grand Adm Dönitz on the U-boat war clearly state how effective the anti-submarine campaign had been. 'Of an approximate strength of 38 000 men in the U-boat arm, around 30 000 had fallen.' Of the 727 U-boat losses, records generally credit 40 per cent of these to air action alone, 10 per cent to strategic bombardment and a further 10 per cent to combined air and naval engagement. He went on to state⁴⁴ Coastal Command 'played a decisive role in inflicting high losses' although other commentators⁴⁵ believe their success 'had not been so much in the number of U-boats sunk as in forcing a drastic drop in enemy morale'. More telling, the words of a captured officer 'It's no longer any fun. If an aircraft is there, we've had it.'

Coastal Command operations was not all anti-submarine work. Individual missions may be considered inconsequential but they all add up. In terms of Air-Sea Rescue, over 10 600 had been saved and regarding Photographic Reconnaissance, over 32 million photographs exposed, all contributing to the war effort.

In summary though, perhaps the major achievements for Coastal Command were best captured by Peyton-Ward in his Secret report⁴⁶ to the Air Staff mentioned earlier. He listed seven major achievements of Coastal Command during the war, to which he included some Bomber Command tasks associated with the maritime arena. The achievements he stated were:

- [In] co-operation with surface escort vessels, the defeat of the U-boat menace to ocean communications.

⁴³ *What Britain Has Done - 1939-45*, Pamphlet R.653, Ministry of Information, 9 May 45, p. 25.

⁴⁴ q.v. *The White Crows*, p 62.

⁴⁵ *Loc. cit.*

⁴⁶ Peyton-Ward, *op cit.*, pp. 55-6.

- The strangulation of enemy coastwise trade by direct attack and minelaying.
- The immobilisation at a critical stage of the war of the Brest Group [of warships] and the subsequent destruction of seven of the enemy's major naval units.
- The defeat of enemy air attacks on coastal shipping.
- The [high level of] destruction of enemy shipping in port and accompanying delays inflicted on the movement of cargo.
- The removal of the torpedo-boat and E-boat threat to the invasion of Normandy.
- The destruction of 52 U-boats in port and serious delays to the construction of prefabricated U-boats by bombing assembly yards and internal communications.

I have no reason to disagree.

The RAAF Legacy

The restructure of the immediate post-war RAAF included a dedicated maritime air component. In fact, the Catalina aircraft operating from Rathmines were used until 1950 and a number of Lincoln bombers were produced with stretched noses for what was termed the 'general reconnaissance' role. In addition, the Royal Australian Navy⁴⁷ had stated that: 'the master weapon of World War II had been the aeroplane' and thus took steps to secure a Fleet Air Arm, supported by two aircraft carriers.

By 1950, new long range maritime patrol aircraft had been acquired. Australian Neptunes entered service with No. 11 Squadron at Pearce in Western Australia in November 1951. Twelve were ordered initially, followed by another twelve to equip No. 10 Squadron at Townsville in 1962. These aircraft have now long since been replaced by the Lockheed P-3C Orion and today the RAAF is well provided for in terms of Maritime Patrol and Maritime Strike Aircraft. This can no doubt be partially attributed to the fine heritage set by the Coastal Command crews and of their equivalents in the South-West Pacific theatre. All the missions conducted in World War II are as pertinent today as they were then. Today, as then, the Government has come to realise just how important surveillance, patrol and protection of our sea lines of

⁴⁷ Australian Archives CRS A5954, Box 1841, p.v. Stephens A., *Power Plus Attitude*, AGPS, Canberra, 1992, p. 114.

communication are. It has been stated that 95 per cent of Australia's trade enters and exits by the sea. In order for Australia to ensure it can continue to enjoy freedom of travel and trade, a robust maritime air component of our force structure will continue to be essential. This, I believe is the true legacy left by the Aussies of Coastal Command.

Coastal Command Squadrons in which Members of the RAAF Served

Squadron	Date started	Max strength (mth/year)	Date last known RAAF involvement / Remarks
10 RAAF	Oct 39	468 (9/44)	
14	Nov 44	15 (4/45)	
22	Oct 41	2 (9/41)	Dec 41
36	Nov 44	26 (4/45)	
42	Jun 41	4 (9/41)	Aug 42
48	May 42	1 (9/43)	To Transport Command - 1944
53	Dec 41	37 (9/44)	
58	May 42	24 (9/44)	
59	Jun 41	31 (9/44)	
86	?	32 (9/44)	
119	Feb 43	2 (9/44)	
120	?	38 (4/45)	
140	Mar 42	3 (9/42)	Apr 43
143	Jul 42	3 (9/42)	
144	Jul 42	3 (9/42)	
160	Nov 42	3 (9/42)	Jul 43
172	Mar 42	18 (9/44)	
179	Sep 42	47 (9/44)	
190	Mar 43	4 (9/43)	To Fighter Command - Feb 44
201	Nov 41	14 (9/44)	
202	Jun 42	16 (4/45)	
206	?	30 (4/45)	
209	Dec 41	3 (9/41)	May 42
210	Sep 41	5 (9/44)	
217	?	1 (9/41)	May 42
220	Dec 41	25 (9/44)	
224	?	27 (9/44)	
228	Nov 41	14 (9/44)	
233	Jan 43	26 (4/45)	
235	Jan 42	3 (9/43 & 4/45)	
236	Jan 43	2 (4/45)	
246	Oct 42	2 (9/42)	Feb 43
248	?	4 (9/41 & 9/42)	To Fighter Command - Dec 43 To Coastal Command - Jan 45
251	Aug 44	11 (4/45)	
254	Jan 43	3 (9/44)	Jan 45
279	Nov 41	30 (9/42)	
280	Apr 42	13 (4/45)	
407	May 42	11 (4/45)	
415	Aug 42	3 (9/42)	To Bomber Command - Sep 44
422	Jul 42	2 (9/42)	Jan 43
423	Sep 42	6 (9/43)	Jan 45
455 RAAF	Apr 42	145 (9/43)	Ex Bomber Command - Apr 42
461 RAAF	Apr 42	288 (9/44)	
489	Nov 41	4 (9/43)	Dec 44
502	?	10 (4/45)	
517	Oct 43	10 (9/44)	
518	Sep 43	16 (9/44)	
519	Nov 43	17 (4/45)	
520	Feb 44	4 (4/45)	

521	Sep 43	7 (4/45)	
524	May 44	5 (4/45)	
540	Feb 43	1 (9/43 & 4/45)	
541	Dec 42	2 (9/43 & 9/44)	
542	Oct 42	2 (9/44)	
543	Nov 42	3 (9/43)	Sep 43
544	Oct 43	1 (4/45)	Feb 45
547	Feb 43	37 (9/44)	
612	Oct 41	25 (9/44)	

Source: AWM54 81/4/78 Pt2

DISCUSSION

Mr T.L. Walkley: Your paper pleased me because you're the only lecturer that's made much mention of the efforts of the ground crew. An outsider could be forgiven for thinking that the only people in the Air Force were pilots. I served on 461 Squadron as ground crew. I also flew on operations as a Flight Engineer, as I did in Bomber Command on Lancasters. I'm here to tell you that the people who really worked hard in bad conditions - snow, muck, oil, grease - were the ground staff. And I suggest to you that the next conference that you have, you might pay them the respect they deserve. Thank you.

Wing Commander Mark Lax: Thank you for that. It's a very true *comment* that we seem to gloss over in a lot of the historical references, including a lot of the books that I've read. You could be forgiven for believing that there was no such thing as a ground crew person. It is something which I mentioned in my presentation, but when you read the actual paper I think you'll find there's a lot more about the ground crew.

Wing Commander L. Williamson: I speak of my brother who had a marvellous, interesting tour of duty in the Hebrides with a Canadian air crew. So much so that he came home with a Canadian accent. But I think one of the things that hasn't been emphasised enough - from what I can gather from talking to him - were the long, lonely hours - boring, boring, hours - spent in these aircraft on patrol. I think there was quite a feat of stamina to go through all of that, and with the stress and the ever present risk. And incidentally he was flying on Halifax's as an observer and he did this on meteorological missions, so it wasn't as confined a squadron as you've mentioned.

Mark Lax: Thanks Lindsay. What I did was send a number of letters out about eight months ago to the Old Boys Associations and I received about eight replies. So some of what was presented today came from information provided by people that were there. One of the things that I'd written in my original script was that the other enemy was boredom. As an act of courtesy I sent a copy of the script to those people that replied to my letters and to a man they all wrote back telling me that they were never, ever bored. So I guess you can't win, can you.

Air Commodore Brendan O'Loughlin: I see that Air Commodore 'Bull' Garing is in the audience and I wonder if he would like to contribute to this discussion.

Air Commodore W.H. Garing: Well to the presenter Mark Lax, I congratulate you on that paper. You did it very well indeed. There's not much one could add to it except for a lot of the things that happened in No. 10 Squadron. And don't forget that No. 10 Squadron consisted of Permanent Air Force. The few who went over to bring the flying boats back in the first place were highly trained; men like Bill Richmond as an

engineer and so forth. Just before Christmas in 1939, the main body of No. 10 Squadron was sent from RAAF Richmond to Europe and they got there about Christmas Day in freezing weather. Even the water around the Coast was frozen - salt water frozen! So you can imagine what it was like.

You mentioned the weight of the Sunderland. I remember on one occasion I had to go out to the Mediterranean and I had a big load of things for Malta and Charlie Pearce was commanding the squadron at the time. I was one place from him in the Air Force List, so I was a Senior Flight Commander. And they loaded this damned Sunderland up until it reached about 34 000 pounds and both floats were half submerged. So I went to Charlie Pearce and said: 'For God's sake, sir, can't somebody take some of it off.' And he said: 'You can fly it, get going!' Well we did, but we were at Mount Batten and the flare path was laid and we opened up and never looked like getting off the water. We had to go right back up the river, come down and then open her up to get over that sea wall. And we did. And 'Shortie' Dibbs, the engineer, was standing beside me looking over my shoulder and he said: 'For Christ's sake, sir, look at the engines,' and they were red hot. From that moment on, all the way out to Cairo, the performance fell down. Well I brought Anthony Eden back from the Cairo conference. We also had other VIP jobs. I took Lord Lloyd to France to persuade the French Government - de Gaulle - and Marshal Pétain to take their Government overseas and that we would restore the French Empire to them after we'd beaten Germany. Pétain promised that he would do it. And we took off at daylight and I got an immediate message that German Fighter Command were after us. So we flew way out into the Atlantic. Lord Lloyd spoke to me at great lengths and he had a wicker basket underneath his seat and it had two bottles of French Champagne and he said: 'Share this with me, it's under orders from the Chief of the Air Staff.' Anyway, that never came off.

And I'd like to mention 461 Squadron - you've referred to it - it was a daughter squadron of No. 10. Squadron Leader Dudley Marrows, in the Bay of Biscay, saw this U-boat on the surface and there were two others behind him - two other U-boats, so three altogether. And he attacked the first one and blew it in half with depth charges and so forth. He then flew around and dropped his rubber boat to the Captain who was blown off his conning tower. And that Captain eventually got back to Germany and came out to Australia, looked for Dudley Marrows and they became the greatest of friends. Today Marrows is a number one orange grower.

But I think that was a good talk on the Coastal Command and you've seen how important it was. The crews in our aircraft were so trained that anyone could read morse code or flag, no matter which way the aeroplane turned. They used to take over when the captain could no longer see the signals coming up. So that was the discipline of 10

Squadron and we passed that on to our daughter squadron who did so well.

Group Captain J.B. Fitzgerald: I was just wondering when the first Empire Air Training Scheme graduates joined 10 Squadron? Also, I wish to make a point about the flexibility of Coastal Command. For instance, a lot of those aircraft that went in the thousand bomber raids on Europe early in the war were Coastal Command aircraft.

Mark Lax: Yes, I'll take the last point first. There was a lot of things left out of my presentation simply because of time. We could really spend a day like today just talking about Coastal Command and operations. The paper which will be published - and you'll all receive a copy of the publication - is about three times as long as the one I presented today. Hopefully, it will cover a lot more of the unusual sorties that Coastal Command did and include a few more anecdotes.

Turning to the first question about the time when the first EATS graduates arrived at 10 Squadron, I'm sorry I don't know the answer.

**RAAF PERSONALITIES
IN THE EUROPEAN AND NORTH AFRICAN CAMPAIGNS
DURING WORLD WAR II**

Group Captain David Schubert

PREAMBLE

Historians are accurate, disinterested unemotive and factual people. I am not an historian: my only exact association with history is the fact that I was born in the past. A personal interest in two personalities associated with their examples of command leadership and, as a matter of course, loyalty bring me here today. However, my interest and the task set out for me provided a dilemma. Let me explain this dilemma by relating the story of the first personality that came to mind regarding the air war in Europe.

AVM D.C.T. Bennett

AVM D.C.T. Bennett's autobiography, *Pathfinder Wartime Memoirs*, was given to me at an impressionable age as a reminder of the value of leadership and to reinforce that ideal.¹

Bennett joined the RAAF to fly, graduated from Point Cook but took up a short service commission in the RAF. This was a practice that many Australian service pilots chose in order to keep flying. As George Odgers noted:

...the RAAF had for some years trained Australians as pilots for entry into the RAF. On graduating at Point Cook they were given 'short service' commissions in that service. As a result, when World War II began, some 450 Australians were serving with the RAF, nearly all of them operational pilots. When war came there were in fact more Australian aircrew in the RAF than there were in the permanent RAAF.²

Bennett had left the RAF in late 1935 and established himself as a world class aviator with Imperial Airways (later BOAC now British). He entered the war as a civilian, ferrying military aircraft from Canada to the United Kingdom. He rejoined the RAF and rose to fame as the

¹ Bennett, D.C.T., *Pathfinder Wartime Memoirs*, London, Shakespeare Headpress Pty Ltd, 1958.

² Odgers, G., *The RAAF: An Illustrated History*, Frenchs Forest NSW, Child & Associates Publishing Pty Ltd, 1989, p. 58.

instigator and resolute leader of the PFF - Pathfinder Force. However, my remit was to look at RAAF personalities and Bennett did not meet the criterion of being a RAAF personality. He was certainly an Australian personality and there were tenuous links to the RAAF. That in a nutshell was my dilemma.

PANTHEON OF PERSONALITIES

There were many Australian airmen involved in the air war in Europe. Not all were RAAF and not all flew with the RAAF. This still presented a veritable pantheon of personalities who were dominant at some stage in the air war but for one reason or another fell outside the terms of this paper. So firstly let me tell you about just two of the personalities that I will not talk about today. There are two underlying themes in these omissions.

Air Commodore Hugh Edwards VC

A well known West Australian who became Governor of that State, Hugh Edwards was an Australian awarded the Victoria Cross for operations during the European air war. He was awarded the VC when CO of 105 Squadron RAF, he flew Blenheims against targets in Bremen in 1942, one of many acts of gallantry. He served in the RAF throughout the war and had joined as a regular RAF officer.³

Air Chief Marshal Sir Wallace Kyle

Another West Australian who also flew Bomber Command light bombers as part of 2 Group was the then Wing Commander Kyle CO of 139 Squadron RAF 1940 -41. He remained a serving RAF officer after WWII. Some may recall his visit to Australia in later years as Air Chief Marshal Sir Wallace Kyle , AOC-in-C of RAF Strike Command.⁴

Air Marshal Sir Richard Williams

Also in this pantheon of personalities were three senior RAAF officers who were involved in the European war. None was directly involved in the higher command of operations - a point that will continue as a thread throughout my presentation.

Sir Richard Williams was in the United Kingdom on two separate postings. The first, noted Williams in his autobiography, was Air Officer

³ Herington, J., *Air War Against Germany and Italy 1939 - 1943*, Canberra, Australian War Memorial, 1954, p. 192.

⁴ *ibid.*

in Charge of Administration, after a short attachment to the Air Ministry early in 1939.⁵ In February 1940, Williams returned to Australia only to return to London in October 1941. He set up and commanded RAAF Overseas Headquarters: it was the penultimate move in a complex administrative battle that had its genesis in the Empire Air Training Scheme (EATS) and in essence revolved around a power play to command RAAF and Australian airmen in Europe. Williams again left the United Kingdom - this time in January 1942 to return to Australia and what he thought would be an appointment as CAS.⁶ Williams spent the remainder of the war in Washington as the RAAF representative.

Air Vice Marshal McNamara VC

Williams handed over command to Air Vice Marshal McNamara who had been in the United Kingdom since 1937 where after completing Imperial Defence College (IDC), he was the Australian air liaison officer with the Air Ministry.⁷ McNamara remained there until later in 1942 when he went on loan to the RAF as AOC British Forces Aden. He returned to London in 1945 to be the RAAF representative at the British Ministry of Defence. Despite a valorous early career and being 'quiet, scholarly, loyal and beloved by all' McNamara did not loom large as a RAAF personality in the European war. Nor did he return to the post-war RAAF.⁸

Air Vice Marshal Wrigley

Although there is a minor discrepancy between sources over who immediately followed Williams as AOC Overseas HQ, Air Vice Marshal Wrigley commanded the HQ from 1942 - 46.⁹ Wrigley had been posted from Australia to London where he remained throughout the war. Perhaps of all the senior RAAF officers Wrigley made an impression on the RAAF as a personality in the European war. Some anecdotal evidence suggests that Wrigley was seen as a RAAF personality not only due to his position in dealing with large numbers of RAAF personnel transiting through London but also because of his engaging nature.

⁵ Williams, Sir Richard, *These are Facts: The Autobiography of Air Marshal Sir Richard Williams, KBE, CB, DSO*, Canberra, Australian War Memorial, 1977, p. 245.

⁶ Williams, *op. cit.*, p. 281 *et seq.*

⁷ *Australian Dictionary of Biography*, Melbourne, Melbourne University Press, p. 349.

⁸ *ibid.*, p. 349.

⁹ See *Australian Dictionary of Biography*, p. 349 and Williams, *These are Facts Autobiography of Air Marshal Sir Richard Williams*, p. 283, Herington, *Air War Against Germany and Italy 1939 - 1943*, p. 542 and Johnson, Ed., *R.A.A.F. Over Europe*, p. ix.

Like Williams, McNamara and Wrigley, the next personality also wore the distinctive blue of the RAAF: but that is another story in itself.

It was called the 'Big Show' - the air war over France and Britain and it is over France in 1940 that an impressive character claimed a place in history.

THE BIG SHOW (THE BATTLE FOR FRANCE)

Flying Officer L.R. Clisby, DFC

On the 15th May 1940 after a furious five days of fighting which involved air combat on six occasions and shooting down eight German aircraft Flying Officer Leslie Clisby DFC, died in action still wearing his tattered RAAF uniform that last day at Rheims.¹⁰ So died Australia's first air ace of the war.¹¹

Clisby was serving with the RAF's No. 1 Squadron at the time but throughout his career in France, Leslie Clisby clung to his tattered RAAF blue uniform. Regulations permitted RAAF recruited and trained aircrew to wear the RAAF blue until their uniforms wore out, when they were replaced by the lighter blue of the RAF. 'It will see me through,' Clisby told a war correspondent who was among his closest friends.¹²

During his short career Clisby was larger than life. Said a colleague who was with him on the squadron just before his death: 'He was an Australian and had thrown himself into the fray with a reckless abandon that was magnificent in its way.'¹³ He was described as an aggressive and fiery pilot who rushed in regardless of the odds.¹⁴ It paid dividends and Clisby is credited with sixteen kills making his the fifth highest score for Australians in WWII.¹⁵

One anecdote remains as testimony to a personality of the era. Three days before Clisby crashed, he was on another sortie in which his Hurricane's rudder was shot away in a rear attack by a Messerschmitt.

¹⁰ Johnson, *op. cit.*, p. 7.

¹¹ Newton, D., *A Few of 'The Few' Australians and the Battle of Britain*, Canberra, Australian War Memorial, 1990, p. 10.

¹² Johnson, *op. cit.*, p. 7

¹³ Odgers, G., *op. cit.*, p. 60.

¹⁴ Newton, Dennis, *op. cit.*, p. 10.

¹⁵ Garrison, Air Cdre A.D., 'Australian Fighter Aces', *Australian Aviation & Defence Review*, December 1980, p. 97.

This occurred after he had shot down three other Me.s. As he came down, Clisby saw a Heinkel in front of him and fired a burst at it. Hurricane and Heinkel landed close together, the occupants of both aircraft unhurt. Clisby emerged from his damaged Hurricane, drew his revolver, and pursued the German crew over the rough fields, firing as he gained on them. The Germans pulled up, their hands raised, and Clisby marched them away to a nearby village, handed them over to the French and made his way unconcernedly back to his squadron.¹⁶

The Battle for France was lost and the Allies withdrew from France. Forty Australians were involved and ten had died in action.¹⁷ The next stage of the big show was the Battle of Britain.

THE BATTLE OF BRITAIN

Although sources vary in their estimates, some thirty to forty Australians took part as aircrew in the Battle of Britain.¹⁸ Approximately ten were killed and one was shot down and taken prisoner.¹⁹ This last point is a feature of the air war to which I will return later in the paper

Flight Lieutenant C.G.C. Olive, DFC

One of the 'few of "the Few"' was Flight Lieutenant Olive of No. 65 Squadron RAF. With five kills and awarded the DFC he was one of the few to survive the Battle of Britain.

There was a lighter side to Olive's experience in the Battle of Britain. Again, depending on the source, the detail varies but the essence of the story is consistent.²⁰ Olive was leading a flight over Southern England when his oxygen regulator flared into flame burning his face. There was the added complication of initially being too low to bale out, difficulty baling out, and also the risk of colliding with nearby aircraft. He got out but initially his parachute did not open. The small pilot chute had caught on his flying boots. Whilst plummeting earthward he managed

¹⁶ Johnson, Frank, Editor, *op. cit.*, p. 6.

¹⁷ Odgers, G., *op. cit.*, p. 60.

¹⁸ See Newton, Dennis, *A Few of 'The Few' Australians and the Battle of Britain*, Canberra, Australian War Memorial, 1990, p. 284 (estimates 37, KIA 13, POW 1) vice Herington, J., *Air War Against Germany and Italy 1939 - 1943*, Canberra, Australian War Memorial, 1954, p. 35.(estimates 30, KIA 10, POW 1).

¹⁹ Herington, J., *Air War Against Germany and Italy 1939 - 1943*, Canberra, Australian War Memorial, 1954, p. 35.

²⁰ See Newton, D., *op. cit.*, pp. 79, 80 vice Johnson, F., *op. cit.*, p. 24 *et seq.*

to untangle the chute and open his main chute. Having recovered, he saw he was heading toward high tension cables. In attempting to sideslip away from the cables he noticed his chute was splitting into two. As if these problems were not enough, he heard two loud reports. Someone was firing at him, but was fortunately out of range. He landed in a potato field only to be bailed up by pitchfork-wielding country girls working the field. Realising he was not German they lowered their weapons. However, they quickly retrieved them yelling 'Hold off, hold off'. Olive looked around to see them running at a Home Guard soldier who had shot at him earlier and was now closing on him. That minor difference sorted out, he climbed into an ambulance that had arrived on the scene. He could be forgiven for thinking that was the end of his troubles. However, the ambulance took a bend too fast and rolled over. Olive scrambled out, bruised but unhurt, and was then picked up by a fire engine rushing to where Olive's Spitfire was burning itself out. The fire engine, too misjudged a sharp corner and ended up a minute later in a ditch filled with water and foam. Olive managed to jump clear and climb back on the road. Tucking his parachute under his arm he began to walk back to Hornchurch base. An old bull nosed Morris utility was driving by and pulled up beside him. The driver offered him a lift. 'Not bloody likely,' Olive replied. 'I'm going to walk.' At Hornchurch the doctor told him that the burns on his face would not take long to heal and suggested that Olive take 48 hours leave in London to recover his composure.²¹

Olive later went on to raise and command an RAAF squadron (No. 456: a night fighter squadron) in more trying circumstances. I shall return to him subsequently in this presentation after looking at another Australian character in Fighter Command.

FIGHTER COMMAND

Squadron Leader K.W.T. ('Bluey') Truscott, DFC and Bar

One particular character who became a legend and a genuine personality in Europe, as well as Australia, was 'Bluey' Truscott.

Immediately before the war and even after he had joined the RAAF, Truscott was a prominent football player in Melbourne and as such he had become a public idol. The period before his graduation as a pilot had been filled with grave fears both for himself and his instructor, but he was passed as competent and was soon commissioned ahead of many of his fellow trainees, most of whom had better flying qualifications than his. Truscott's potential quality was assessed as being more than sufficient to make up for his early ineptitude as a

²¹ Details quoted from Newton and Johnson acknowledged above.

trainee pilot. He went on to prove this judgment to be sound; he was to achieve unusual success as a fighter pilot in the skies over Britain and France.²²

Posted to No. 452 Squadron, he immediately formed a strong and binding friendship with another legend - Wing Commander 'Paddy' Finucane who was 'his teacher and friend'. They formed according to a contemporary the toughest, ice-cold fighter partnership in the RAF.²³ A Pilot Officer in August 1941, Truscott rose to be a Squadron Leader and CO of No. 452 Squadron in January 1942 taking over from Squadron Leader Bungey - another Australian who motivated 452 Sqn with good training and sound administration.²⁴

Truscott returned to Australia in 1942 to command No. 76 Squadron which was forming in Townsville. He was to die in an aircraft accident in the South West Pacific theatre.

An Australian Squadron - No. 456 Squadron

I indicated earlier that I would return to Gordon Olive. He was the second influence on me in taking a partial view of personalities in the air war. In 1986 as PMC at Point Cook, I had the honour of meeting Wing Commander Gordon Olive, DFC when officiating at a reunion dining-in-night for No. 456 Squadron RAAF. The dinner, a display by the RAAF Museum about 456 Squadron and the presence of the son of a former RAF CO representing his father and the RAF interest boded well for a good evening of accurate history telling. In particular they looked to their former CO with pride and respect. It is through their eyes at that dining-in-night that I would like to relate the role of Gordon Olive as CO of No. 456 Squadron.

They recalled over dinner that 456 Squadron was formed at Valley airfield on Anglesey under the command of Squadron Leader Olive at a time when there was a period of rapid development in the organisation and technique of night-fighting. Also there was the continuing dilemma of Article XV squadrons in regard to manning them with RAAF personnel. This was compounded because the squadron was initially equipped with Defiants and no RAAF pilots had completed conversion courses. Also only about half the ground crew were RAAF - some 180.²⁵

²² Gillison, D., *Royal Australian Air Force 1939 - 1942*, Canberra, Australian War Memorial, 1962, p. 604 *et seq.*

²³ Southall, Ivan, *Bluey Truscott: Squadron Leader Keith William Truscott R.A.A.F., D.F.C. and Bar*, Sydney, Angus and Robertson, 1958, preface.

²⁴ Herington, J., *Air War Against Germany and Italy 1939 - 1943*, Canberra, Australian War Memorial, 1954, p. 139.

²⁵ *ibid.*, p. 145.

As RAAF personnel slowly moved into the squadron further difficulties arose as the squadron re-equipped with Beaufighters disrupting crewing and training. For example the air gunners had to retrain as 'Observers, Radio' - that is radar operators.²⁶

Olive had become CO of Australia's first night-fighter unit in June 1941 with the unit operational in September 1941 on Defiants only to re-equip with Beaufighters in October 1941. The squadron was still not fully operational on Beaufighters when in Jan 1942 the squadron claimed its first victory - a Do - 217.²⁷ The victory was gratifying but the area remained quiet. Throughout February crews were kept in a state of readiness expecting to fly at short notice but no enemy aircraft were encountered during routine patrols. The squadron fell into a slough of despond. Weather was bad but the enemy were inactive; patrols were mostly by day; new pilots were arriving but experienced ones were being posted out so the general feeling arose that 456 was just a glorified OTU.²⁸ There has also been little increase in the national character of the unit, for although 188 of the total 352 members were Australians, only 3 additional RAAF pilots joined the squadron before the end of April 1942 and, meanwhile, four had been posted to Australia.²⁹

As Wing Commander Olive rose to speak after dinner, most of the squadron members strained to see the CO who had been racked by illness which cut his tour short in March 1942. Olive spoke of the hard times and the great effort they had all made to overcome incredible difficulties and the nature of war. He spoke of the improving morale and the later achievements of 456 when they re-equipped with Mosquito night interceptors. He mentioned that the RAF CO who replaced him - there being no suitably qualified Australians available - was so impressed with the elan of the squadron that he elected to wear an RAAF brevet while commanding 456 Squadron.

Then Olive seemed to look constantly into the distance as though recalling other incidents of the time. As he gazed into the middle distance his speech became rambling and a feeling of disbelief swept the room. Yet out of awe and respect for the man no one moved or looked away. Finally the truth dawned: time had taken its toll and Olive was now suffering a debilitating loss of mental faculties. The dinner finished on a quiet note but all who attended respectfully spoke to Olive before he retired for the night. I regret to say that Wing Commander Olive, DFC passed away the following year.

²⁶ *ibid.*

²⁷ *ibid.*, p. 338.

²⁸ *ibid.*

²⁹ *ibid.*

The mention of night fighters, night training and moments of sheer terror lead one to think of Bomber Command and it is to this facet of the air war that I will now turn.

BOMBER COMMAND

In an enterprise, demarcation agreement that would impress any unionist another speaker and I agreed not to cover the same ground. Consequently I will not mention Edwards VC, Australians who flew with No. 617 Squadron - the 'Dambusters' or the gallant RAAF bomber pilot awarded the posthumous VC for an incredible act of gallantry - Middleton VC.³⁰ Instead I have concentrated on two personalities that typify the RAAF contribution to the air war against Germany.

Wing Commander C.E. Martin, DSO, DFC CO 460 Sqn

In December 1940, a thirty year old pilot officer sailed from Australia for Europe. He was older than the average aircrew and he was also one of the first to complete his aircrew training under EATS within Australia.³¹ Three years later as a Wing Commander he was the first EATS graduate to command a heavy bomber squadron and it was a RAAF squadron.³² He had earlier served with RAF squadrons as an aircraft captain in No. 57 Squadron and as a squadron leader in No. 50 Squadron.

In February 1943 Wing Commander C.E. Martin took over command of No. 460 Squadron RAAF. Under him the squadron continued to progress as one of the most reliable and painstaking units of No. 1 Group.³³ The squadron relocated to Binbrook in May but it is the night of July 3, 1943 on which I wish to concentrate. Twenty-six Australian Lancasters of 460 Squadron were lined up ready for another attack on Cologne. The aircrew and most of the ground crew were at their evening meals when an alarm came. Through an electrical short circuit the entire bomb load of one Lancaster had been released and had fallen to the ground, where the incendiary part of the load was burning fiercely beneath the aircraft.³⁴

³⁰ Bill, S., *Middleton VC*, East Bentleigh, S. & L. Bill, 1991.

³¹ Australian War Memorial Collection 13:06:26:Caption to negative #004343.

³² Herington, J., *Air War Against Germany and Italy 1939 - 1943*, Canberra, Australian War Memorial, 1954, p. 479.

³³ *ibid.*, p. 479.

³⁴ These facts and succeeding descriptions are quoted from: Johnson, Frank, Editor, *op. cit.*, pp. 108, 109.

The bomb load exploded and then the Lancaster next to the first also burst into flames and some minutes later its bomb load exploded wrecking the aircraft and sending more incendiaries among other aircraft and starter trolleys.

With several airmen, Martin manned the fire station tender and extinguished as many of the incendiaries as possible. Then they saw smoke coming from another bomber some distance away. Martin climbed into the aircraft and tried to fight the flames with hand extinguishers.

When the flames were partly under control another airman climbed into the bomber and disconnected the electrical leads to prevent the bombs being released. By this time the fire was intense enough to cause the magnesium content of the fuselage to flare up. Almost suffocated, the men had to leap out. Martin remained on top of the burning, fully laden bomber and directed operations until the flames were out.

In spite of the accident, shrapnel torn aircraft and damaged runways, seventeen aircraft took off later that night from a patched-up Binbrook. All aircraft returned several hours later after a successful attack on Cologne. As a postscript, Martin was subsequently awarded the DSO.

THE SECOND FRONT

The individual cost to individual Australians in the air war over Europe cannot be divined from statistics. However, figures do show the sheer size of the contribution and some of the cost. Australia's contribution was essentially one of aircrew. In May 1945, of approximately 15 500 RAAF men engaged against Germany, some 12 300 were basically trained aircrew. Inevitably with the scale of these numbers there were many opportunities for distinction although many died bravely without coming to notice. For example, nearly two thirds of all citizen aircrew recruited in Australia served at some time in Europe or the Mediterranean and nearly a quarter of those actually engaged in operations lost their lives. In all, over 6 500 Australian airmen and officers lost their lives - a figure of approximately 20% of all Australian war deaths in all Services and all campaigns of the Second World War.³⁵

This involvement and losses had another cost. The air war was the Allies second front and another category of air force casualty was the

³⁵ Herington, J., *Air Power Over Europe 1944 - 1945*, Canberra, Australian War Memorial, 1963, p. 465.

airman who was shot down and captured. In general, of every 12 RAAF aircrew lost over enemy territory, eight died, one evaded capture and three would become prisoners of war. Some 25% of RAAF lost on operations were prisoners of war: approximately 1,476 Australians were captured, the majority captured soon after hitting the ground.³⁶ Some evaded for months and some escaped. Some were captured and later escaped. Others were less fortunate.

What follows is the story of one RAAF personality: but it is a tribute to the sheer cost in lives of the RAAF contribution to the second front in Europe. This is the story of Squadron Leader Alan McSweyn who was captured and escaped ... eventually.

Squadron Leader Allen Frank McSweyn MC, AFC

Squadron Leader Allen Frank McSweyn MC, AFC has a simple entry in the Australian War Memorial records. It reads: born Sydney 31 July 1918; P-O 10/12/40; F/O 10/6/41; T/F-Lt 10/12/42; T/SQNLDR 1/7/44. 115 Sqn RAF 11/4/41 - 30/6/41. Missing 30/6/41 - POW - safe Gibraltar 16/12/43 escaped.³⁷

This rather cryptic entry gives no indication of an incredible experience. The story begins on the night of 29 - 30 June 1941 when Pilot Officer McSweyn was shot down during a raid against Bremen. He was captured three days later while starting up the engines of an Me -110 in which he hoped to reach safety. At Spangenberg (Oflag IXA/H) he attempted to climb out of the fortress by means of a rope and, although seized by guards, broke away and was safely back in his bed before a general search was made. At Dossel, near Warburg, (Oflag VIB) to which he was later transferred, McSweyn was again caught attempting to escape this time with wire cutters made from fire-grate bars. On another occasion he hid in the back of a laundry cart, but unfortunately the sentry, who did not always search thoroughly, discovered him by the time he reached the main gate. During the winter months of 1942-43 he engaged in several tunnel schemes at Schubin (Oflag XXIB) but this camp broke up in April 1943 before his preparations were completed. The officers knew they were to be transferred to Sagan (which gained notoriety: the Great Escape in which four Australians were among the fifty prisoners shot on Hitler's orders for escaping) McSweyn decided to change his identity as there seemed little chance of escaping from a Luftwaffe camp. Accordingly with the aid of blank identity cards he changed places on the train to Sagan with a private soldier and entered Stalag Luft III in the role of an orderly. Here for three months he volunteered for menial and unpleasant jobs only to throw down his tools and refuse to carry on after a short time at each.

³⁶ *ibid.*, p. 473.

³⁷ Australian War Memorial microfiche records of Australians in RAAF and RAF.

The reputation he achieved as a refractory nuisance, backed by the recommendation of the Senior British Officer who was aware of his intentions, led in July 1942 to a transfer to Lamsdorf.

The first part of McSweyn's plan was thus accomplished, in that he found himself under an assumed name in a poorly-guarded working compound, and after a few weeks he slipped away from the potato-digging gang, obtained a bicycle from some Polish workers, and reached Danzig after five night's travelling. At Danzig he successfully stowed away in the coal bunker of a small Swedish ship which had pulled away from the wharves and was bound for Sweden when German police threw tear-gas bombs into McSweyn's hideout and he was forced to give himself up.

Returned to Lamsdorf, McSweyn immediately began a new scheme with very thorough preparations. Firstly he enlisted the aid of a German Jew to forge a complete set of personal and travel documents for him in the guise of a French workman returning to Marseilles unfit for further work in Germany. It took six weeks to prepare a false medical certificate, French identity card, travel passes and a letter, purporting to be from a high army department, giving permission for two men to travel straight through to Marseilles and setting out that other personal documents had been destroyed in Berlin during an air raid. As a companion in this escape McSweyn chose a New Zealander who spoke fluent German and who had pre-war experience of the German railway system. After money, food and clothes had been collected, the two men escaped in full daylight through a tunnel already prepared by the compound escape committee. By excellent timing they were in Berlin that evening before their departure had been noticed, and, after boldly spending the night at a small hotel, they went on next day to Mannheim. Here they slept in an air-raid shelter, the city still being very disorganised after a mass air raid a fortnight previously. The next stage of the journey was to Saarbrücken where help was sought, in various French working camps, in obtaining a guide across the frontier. After some disappointments and delays, a Frenchman steered them successfully through all the police checks, and, once in France, McSweyn contacted an organisation which arranged his journey to Gibraltar.³⁸ McSweyn arrived in Gibraltar in December 1943, two and a half years after he had been shot down.

COASTAL COMMAND

In a similar union demarcation agreement yet another speaker and I agreed that we would not rake over the same RAAF personalities in Coastal Command. I believe that the previous speaker provided those insights on RAAF personalities. Unfortunately, time did not allow the

³⁸ Herington, J., *Air War Against Germany and Italy 1939 - 1943*, pp. 491, 492.

story of Flight Lieutenant Jack Jewel's welcoming party for the ditched No. 10 Squadron Sunderland.³⁹

Confident that Coastal Command has been put under the microscope I can now look further afield.

NORTH AFRICA AND ITALY

The remit given me by the organisers of this conference allowed me to include North Africa in the air war theatre. The initial thought that crossed my mind was to tempt trans-Tasman relationships and claim one of the most famous personalities in North Africa as one of our own. Second only to Tedder, 'Mary' Coningham exerted great influence on the conduct of the air war in North Africa. Vincent Orange's biography of 'Mary' Coningham establishes that he was born an Australian. However, as he grew up in New Zealand and flew with the RAF I believe that I can pass on to other personalities who were both Australian and RAAF.⁴⁰

Group Captain C.R. Caldwell, DSO, DFC and Bar, Polish Cross of Valour

In his series on Australian Fighter Aces for *Australian Aviation and Defence Review* in 1980, Air Commodore Garrison notes that Group Captain C.R. Caldwell, DSO, DFC and Bar, Polish Cross of Valour, was the top ace not only within the RAAF but of all Australians wherever they served in WWII.⁴¹

Clive 'Killer' Caldwell had enlisted in the RAAF at the outbreak of WWII and was selected for pilot training at Point Cook. However, on learning that his officer-pilot course would be employed as instructors on graduation, he somehow managed to change over to the EATS and began his basic flying career all over again as an AC2 aircrew trainee. He was not a young starter being 29 when undergoing training.

Caldwell quickly made his mark in the North African theatre. He was sent to the Middle East on posting to No. 250 Squadron RAF with several other Australians. It formed part of No. 262 Wing which was later to include most of the Australians serving in the Middle East and included No. 3 Squadron RAAF. As a product of the EATS, Caldwell was the first graduate to become a flight commander and the first

³⁹ Johnson, Frank, Ed., *op. cit.*, pp. 54, 55.

⁴⁰ Orange, V., *Coningham A Biography of Air Marshal Sir Arthur Coningham*, London, Methuen London, 1990.

⁴¹ Garrison, Air Cdre A.D., *op. cit.*, p. 98.

squadron commander. In a special reference to him at the time the Official War History records that 'Caldwell was already developing an uncanny gunnery sense which was to bring him great success and he assiduously practised this by low-level firing at every opportunity'.⁴²

Briefly his exploits with the squadron included shipping escort duties and then bomber escort duties as well as fighter sweeps in support of ground forces. Late 1941 is indicative of his operations when No. 250 Squadron began operating as part of No. 262 Wing. The wing carried out sweeps to test enemy reactions. On 5 December, Caldwell succeeded in shooting down five Ju-87s in the one sortie. For this, notes Chris Coulthard-Clark in his obituary article on Caldwell in *The Australian* this year, Caldwell received the simultaneous award of DFC and Bar - an honour unique in RAAF history.⁴³

Clive 'Killer' Caldwell's special qualities have been well summed up as '...combined great bravery with capable leadership and cool confidence... (he) was an alert, fast-talking, quick-acting man with exuberant confidence. He showed great aggressiveness in combat.'⁴⁴

Caldwell left the Middle East with 20 1/2 confirmed enemy aircraft destroyed to return to Australia as wing leader of No. 1 Fighter Group.⁴⁵

Like Truscott's before him Caldwell's return to Australia did not end in glory. It was an unfortunate transition from the European/African theatre for the most prolific Australian ace of WWII. However, unlike Truscott, Caldwell was alive to see victory at the end of the war.

Group Captain Brian Eaton, DSO and Bar, DFC , US Silver Star

On his retirement from the RAAF in 1974 as an Air Vice Marshal, Brian Alexander Eaton was interviewed by the *The Herald* newspaper. In recalling his experiences in World War II he described his introduction to air warfare. His first brush with death was when 20 mm cannon fire from a German Me 109 shredded his RAAF Kittyhawk over the Western Desert in 1943:

I was too busy getting the kite down to be frightened he recalls. But my God was I surprised. I still haven't seen the plane that did it.⁴⁶

⁴² *ibid.*, p. 98.

⁴³ *The Australian*, Wednesday August 10 1994, p. 13.

⁴⁴ Garrison, Air Cdre A.D., *op. cit.*, p. 98.

⁴⁵ *The Australian*, Wednesday August 10 1994, *op. cit.*, p. 13.

⁴⁶ *The Herald*, Saturday Jan 12, 1974 -*Weekend Magazine*, p. 25.

Within the next nine days he was shot down twice more, a terrifying initiation for a combat raw 26 year old flight lieutenant. 'I was bloody determined it wouldn't happen again,' he said, 'and it didn't.'⁴⁷ However, he was to continue a series of close calls even when on the ground.

When war broke out Flt Lt Eaton was a flying instructor at Point Cook. He remained in Australia until 1943 when he was posted to 3 Squadron in the Western Desert. Even the trip across was an adventure. He took a boat trip to Calcutta and travelled across India to catch a troop transport ship to ferry him to his squadron.

He was keen to bag a first kill but a Me 109 got to him first. Eaton crash landed in the middle of a fierce tank battle, between New Zealanders and Germans, for a place called El Hamma. He clambered out unscathed from the wrecked aircraft and asked the startled Kiwis for a lift back to base. They obliged.

The second time he was shot down it was due to ground fire - dual 88 mm anti-tank and ant-aircraft guns. He crashed landed behind German lines and later friendly Arabs smuggled him back to base. Then only two days after he arrived back and 10 days after his first disaster he again fell victim to an Me 109 which came diving out of the sun. He managed to glide his aircraft 80 miles back to the airfield, only to find it being bombed. He had no choice: he landed the damaged Kittyhawk amid bursting bombs and notched up another miraculous escape.⁴⁸

Within months he was a squadron leader in 3 Squadron and was involved in the invasion of Sicily during which his brother Roger, a flight sergeant in the RAF, was killed in a disastrous Wellington bomber raid.⁴⁹

Eaton was promoted to wing commander and posted to an Indian division as forward air controller for the final attack on the hitherto impregnable German fortress at Monte Casino. For three months he was under daily artillery attack but his luck stayed with him. A shrapnel shell exploded over his observation post on GMT Trochia, facing Monte Casino and cut down a British army liaison officer standing next to Eaton. Eaton remained unscathed. Later by mistake he drove almost right into the German defences at the Hitler Line and again escaped unhurt when machine guns opened up on him.⁵⁰

⁴⁷ *ibid.*

⁴⁸ *ibid.*

⁴⁹ *ibid.*

⁵⁰ *ibid.*

Subsequently promoted to Group Captain, Eaton took command of No. 239 Wing comprising 3 Squadron and 450 Sqn RAAF, 5 Sqn South African Air Force, 112 Sqn and 260 Sqn RAF and 250 Sqn Rhodesian Air Force. He flew daily sometimes twice a day each time leading a different squadron. His superior officers learned of the extent of his flying and aghast, ordered him to reduce it drastically. So Group Captain Eaton merely stopped logging his flights. Eaton was one of the few wartime personalities with senior command experience from the European air war to remain in the post-war RAAF and rise to senior rank. Perhaps it was fitting that he retired from the RAAF in 1974 as Air Officer Commanding Operational Command.

It is interesting that Eaton is not listed in Australian aces of WWII. One source indicates that he had seven victories. However, other anecdotal evidence suggests that he had a low number of kills for two reasons. One was that he flew largely ground attack sorties and secondly as a good commander he took the new, inexperienced pilots up as his wingman. Not only did he use his experience to protect the wingman, he allowed him to learn and acquire skills while remaining alive. Thus he would manoeuvre the section in air-to-air combat and position the wingman for the kill. It was claimed that he scrupulously confirmed kills for the rightful attacker.

A FAITHFUL RETAINER

The final RAAF personality was known affectionately as 'George'. In fact 'George' is an example of what the historian John Herington calls 'the emphasis on team work'.⁵¹ The stories surrounding 'George' involve defence industry, defence civilians, training, logistics, ground crews and air crews. So this personality characterises what the modern RAAF is rediscovering - the one team approach with air power as its aim.

'George' was flown to Australia in October, 1944, with ninety small yellow bombs painted on the side of the fuselage as a record of its many flights over enemy territory. Flight Lieutenant E.A. Hudson, DFC., captained the crew on the flight to Australia bearing the allied hope that when the veteran Lancaster arrived in Australia it would soon be joined by many other Australian-built Lancasters to help bring victory against Japan.

'George' carried twenty-nine pilots of No. 460 Squadron on its ninety journeys over enemy territory, making its first war flight on the night of December 6, 1942, and its last on April 20, 1944, when it was part of

⁵¹ Herington, J., *Air War Against Germany and Italy 1939 - 1943*, p. 478.

the force which attacked Cologne. Apart from the crews which have flown in 'George', there was one man who has an important place in the bomber's history. He was former South Australian garage man, Flight Sergeant H. Tickle, RAAF, who had charge of 'George's' maintenance flight and flew to Australia with the aircraft. Tickle was mentioned in dispatches in June 1944 for his work.

Brand new, 'George' arrived at No 460 Squadron's base at Binbrook, Lincolnshire, on October 22, 1942. On its first mission, to Mannheim, Germany, Flight Sergeant Saint-Smith was pilot. Saint-Smith did thirteen trips and won the DFM in 'George', and after each of them a little figure with a halo was painted on the fuselage to mark 'The Saint's' association with the aircraft. Saint-Smith later became a Mosquito pilot and won a DFC as a flight lieutenant. He did not return from an attack on Beauvoir, France on 29 June 1944.

'George' and Harry Tickle combined to set such an example of hard work and reliability that they became well known outside the Service. Workers in the south of England who tested parts for aircraft heard of the 'partnership', and asked for photographs of the bomber and the N.C.O., and wrote later to say that they had hung them on the factory walls.

One of the most interesting entries in Tickle's book is dated October 22, 1943, when 'George' carried a heavy load of bombs to Kassel on its sixty-seventh trip, with Flight Sergeant W.A. Watson, RAAF, as pilot. The bomber ran into a violent electrical storm. Lightning and balls of fire played around the bomber and blue flames glowed on the propellers. At one stage there was a flash, and a lump of ice whizzed in and bruised the engineer's head.

'George' survived another severe testing on the night of June 16, 1943, when it collected seventeen flak holes in the wings, tailplane, fuselage, mid-upper turret, propellers and undercarriage over Cologne. 'George's' log gives more glimpses of its varied career. September 6, 1943: 'Had to give her the works. Came home on three engines.' December 16: 'Hot trip to Berlin. Hole in the fuselage. Fighter came close, read the letter "G", left hurriedly.' January 29, 1944: "'George" was first away to Berlin, last back.'

When 'George' carried an Australian war correspondent as a passenger to Berlin on January 16, 1943, the bomber received thirteen flak holes in the starboard wing, tailplane and rudder, and lost the use of two of its engines, which iced up over the target. A predicament which 'George' survived.

Many of 'George's' targets were in Italy and the Ruhr. Several crews completed their tours in the veteran, then left to act as instructors. To its last trip the bomber had only one major inspection - when it

completed 343 operational hours. Among the 200 men who spent between them 664 hours and five minutes of operational flying time in 'George', many were decorated or promoted or both.

On 'George's' ninetieth and last war flight Flying Officer J.A. Critchley, RAAF, was its pilot. The bomber kept up its reputation, and acquitted itself as well as ever. The crew - and the whole squadron - were delighted that 'George' finished its operational career over a German target. As well as the bomb symbols, 'George' had the DFC and the DFM painted on its side, affectionate tributes paid by the men who remembered the bomber as the luckiest and the most reliable that they had ever flown, and the best serviced.⁵²

CONCLUSION

What conclusions can I draw from this cursory look at some RAAF personalities. There are recurring themes which intertwine. Clisby's uniform is an indicator, the non-discussion of personalities such as Sir Hugh Edwards VC, Olive's challenges in 456 Squadron and Williams posting to London. Overarching these is the EATS theme.

The first conclusion I draw from the personalities examined is the high quality and large number of Australians in the European air war. Significantly many were not RAAF *per se* but performed exceedingly well in the war effort: Bennett and Edwards, for example. This links to a second theme of a quest for identity. Individuals were recognised as Australians, some even as members of the RAAF by the distinctive blue uniform however, there was no recognition of a RAAF air component that was manned solely and completely by Australians. The result was a fruit salad: Although mixed, the individual components remained distinct but in one large bowl. There was no Australian dessert bowl and that involved Williams and others in a third theme of administrative war to establish a RAAF identity.

The personalities were largely drawn from the tactical level of war. This was no accident. There was no RAAF personality who had the operational level experience at the higher command levels. The few who gained experience at higher levels were mostly still in the tactical arena: for example, Eaton and Caldwell. More importantly, little higher command experience gained from the air war in Europe was translated into command positions in the post-war RAAF. This was not the case necessarily at lower levels where the practice had been to repatriate experience from the European war to the South West Pacific theatre. It was not successful on all occasions at either end as No. 456 Squadron's

⁵² Johnson, *op. cit.*, pp. 120 - 122.

experience shows and the demise of Truscott and Caldwell demonstrates.

Finally, why some individuals should be called personalities is an emotive and potentially divisive issue. Let me conclude then with an observation by Air Vice Marshal Wrigley.

In the foreword to *RAAF Over Europe*, Air Vice Marshal H.N. Wrigley, CBE, DFC Air Officer Commanding RAAF Overseas Headquarters 1942-46 stated:

This book, until the official history of Australia's part in the war is published, will serve to tell something of the part our men took in the mighty air battle over Europe. Many an Australian airman's name that lives in the memory of his colleagues of the RAAF has perforce been omitted here, many valorous deed has had to go unrelated, but each individual story exemplifies the personal stories of the many; each story has been chosen to typify a phase in the European air war ...⁵³

I crave your indulgence that I have worked to a similar caveat in the preceding forty five minutes. Some names that live in the memory of colleagues and many a valorous deed had to go unrelated. It is the tyranny of time. Many were not recognised as Wrigley observes, therefore, I present this paper as a tribute to the valorous deeds and unacknowledged personalities who flew and fell in the air campaign that was the Allies' second front in Europe.

⁵³ Johnson, F., *R.A.A.F Over Europe*, London, Eyre & Spottiswoode, 1946, p. ix.

DISCUSSION

Wing Commander Alec Freeleagus: May I bring to this excellent conference the name of an Australian personality who participated in what was a forgotten campaign, and that was the Greek campaign. The name is Flight Lieutenant R.N. Cullen DFC. He may well qualify as a personality because of his background. He was a well known motor cycle racing driver in England before the war and his nickname was 'ape' because of his physique. In the air war which took place over the Albanian Mountains when the Greeks were repelling an Italian invasion - and that was six months before the Germans - the Royal Air Force provided two fighter squadrons. Cullen died in that campaign after shooting down five aircraft in one engagement. Subsequently, his tally rose to a score of 13, which I think in the official RAAF history list of aces puts him about 9th or 10th. There were several other Australians in the Greek campaign and their story will be told. It's being researched by Squadron Leader Despina Tramoundanis, who fittingly was born in Crete. And it's a great pity that the poet who came from the 6th Australian Division, who did not know of these people, wrote these words: 'If in Greece the Air Force be, where the bloody hell are we?'

Air Commodore Brendan O'Loughlin: I am sure that many of you have in mind many other people whom you have discovered to be personalities in either your experience, your reading or your research. I suppose the Air Force is slightly different in that we concentrate on the warriors, the people who go out and do the fighting, but as we've had it pointed out to us already, there were many others who have not been mentioned. Many of you might have in mind the women who supported those forces not only in Europe and other distant parts of the world, but of course closer to home either on a personal support basis or on a war effort basis. I'm sure you'd agree that there were many personalities amongst that category of people who made a great contribution.

RAAF PARTICIPATION IN THE WAR IN EUROPE AND NORTH AFRICA : SOME REFLECTIONS

John Mordike

Introduction

At the beginning of his book *No Moon Tonight*, a personal account of an Australian participating in the air war in Europe, Don Charlwood felt the need to explain why just over forty years earlier he had been a member of Bomber Command. 'Our generation - living today as elderly Australians in a multi-cultural society,' he wrote in 1986, 'has become something of an anachronism in its own lifetime and *No Moon Tonight* has become a book which calls for explanation.' This comment reminds us that our view of the past is influenced by questions of distance and perspective, just as our view of the present. From the vantage point of contemporary Australia, the explanation that Charlwood felt was warranted was that '[b]etween the two world wars young Australians were brought up with a sense of dual loyalty: to Australia and to the British Empire'. 'Product of my generation that I was,' explained Charlwood, 'I did not doubt that we should be there.'¹

John McCarthy discussed this very question from two perspectives in his paper this morning and I am not going to deal with it again this afternoon. I am going to look at certain issues surrounding the RAAF's involvement in the war in Europe and North Africa. Yet, in doing so, it will be evident that the dualism of nation and empire identified by Charlwood - 'the sense of dual loyalty', if you like - permeates the events. While Don Charlwood did not question his own involvement and John McCarthy has told us that there was no serious political opposition to the basic principles of the Empire Air Training Scheme in 1939, there were a range of questions that did spring directly from perceptions of Australia's sense of nationhood and national interest within this imperial setting. Why was it deemed important by some people that Australian squadrons be established within the RAF? Why was it considered important by some people that Australians wear the uniform of the RAAF? Why were there questions by some people about the apparent neglect of Australians by the Australian authorities? Why would an Australian airman who had had a narrow escape from death expressly want to talk to another Australian as he recuperated in hospital? Why, after Japan entered the war, were men returning home to Australia from Europe and the Middle East, in Charlwood's words, 'coolly received'? Why did the RAAF's two official historians acknowledge the existence of all these questions in their histories?

¹ D. Charlwood, *No Moon Tonight*, Penguin Books, Ringwood, 1986, pp. ix-x.

I can only suggest that some people who participated in, and commented on, these events harboured some notion and sense of being Australian. This might seem a trivial observation but it has important implications for the fighting services of the nation state which remain relevant today. To what extent should national identity and national interest be acknowledged in Australian contributions to coalition forces involved in international undertakings? When we look at Australian involvement in the war in Europe and the Middle East we can see that the answer to this question not only concerns abstract notions such as national pride and loyalty but also the administration and material well-being of the force.

This paper examines some issues arising out of Australia's contribution to the air war in Europe and the Middle East. Throughout the paper, questions of national interest arise continually, chiefly through the observations of the RAAF's Air Marshal Sir Richard Williams and official historians Douglas Gillison and John Herington.

The Empire Air Training Scheme - Some Imperial and National Considerations

Air Marshal Sir Richard Williams harboured strong feelings over aspects of the Empire Air Training Scheme and its administration. Reviewing the scheme after the war, he concluded that '[f]rom an Australian point of view' it 'was disastrous'. It was a characteristically forthright opinion from a senior RAAF officer who often acted as an advocate for national interests. In making this harsh comment, Williams was aware that, from their personal perspective, participants in the scheme might have a different view. He acknowledged that many of the men considered the scheme to be 'a splendid idea'. Perhaps it was because they had visited places that they would otherwise never have seen, giving the experience special appeal and a sense of adventure. But Williams suggested that a broader perspective than immediate personal satisfaction should be taken. Taking a somewhat didactic role, Williams observed that the participants did 'not realise that most of their achievements are not recorded in Australian history and if they have not had the experience of serving in a wholly Australian unit they cannot possibly understand the full meaning of *esprit de corps*'.²

National identity is recognised as an important consideration for the defence forces of the modern nation state. Williams pointed out that the statement to the House of Representatives by Australian Prime Minister Robert Gordon Menzies in November 1939 contained the comment that, according to the wishes of the Australian people, the

² Williams, *These Are Facts : The Autobiography of Air Marshal Sir Richard Williams, KBE, CB, DSO*, The Australian War Memorial and the Australian Government Publishing Service, Canberra, 1977, p. 335.

government would 'as far as possible, preserve the Australian character and identity of any air force which goes abroad ...'. It was an obvious concession to national sentiment designed to placate any criticism that national interests would be threatened by participation in the war in Europe. Survival is the first instinct of politicians and Menzies' hold on office was not unassailable from within the ranks of the coalition which he led, or from the opposition benches. And there were always alternative ideas on how Australia should conduct itself during the war. For example, three days after the declaration of war, leader of the opposition John Curtin stated that the Labor party's platform put the defence of Australia first while being strongly opposed to conscription and the dispatch overseas of expeditionary forces.³

Williams believed that the spirit of the government's original policy of preserving national identity was not carried into practice. He reported that, although there was an agreement with the RAF that 18 RAAF squadrons should be formed by May 1942, only 12 were actually formed by that date and, by the end of the war some three years later, only 17 such squadrons had been formed. Despite the failure to meet the agreed number of squadrons, at that time 13 000 RAAF personnel were serving with the RAF. Williams did not hesitate to indicate the reason why he believed the agreed number of squadrons had not been formed. 'In my view the RAF did not "play the game" ...,' he wrote. 'No real effort was made to comply with the terms of the agreement.' At the end of the war, Williams noted, '2 621 RAAF air crew were scattered amongst no less than 214 Royal Air Force squadrons and in no less than 111 instances fewer than 10 Australians were together in a unit'.⁴

Was Williams correct in blaming the RAF for the spread of Australians throughout the RAF? It would appear that he did not entirely believe this to be so himself, for, as he noted, the Canadians had been collocated in stations under Canadian command and a Canadian group had been formed. Compared with Canada's success in consolidating its national identity within the scheme, 9 of the 17 Australian squadrons which had been formed by the end of the war were located in the United Kingdom, 6 in the Middle East and 2 in Australia, and they were equipped with 12 different types of aircraft. Furthermore, not all Australian squadrons were commanded by RAAF officers. A South African officer commanded one of the RAAF squadrons in the Middle East, a theatre in which both Canadian and South African wings were formed. Nowhere, Williams noted, was any Australian wing formed. Yet, despite Williams' indignation at this outcome, he had to concede that, while the RAF did not have 'the will to fully implement the Empire Air Training Scheme agreement', 'no pressure similar to that by Canada

³ D. Gillison, *Royal Australian Air Force 1939-1942, The Australian War Memorial*, Canberra, 1962, p. 58.

⁴ *ibid.*, pp. 335-6.

was put on them to do so'.⁵ Explaining why national interests were not more forcefully promoted remains a key question in any examination of Australia's participation in the Empire Air Training Scheme.

At this stage, there are no easy answers to the issues raised by Williams. There are certainly some contributory factors which have been identified by him and also Professor John McCarthy in his important book *A Last Call of Empire*. Some of these will be mentioned at various stages throughout this paper. Yet the study which examines this particular aspect of the Empire Air Training Scheme in detail remains to be done. At its heart it would be a study of empire and nation, dealing essentially with the ambivalence - the tension between national and imperial priorities - which has characterised Australian defence developments from the colonial era through to the post-World War II period.

From 1879 when Britain instituted a royal commission under Lord Carnarvon to examine imperial defence, the British authorities contemplated the involvement of the colonies in imperial defence. 'The growth of the Colonies in wealth and population will, in all human probability, be relatively more rapid than that of Great Britain,' Carnarvon concluded, 'and their power to take a fair share of the defence of the Empire will be constantly on the increase.'⁶ Accordingly, Britain developed imperial defence strategies based, understandably, on a centralist view of empire. Centralised control by Britain and adherence to British operational doctrine were essential features of imperial defence proposals put to the colonies for agreement. In the early part of this century imperial defence requirements also promoted the idea of imperial federation, an idealistic notion which could never succeed because of the strength of sub-imperial nationalism. For the same reason, suggestions for standing imperial defence forces were never implemented. Military contributions by the colonies and dominions only occurred during war and, in the Australian case at least, such contributions depended on a decision by individuals to volunteer for service. Indeed, it was the Australian Defence Act of 1903 which denied an Australian government the power to dispatch its servicemen, and hence its established defence forces, outside Australian territory. This restriction was inspired by nationalist sentiment within the Australian parliament and was designed to prevent an imperially-minded Australian government sending men to imperial operations against their will.⁷ When Australians did volunteer for overseas service they were formed into Australian units before embarkation, except in

⁵ *ibid.*, pp. 336.

⁶ J. Mordike, *An Army For A Nation : A History of Australian Military Developments 1880-1914*, Allen and Unwin, North Sydney, 1992, pp. 7-8.

⁷ *ibid.*, pp. 78-83, pp. 126-7.

one case and that was the Empire Air Training Scheme. In no other case, it seems, was there such a large degree of surrender of national identity and control.

Williams wrote that, in the early months of World War II, '[t]here were strenuous objections to our Army being scattered - why the same principles were not applied to the Air Force I cannot understand ...'.⁸ Douglas Gillison, one of the RAAF's official historians, was a little more critical. He pointed out that not only did the RAAF have a RAF officer as its commander in the early months of the war (Air Chief Marshal Sir Charles Burnett was appointed as Chief of Air Staff on 11 February 1940), but 'it seemed likely that its main task would be to train recruits for an English-led force in which there would be only token recognition of Australian national sentiment'. Like Williams, Gillison also compared the RAAF's experience with that of the Army. 'How different was the situation of the Australian Army!', Gillison declared.

By April 1940 it had organised an army corps for overseas service under a commander who had been given wide powers. By August 1941 ... the corps had fought as such in two hard campaigns and its first commander had been promoted to a higher post. But no officer of the RAAF, in a war then two years old, had commanded in action, except briefly, anything larger than a squadron.⁹

The commander to whom Gillison referred was, of course, General Sir Thomas Blamey. His original charter as commander of the 2nd AIF opened with the words:

The Australian Imperial Force [is] to be recognised as an Australian Force under its own Commander, who will have direct responsibility to the Commonwealth Government, with the right to communicate direct with that Government. No part of the Force [is] to be detached or employed apart from the main Force without his consent.¹⁰

The resolution with which Blamey implemented his charter may be judged by the comments of his chief of staff, Brigadier Sydney Rowell. After one year in the Middle East, Rowell said:

It is not my business to give the Commander bouquets but I think anybody with less force of character and sense of responsibility to the AIF here and to his Government at home would have split the show and we would have a lot of difficulty in restoring it again.

⁸ Williams, *op. cit.*, p. 265.

⁹ Gillison, *Royal Australian Air Force*, pp. 118-9.

¹⁰ N. Carlyon, *I Remember Blamey*, Sun Papermac, 1981, p. 29.

But he never ceased to make it clear that he owed his duty to his Government. He made it clear that the British could not simply order Australian units about as they liked. Now they understand us and we understand them.¹¹

These comments should be kept in mind when considering the Empire Air Training Scheme. It was an episode in Australian defence history with some unique aspects. Gillison did provide some reflections on what the major influences might have been in producing such outcomes, but, while they have some credibility, his observations need further analysis. First, he nominated the 'sense of extreme urgency attached to the need for swift action to counter German air power and the manner in which the British Government took the initiative with a definite proposal'. Secondly, he thought that the fact that 'the RAAF was a relatively young Service probably made the Australian Government less concerned to preserve its identity than they would have been if similar proposals had been made affecting their army or navy'. Finally, he highlighted 'the hard fact that the United Kingdom considered that it could not produce enough aircrew to fly the aircraft that its factories could produce and its ground staff could maintain'. On this last observation, Gillison claimed that this had been the case for some time and that 'already in 1939 there were as many Australian aircrew in the RAF as in the RAAF'.¹²

Gillison's reflections are helpful for a start but it is evident that there are other factors involved. Some of these will become clearer after dealing with aspects of the RAAF contribution to the air war.

Early Administrative Arrangements in the United Kingdom

At the very outset of the Empire Air Training Scheme, it was proposed by the Director of Organisation at the British Air Ministry that an Australian base depot be established in England. This suggestion was taken up in late 1939 by Mr Richard Casey, Minister for Supply and Development, and Group Captain Bostock, both members of the Australian mission to the London defence conference. Indeed, Bostock together with the air liaison officer in London, Air Commodore McNamara, and the commanding officer of No. 10 Squadron, Wing Commander Lachal, thought it wise to form a nucleus base organisation as soon as possible. If this were done immediately, as the expected flow of aircrew started to arrive in England, the depot would be ready to receive the men, prepare and maintain their personal records, organise and administer their pay, supply Australian equipment, such as uniforms, and look after the numerous administrative functions

¹¹ *ibid.*, p. 19.

¹² Gillison, *Royal Australian Air Force*, pp. 81-82.

associated with promotion, repatriation, remustering and the general interests of the men.¹³

This proposal not only received ready agreement when it was considered at Air Force Headquarters in Melbourne, but it was also proposed that accommodation be secured immediately for a reinforcement pool where men might be trained before they were posted to operational units. While headquarters had ideas on the size of the proposed base unit, the Minister for Air, Mr Fairbairn, believed that the British Air Ministry was the best judge and requested the Australian High Commissioner in London, Mr Stanley Melbourne Bruce, and McNamara to open discussions on the subject with the British authorities.

Under Article XV of the Riverdale agreement, which had been negotiated in Ottawa, it was recognised, in principle, that Australia's contribution to the war in Europe could be RAAF squadrons manned completely by Australian aircrews. The details were left to Bruce to work out with the British authorities in London. Accordingly, Bruce directed McNamara not to take any action on the proposal to establish a base unit until these negotiations had been completed. Here the process stalled and it was not until November 1940 - that is, 12 months after the original suggestion to establish an Australian base unit - that the Air Board decided to send a nucleus staff to the United Kingdom. But opposition came immediately from the Australian secretary of the Department of Air, Mr Langslow, who pointed out that, under the terms of the Riverdale Agreement, the major administrative arrangements were the responsibility of the British government; the RAAF only had to meet the excess in Australian pay rates over that of their British counterparts. Simultaneously, the British Air Ministry raised similar objections to those of the secretary of the Department of Air, but it was willing to defer to the Air Board if it wished to proceed with the establishment of an administrative unit.¹⁴

As often happens, bureaucratic niceties and indecision stood in the way of sensible progress. However, at this stage another important factor began to influence the outcome. Williams, in a tone of disapproval, recorded that McNamara had discussed the proposed Australian base unit, 'for reasons known only to himself', with the Air Ministry's Air Member for Personnel instead of the Director of Organisation, whom Williams indicated as the correct authority. According to Williams, McNamara's approach allowed the Air Member for Personnel to promote his own particular interests in the ensuing developments. Specifically, the British Postings Directorate wanted to retain the largest possible

¹³ J. Herington, *Air War Against Germany and Italy 1939-1943*, The Australian War Memorial, Canberra, 1962, p. 108; and Williams, *op. cit.*, p. 269.

¹⁴ Herington, *Air War Against Germany and Italy*, pp. 108-9; and Williams, *op. cit.*, p. 267.

degree of autonomy in posting trainees from the Dominions and it was contended that this could only be done satisfactorily if it were the sole authority. Accordingly, the Air Ministry proposed that six Australian officers and eight airmen be posted to the RAF Central Records Office and the reception centre at Uxbridge, making the proposed Australian base unit, in its opinion, unnecessary. Bruce and McNamara agreed with this advice from the Air Ministry and recommended that it be accepted.¹⁵

'It should have been clear to McNamara that [the] stated desire of the Air Member for Personnel was quite opposed to the [Riverdale] agreement,' snorted Williams, while explaining that the agreement 'provided that Dominion personnel would be kept together in crews and in selected squadrons "in order to retain their separate identity and to achieve homogeneity in those squadrons"'. Furthermore, he concluded, it 'did not meet the needs which prompted the original recommendation for the establishment of "a base headquarters" which went far beyond the mere question of postings'. Whether McNamara alone deserved Williams' disapproval is not clear. Bruce, it must be noted, escaped any such disparaging comment, but he, probably more than anyone else, was inclined to acquiesce in the face of British suggestions. With the recommendation by Bruce and McNamara and the probable support of Burnett in Australia, who was reported to be 'not quite sure' that 'the identity of Dominion squadrons overseas is such a matter of importance as it is made out to be', the proposal to establish the Australian base unit was abandoned at the end of November 1940. Instead, a few junior officers were posted to the RAF's reception centre at Uxbridge to look after the interests of Australians.¹⁶

The first Australian trainees began to arrive in England a month later, on Christmas day. Arriving at Uxbridge, the new arrivals completed documents for record purposes and received a full issue of their necessary kit. This became standard procedure. Australians were then sent on a short period of leave prior to posting to an operational training unit. Giving more formal recognition to the importance of the Dominion contribution to the air war, on 1 March 1941, No. 3 Personnel Reception Centre was formed at Uxbridge to deal with all Dominion airmen and, a week later, an RAAF officer arrived to command A Flight, which looked after all Australians and New Zealanders.¹⁷

At this early stage in the war the Battle of Britain had not been long won, but the United Kingdom was still subject to heavy night attack.

¹⁵ Herington, *Air War Against Germany and Italy*, pp. 109-10.

¹⁶ Herington, *Air War Against Germany and Italy*, pp. 109-10; and Williams, *op. cit.*, p. 269, p. 267.

¹⁷ Herington, *Air War Against Germany and Italy*, p. 111.

There was also no established policy for the employment of trainees from the Dominions; negotiations between the Australian and British authorities on the implementation of Article XV of the Riverdale agreement had not been finalised. All Dominion trainees were urgently required to fill a number of vacancies, especially since the early drafts of trainees were all pilots. This meant that not long after arriving at Uxbridge, men were despatched to advanced training units, according to the operational requirements at that time. It was this aspect of the scheme which was to become the cause of much concern from the national perspective. Williams reported that, effectively, Australia:

... had contracted to enlist into the Royal Australian Air Force and to train thousands of young men who would then be sent to the United Kingdom - or any other destination where the Royal Air Force was to be found - not as units which could be efficiently administered with complete records of their service, promotions, pay and all those matters which are of importance to the contentment, morale and history of a fighting Service, but to serve in the Royal Air Force on the other side of the world as individuals.¹⁸

Administrative Arrangements in the Middle East

Australian trainees began to arrive in the Middle East in early 1941, going into the general pool of aircrew in Egypt. Williams observed that they found 'there was nobody with a particularly Australian responsibility or interest to attend to their needs - pay, onward movement and the like'. As it had done eventually for the United Kingdom, the Air Ministry had advised against the establishment of an Australian base unit in this theatre, but, in November 1940, it did recommend that an Australian group captain be provided either to care for the RAAF's interests, or to work as a staff officer in Middle East Headquarters. As an interim measure, it seems, Air Marshal Tedder, the Air Officer Commanding RAF Middle East, seconded Wing Commander I. D. McLachlan from the command of No. 3 Squadron in the Western Desert into his headquarters to look after RAAF matters. But Burnett disagreed with these arrangements. According to Williams, the Chief of Air Staff in Australia acted without the knowledge of the Air Board and directed that, if McLachlan was not required for operational duties, he was to return to Australia and, furthermore, no RAAF officer would be posted to Middle East Headquarters. Members of the RAAF in that theatre were to rely on existing RAF arrangements.¹⁹

¹⁸ Williams, *op. cit.*, p. 266; and Herington, *Air War Against Germany and Italy*, p. 111.

¹⁹ Williams, *op. cit.*, p. 271. Note: Official history says Air Board.

From the outset there were continual difficulties with pay and equipment for Australians in this theatre. It quickly reached the stage where remedial action was required. In March 1941, Headquarters Middle East requested three RAAF officers to assist with pay and records. This was approved by the Air Board, but there was a delay of some months before action was taken to provide the men.

Establishing Australian Squadrons in the United Kingdom

In April 1941, Australia and the United Kingdom ratified a memorandum of understanding. It stipulated that 18 RAAF squadrons would be formed from the trainees arriving in the United Kingdom. The number was restricted to 18 squadrons because, while Australia would eventually provide sufficient numbers of air crew to create many more squadrons, the United Kingdom would have to provide the ground staff to keep them in the air. Therefore, it was decided to settle on 18 squadrons with the surplus Australian trainees being posted to RAF squadrons, but Australian identity would be maintained by the wearing of Australian uniforms and badges. Although the 18 Australian squadrons would require RAF senior officers and ground crew if they were to be established quickly, it was intended that RAAF personnel would eventually replace them. A further provision in the memorandum of understanding was that, if it so desired, the Australian government could post a high ranking RAAF officer to the United Kingdom who would have access to the senior RAF command structure on matters affecting the employment of Australian airmen. This memorandum of understanding had resulted from the inter-governmental negotiations which had engaged Mr Bruce during 1940.²⁰

The establishment of the projected Australian squadrons was beset with difficulties. To begin with, Australia suggested what type of squadrons it proposed to establish, but the Air Ministry could not match this with its needs. Therefore, as with the administrative questions, Air Force Headquarters left the selection of the types of squadrons entirely to the Air Ministry.

There was no difficulty in procuring Australian pilots, who, with the addition of RAF ground staff, could form operational fighter squadrons. But it was a different matter with more complex types of squadrons. It proved extremely difficult to form complete Australian crews. The postings section of No. 3 Personnel Reception Centre was intent on filling vacancies at operational training units as they occurred, regardless of nationality. This, of course, was to a large degree influenced by the specific demands of the war. Therefore, Australian trainees were scattered throughout the operational training units in

²⁰ Herington, *Air War Against Germany and Italy*, pp. 110-1.

Britain, and, subsequently, the operational force itself. But, in addition to operational requirements, another issue also influenced the dispersal of Australians throughout the RAF.

Whenever Australian servicemen have served with forces from the United Kingdom, there have been examples of cultural and social dissonance. This first happened in the Boer War when 16 000 Australians served with the British Army. As one example from this war, the distinguished British historian, Thomas Pakenham, noted a certain tension between British and colonial officers, which he detected during his extensive research on the records from the war in South Africa. Pakenham commented on it in this way:

... reading about the war through the private letters of people one's always picking up this tension ... which is sort of implicit in the whole war ... which is that the colonials, you know, could be rotters. You can't trust a colonial! He's not a gentleman! He's not been to a Public School!²¹

Similar tension arose during World War II because it was believed that Australians would not conform to the normal requirements of service discipline. In his book *No Moon Tonight*, Don Charlwood recounted a situation when he joined 103 Squadron, an operational squadron based in Elsham Wolds:

When we had given [the Orderly Room clerk] the names of our next of kin, we were sent to the crew room to await the arrival of the Wing Commander. After half an hour he came. I did not see him until an indignant voice behind me addressed the crews sharply.

'Don't you stand up when your CO enters the room?'

I turned and saw a man of perhaps twenty-seven or twenty-eight, tall and with a high complexion, higher now than usual with anger. His eyes were blue-grey, his hair receding. He wore a RAF battle dress on which were the ribbons of the DSO and DFC.

'Tonight there will be no operations.'

The news appeared to annoy him slightly, but among the men there was visible relaxing.

'Squadron Leader Fox will see the new crews in this room. The rest will report here again at 1 o'clock.'

So ended Charlwood's first, crisp encounter with his commanding officer and he settled down to meet his squadron leader:

²¹ Thomas Pakenham, *An Elegant Sort of Martyr*, a radio documentary on the legend of Breaker Morant and the Boer War, first broadcast by ABC radio on 23 April 1981. Tape recorded copy held by Oral History Section, Australian National Library, Canberra.

[Squadron Leader] Fox sat casually on the table. 'I would like to have a yarn with you chaps who have just come to the squadron. I see that most of you are from Australia and one or two from Canada. I know that ideas of - uh - discipline are not quite the same in the colonies --'

Beside me Geoff was on his feet. 'Excuse me, sir, we come from the Dominions!'

Fox looked at him disconcertedly. 'I -- Yes, I had forgotten. You chaps do prefer the term "Dominions", don't you.'

[Squadron Leader] Kennard [another British officer] stared at Geoff with more than usual intensity, as though noting his face for future reference. But from the men there were murmurs of agreement.

'In any case,' Fox continued, in a hardening voice, 'discipline among the sergeants has become very lax, and unless there is a big improvement we shall be obliged to tighten up on privileges.'²²

In addition to perceptions that Australians were a potential source of disciplinary problems, there was concern over the way in which some RAAF officers related to non-commissioned airmen. The result was that even where Australian pilots, navigators and gunners entered operational training units together they were often separated. This was in part a result of the policy to form crews on the basis of technical merit alone, but it was also done because it was believed that national crews were detrimental to training discipline. Australians seemed to be the worst in this regard, an observation reinforced in British minds by the closeness demonstrated by those crews who had commenced their training together as recruits and had subsequently become officers or sergeants.

Don Charlwood provides just such an example. While undertaking advanced training as a sergeant navigator at No. 27 Operational Training Unit, Lichfield, Charlwood met up with a new arrival at the same unit, Max Bryant. The two men were old friends, having first met when they found themselves together as members of a group of recruits who had left Australia to commence their training in Canada. Naturally, they wanted to converse at length about their experiences since their last meeting and sought the congenial surrounding of the mess. But Bryant had since become an officer, while Charlwood was still a sergeant.

'Not being known [at Lichfield],' Charlwood wrote, '[Bryant] rectified this in his own way. He took off his tunic and borrowed one of mine, then he came to the sergeant's mess.' In the mess, the conversation continued with Bryant asking Charlwood:

²² Charlwood, *op. cit.*, pp. 59 -61.

'What stage of your training are you up to?'
 'Night cross-countries,' I said. 'We do the first tonight.'
 He grasped my arm, 'Would you mind if I came?'
 I laughed. 'Of course not!'²³

Such harmless behaviour among men who had commenced training together with a common purpose and had since become officers or sergeants was, of course, quite offensive to conservative military sensibilities. 'This camaraderie in off-duty hours, regarded as entirely natural by men from the Dominions,' reported John Herington, one of the RAAF's official historians and himself a member of the RAAF serving in Bomber Command, 'was considered undesirable by many United Kingdom commanding officers who attempted to segregate officers and sergeants.'²⁴ This was another factor which contributed to the spread of Australians throughout the fighting organisation.

Overseas Headquarters, RAAF

The problems associated with the spread of Australian personnel throughout the RAF was a growing cause for concern. In Australia, politicians and the press launched attacks over the tardiness in establishing Australian squadrons. Attempting to remedy the situation, the Minister for Air appointed Air Marshal Williams on the 30 August 1941 to command an Overseas Headquarters for the RAAF. The appointment was made under the terms of the April 1941 memorandum of understanding. The Overseas Headquarters was to be under the general control of the Australian High Commissioner and would incorporate the existing liaison officer in London. Its duties included inspection and liaison on matters concerning trainees and it also had direct reciprocal access to RAAF administrative personnel assigned to Air Ministry branches. In addition, the Headquarters was to be the action office for receiving and dealing with enquiries from Australia on the location, condition and welfare of Australian airmen. By arrangements with the Air Ministry it was to supervise all matters relating to the reception and repatriation of personnel. The scope of its responsibility also extended to RAAF personnel serving in the Middle East, with the limitation that its interests were confined to record keeping matters.²⁵

The Overseas Headquarters opened its doors in Kodak House on 1 December 1941. Its staff of 24 officers and 41 airmen came partly from Australia, partly from the existing liaison office staff in London and

²³ *ibid.*, pp. 27-28.

²⁴ Herington, *Air War Against Germany and Italy*, p. 115 and f/n 4.

²⁵ *ibid.*, p. 116.

partly from No. 10 Squadron. Before it could become effective, however, it had to overcome many difficulties concerned with its own organisation. Policy was non-existent or unclear, office systems and procedures were lacking and the staff was inadequate for the job. And such was the administrative muddle resulting from the spread of RAAF personnel, that its first few months of operation were consumed merely by trying to assess the size and the nature of the problem of looking after the interests of Australian airmen.²⁶

The Overseas Headquarters included air staff who, in an advisory and not an executive role, kept abreast of all operational and technical issues arising in Fighter, Bomber and Coastal Commands. Others surveyed developments in armament, navigation, photography, radio and intelligence. With the outbreak of war in the South West Pacific a few days after the headquarters opened, the major object of these sections became the provision of technical information back to Air Force Headquarters in Australia. On the administrative side, there were personnel and casualty sections, while medical, legal and accounting functions were also included. But it was the administrative problem which was a direct result of the dispersal of men which provided the biggest headache.²⁷

To begin with, the Headquarters set about finding out the location of all Australians serving with the RAF. By this stage nearly 2 400 aircrew and 1 500 ground staff had been posted from No. 3 Personnel Reception Centre under purely RAF arrangements. Williams soon discovered that the RAAF personnel who had been sent to the postings section of the Air Ministry to look after officers and to the RAF Records Office to look after airmen had been employed largely on other matters. The exigencies of the war complicated matters further. Units were changing location, and even function, frequently and some units had, in late 1941, been sent to the Middle East.²⁸

It was some time before Williams could get a good indication of the situation in the United Kingdom. It was even worse in the Middle East where it took months for the Overseas Headquarters even to get reliable figures for the number of Australians in the theatre. Indeed, from a RAAF perspective, the Middle East was an administrative muddle at its worst. For some time there had been numerous complaints from that theatre over pay, equipment, promotion and employment. This poor situation had been further undermined when Burnett had withdrawn the small liaison office which had been established for the interests RAAF personnel. RAF unit commanders in the theatre simply did not

²⁶ *ibid.*, p.524.

²⁷ *ibid.*, p. 525.

²⁸ *ibid.*, p. 120.

understand the correct procedure for satisfying the requirements of their RAAF members. Making administration more difficult, the respective RAAF headquarters in Melbourne and London at times issued conflicting, or confusing, policy statements.

One disturbing example concerned the issue of an order by Middle East Headquarters, as it was subsequently claimed, on the advice and 'specific request' of the RAAF's Deputy Chief of Air Staff, Air Commodore Bostock. This order stated that where two Article XV squadrons, Nos. 450 and 451, had been referred to as RAAF squadrons they were in reality not part of the RAAF. The order stipulated that these two squadrons had been loaned to the RAF under the terms of the Empire Air Training Scheme and 'for all practical purposes they should be regarded as RAF squadrons in every way'. John Herington wrote in the official history that this order was based on a misunderstanding of a document written by Bostock, but, before the matter was satisfactorily resolved, there was a good deal more confusion at the headquarters level over the actual status of Article XV squadrons. There was also some discontent among the members of the two squadrons. The matter was not finalised when the original order was rescinded and a new order issued which stated that the two squadrons were RAAF squadrons. This was challenged by the accounting authorities who claimed that the squadrons were RAAF squadrons in nomenclature only and not in conditions of service. Otherwise, it was contended, the Australian government and not the Imperial government could be charged for its operations and associated maintenance costs, such as pay and equipment. This episode took months to resolve. It serves as an indication of the uncertainty surrounding the situation, especially in the Middle East.²⁹

When Japan entered the war, there was a flood of enquiries about transfer to fight the Japanese, prompted not only by a desire to participate in the protection of Australia from an immediate threat but also, it seems, to escape the unfortunate administrative situation in the Middle East. In the United Kingdom, over 100 Australian aircrew in No. 3 Personnel Reception Centre, who were waiting for operational training, also signed a petition requesting immediate return to Australia.³⁰

²⁹ *ibid.*, 120-3.

³⁰ Williams, *op. cit.*, p: 277.

The Establishment of No. 11 Personnel Dispatch and Reception Centre for Australian Trainees

By late 1941, it had become obvious that it had been a mistake not to establish the base depot in England at the very outset rather than rely on RAF administrative facilities. Belatedly, attempts were made to create an Australian administrative unit within the existing organisation of No. 3 Personnel Reception Centre, which had moved to Bournemouth on 1 July 1941. The change in location was a direct result of an increased flow of Dominion trainees which began to outstrip the requirement. The Uxbridge depot was too small to accommodate the men who were now facing a delay of up to 3 months before moving on to operational training. Indeed, the delay between arrival and posting to operational training became a growing problem for the duration of the war, placing added strain on the administrative system. But it is clear that, while these delays were a source of discontent to men impatient to begin operations, their sense of humour was not entirely extinguished. Over the winter of 1941-42, some men demanded the award of a 'Bournemouth Long Service Medal' for 3 months stay while others believed that they deserved a 'bar' to this decoration for additional 'meritorious delay'.³¹

The attempt to create an Australian administrative unit within No. 3 Personnel Reception Centre was undertaken largely under the guidance of Wing Commander Thomas White, a RAAF officer who had previously commanded an initial flying training school in Australia. Undertaking the task with determination, the numerous RAAF trainees, who were living in commandeered billets throughout Bournemouth, were centralised in Bath Hill Court, Russell Court and the Royal Bath Hotel. With this collocation of personnel, A Squadron was established especially for Australian trainees. It enjoyed direct access to the Overseas Headquarters in London with the object of improving reception procedures and eliminating discontent among airmen.³²

The new arrangements began to achieve noticeable improvements in 1942, but it is also apparent that Wing Commander White, a member of the Australian Flying Corps in World War I, was a key personality working towards the goal of improving conditions for members of the RAAF at Bournemouth. Until then postal arrangements had been chaotic with some letters and parcels taking up to 12 months to be delivered to the member concerned. Accordingly, an Australian Postal Unit was established at Bournemouth. It was also discovered that the Australian Comforts Fund Commissioner in the United Kingdom did not know that there were any RAAF personnel in Bournemouth. Once their

³¹ Herington, *Air War Against Germany and Italy*, p. 125 and f/n 1.

³² *ibid.*, p. 124.

presence had been brought to the commissioner's attention, a regular supply of warm, woollen clothing and food parcels began to arrive. There were also no Australian chaplains in the whole country, but RAF chaplains were soon organised to provide regular services. Normal disciplinary practices, such as marching and orderly parade procedures, were also introduced for personnel who were in transit for long periods at Bournemouth. Some attempts were also made to overcome the random nature of operational postings for the men by at least taking account of the airman's ability and his personal wishes.³³

In the first quarter of 1942, it became clear that the number of trainees being held at No. 3 Personnel Reception Centre was beyond its capacity. It was expected that some 7 500 men of all nationalities would be awaiting posting to operational training units by mid-1942. This trend was undoubtedly compounded by the decision taken in that year to use one pilot rather than two in heavy bombers. As a result, an Australian holding unit was established on 1 October 1942 as a distinct personnel reception centre. While this organisation remained an integral component of the RAF Flying Training Command for general administration and conformed with normal British training requirements, it was to be functionally controlled by the Overseas Headquarters. This unit also attempted, within its limited ability, to influence the postings of the airmen. It established equipment and pay sections and, at the end of 1942, became a national holding unit with the designation No. 11 Personnel Dispatch and Reception Centre. It performed the function of repatriation as well as the reception of Australian airmen.³⁴

Improvements in Administrative Support

Some of the eventual improvements in conditions for members of the RAAF were undoubtedly influenced by Air Marshal Williams, who returned to Australia and reported to the Air Board in early in 1942. Williams pointed out to the Board the particular problems being experienced in the United Kingdom and the Middle East. The wide dispersal of RAAF aircrew concerned him most. Williams reported that Australians were serving in 80 operational units in the United Kingdom, but 70 of these units had fewer than 6 Australians. As another example, 200 fitters were spread among 62 RAF units in the United Kingdom, while, in the Middle East, fitters were serving as motor transport drivers. These statistics were an indication of the sense of isolation experienced by many of the men, cut off from home with no

³³ *ibid.*, pp. 124-5.

³⁴ *ibid.*, p. 529.

access to such simple pleasures as an Australian newspaper or a magazine.³⁵

It was quite natural that men who faced the rigours of the air war far from home found comfort in establishing an Australian connection. Don Charlwood tells of one Australian, a rear gunner in a Wellington, who was pulled from the blazing wreck of his aircraft by a farmer. Later that night Charlwood was approached by a RAF medical officer who asked Charlwood whether he would go to the sick quarters to talk with the survivor, who had previously been involved in two other crashes:

'He wants to see someone from Australia - I think a yarn might help him.'

The rear gunner appeared unscathed. He was in a dimly-lighted room, lying slightly propped up in bed. I recognized him as 'Brownie', a rowdy youngster with ginger hair Since those last days at Lichfield I had not seen him, nor did he appear to recognize me.

He addressed me as soon as I came into the room.

'What part of Aussie are you from?'

'Victoria,' I said.

He appeared disappointed.

'Come from Perth m'self; good spot, too. Wouldn't mind being back there now, neither. Gee, it was a shaky do. I couldn' get away from the fire.'³⁶

And so the airman unburdened himself, finding some comfort in talking to another Australian. There must have been many situations during the war when such support was needed but never provided.

Confronted by Williams' representations, the Air Board in Australia made a conscious decision to look after the future interests of RAAF members. But it took a long time to do anything practical. The process of approving and despatching newly authorised policies from Melbourne took 6 months. Essentially, increased powers were devolved to the officer commanding the Overseas Headquarters, permitting him to exercise the full powers of the Air Board in the administration of Australian airmen overseas. Furthermore, Australian base post offices were established in London and Cairo. Welfare officers were appointed to work in conjunction with the Australian Comforts Fund. Three chaplains were also appointed for the United Kingdom and three for the Middle East. However, all of these improvements were not effective

³⁵ *ibid.*, p. 534 and p. 536 f/n 6.

³⁶ Charlwood, *op. cit.*, pp. 55-6.

until March 1943, virtually twelve months after the problems were forcefully put to the Air Board.³⁷

Dispersal of Australians Beyond Rectification

The wider powers now available to the commander of the Overseas Headquarters meant that the worst features of the administrative system could be repaired, but, according to Herington, it proved possible only to retard the centrifugal forces which dispersed Australian airmen throughout the RAF.³⁸

During 1942, Air Marshal Williams and his replacement, Air Vice-Marshal Wrigley, pressed strongly Australia's claims for administrative improvements in a series of conferences aimed at extending and amending the basis of agreement between Australia and Britain. The outcome of these negotiations were ratified in a new agreement on 31 March 1943 and it prescribed some conditions favourable to Australia. Firstly, it stipulated that personnel of the RAAF serving with, or in conjunction with, the RAF were to remain under the conditions of service prescribed by the RAAF. There were also proposals aimed at achieving a measure of concentration of RAAF units and personnel. For example, it was proposed that existing and future RAAF bomber squadrons be located within a selected Bomber Group of the RAF. Those RAF squadrons who were to receive RAAF airmen were also to be in the same Bomber Group. But all these arrangements were subject to operational exigencies and, in reality, the situation had long since past the point where the spirit of the new agreement could be reflected in the organisational reality. A further arrangement under the terms of the new agreement meant that men who had completed two operational tours were eligible for repatriation. Tours had been laid down in November 1941 according to what was called the 'Datum Line' policy. At that time, a tour in all commands, with the exception of Coastal Command, amounted to 200 operational hours. Coastal Command tours varied from 300 hours for attack squadrons to 800 hours for flying boats.³⁹ By 1943, however, a tour amounted to 30 operational sorties.

By March 1943, Overseas Headquarters had determined that Australians were scattered among 135 squadrons in Britain alone. For example, Fighter Command held 73 Australian pilots spread over 18

³⁷ Herington, *Air War Against Germany and Italy*, p. 538.

³⁸ J. Herington, *Air Power Over Europe 1944-1945*, The Australian War Memorial, Canberra, 1963, p. 278.

³⁹ Herington, *Air War Against Germany and Italy*, p. 543, p. 533 f/n 2; and *Air Power Over Europe*, p. 290.

Spitfire squadrons and 13 pilots in 8 Typhoon squadrons. Coastal Command had 20 Australians in 5 Sunderland squadrons, 9 in 4 Beaufort squadrons, 27 in 3 Fortress squadrons and 28 in 3 Hudson squadrons. However, it was Bomber Command where the greatest spread existed. In the Middle East at the beginning of 1945, 872 Australians were scattered among 106 units - 590 of them with 60 operational squadrons and 282 in 46 non-operational formations.⁴⁰

The achievement of a national force was far from reality. The few statistics that are available indicate that, as the war progressed, the dispersal of Australian personnel increased, despite attempts to contain it. The only way to have done this successfully was to have established, at the very beginning, a distinct Australian component within the RAF supported by adequate administrative arrangements including control over posting policy. It is a matter of conjecture whether the RAAF could have done this in the period 1939-1940 but, if so, it is evident that the Australian component would have required a senior RAAF officer with the determination of a Tom Blamey to protect national interests. Full support was also required from Australia, something which was distinctly hampered with Burnett as Chief of Air Staff from early 1940 to mid-1942. The failure to meet these requirements meant that, as the war developed, the demands of the air war took priority and personnel were employed as they were needed.

Senior Officers and Operational Experience

The establishment of a national force would have naturally required an appropriately balanced flow of aircrew, ground staff and senior officers to fill important positions in the command structure, but this did not happen. Indeed, the failure to have RAAF officers promoted to senior rank within an operational command structure and the failure to acquire command and planning experience was one of the major shortcomings of the RAAF involvement in Europe.

According to Herington, the Australian Chief of Air Staff, Sir Charles Burnett, was single-minded about the rapid development of the RAAF training organisation during the first two years of the war and 'persistently declined to permit senior officers to go overseas except in token numbers'. After Japan entered the war, the South West Pacific naturally assumed priority in the minds of Australia's senior defence personnel, but large numbers of aircrew still went to Europe. After the war, Williams claimed that, according to his knowledge, no trainee under the Empire Air Training Scheme attained a rank higher than

⁴⁰ Herington, *Air War Against Germany and Italy*, p. 547.

wing commander while serving with the RAF, a situation which he considered to be 'farical' over a four year period of hostilities.⁴¹

By mid-1943, when the new agreement was struck to achieve greater consolidation of the RAAF units and personnel, the Air Ministry was reluctant to give immediate operational positions to senior RAAF officers. Two air commodores - Cole and McNamara - were offered for active postings but found themselves in the relative backwaters of Ireland and Aden. However, in the last eighteen months of the war, two RAAF air commodores - Bladin and McCauley - did assume important operational posts. Bladin became Senior Air Staff Officer of No. 38 Group - a transport group, while McCauley became Air Commodore (Operations), Second Tactical Air Force. Otherwise, Williams, Goble and Wrigley were occupied in representational roles in Washington, Ottawa and London. Apart from these people, the experience gained was at the squadron leader level or in staff appointments on the Overseas Headquarters.

Some Final Problems Towards the End of the War

By 1 July 1944, RAAF participation in the war had reached a peak with approximately 14 000 men in the United Kingdom, a majority of them in, or headed to, Bomber Command. But by this stage any thoughts of forming a RAAF Bomber Group within Bomber Command had, in the words of Herington, 'been tacitly dropped as impracticable'.

Another problem was now beginning to arise. Of the 14 000 RAAF personnel in the United Kingdom at that time, 3 000 were still waiting to be posted to advanced training units. Making this problem worse, it had become obvious in the first few days of Overlord that the allied air assets exceeded those of Germany to the extent that no further increases in air power were required. Action was taken quickly to reduce the flow of air crew from the Dominions. No more trainee pilots or wireless operators were sent to Canada for further training after June 1944. In September, some 1 750 Australians who were undergoing training in Canada were sent home. However, even with the reduced flow of trainees, large numbers of men began to accumulate in the holding unit, No. 11 Personnel Dispatch and Reception Centre. With the exception of air gunners, few Australians who arrived in the United Kingdom after the launch of Overlord actually reached operational units.⁴²

⁴¹ Williams, *op. cit.*, p. 278.

⁴² Herington, *Air Power Over Europe*, p. 277 and p. 279.

By October 1944, there were 933 RAAF pilots in No. 11 Personnel Dispatch and Reception Centre. Some 200 of these men had been waiting for operational employment for more than 6 months and 8 of them had been waiting for more than 9 months. By the end of the year, there were still 678 pilots waiting and by then, 300 of them had been waiting for more than 6 months. Under these circumstances, there was a change in focus at No. 11 Personnel Dispatch and Reception Centre. It became a major challenge to occupy the men in meaningful work. A three week refresher course on ground subjects was conducted and, to an increasing degree, attachments were organised for varying periods to outside units. While reception and kitting-out functions diminished markedly, especially after August 1944, more time was now taken up with repatriation.⁴³

Although many air men had by this stage completed 2 tours and were eligible for repatriation, Herington reported that some preferred to remain in Europe. Essentially, these men believed that they would be 'more likely to find congenial employment either operational or non-operational' according to their experience in Europe rather than in the South West Pacific. It seems that some who returned had been sent to training units 'to bring them up to Australian standards'. As a result of such actions, there was a general feeling that the RAAF in Australia was opposed to the men returning from Europe. Adding to this perception, during 1942, acting rank had been taken from returnees, and, as a further affront, a general order had been issued instructing returned men to remove badges and stripes from their uniforms which indicated the extent of their European service.⁴⁴ Don Charlwood added another dimension when he wrote that 'many crews returning home to Australia from Europe and the Middle East were coolly received - as if they had chosen to dodge the war that more closely concerned their own country.' But as Charlwood observed, '[m]any, in fact, had been sent overseas two years before Japan had entered the war'.⁴⁵

Conclusion

After the war, Gavin Long, the general editor and one of the authors of the 22-volume Australian official war history, reflected on the extent of the Australian contribution in Europe and North Africa in relation to the war in the Pacific area. Long pointed out that, when the war with Germany ended, there were some 12 300 RAAF aircrew in the United Kingdom while the RAAF strength in the Pacific area amounted to 138 000. Yet this last figure needed some further explanation. According to

⁴³ *ibid.*, p. 285.

⁴⁴ *ibid.*, pp. 290-291 and f/n 9

⁴⁵ Charlwood, *op. cit.*, p. x.

Long, only 14 500 of the Pacific area personnel were aircrew, a figure not much larger than the aircrew contribution to the war in Europe and the Middle East. He concluded: 'These figures illustrate the degree to which the Dominion contribution to the Empire Air Forces was a contribution of aircrew to a force for which the United Kingdom provided most of the ground staff, equipment, technical services and senior leaders.'⁴⁶

In this light, Australia's participation in terms of aircrews was similar in both theatres. It underlines Don Charlwood's perception of the dual loyalty of Australians to empire and nation. However, while this dualism seemed harmonious and compatible from Charlwood's perspective, there was also an underlying tension which is apparent in the comments of Richard Williams, Douglas Gillison and John Herington. The commitment to empire would endure only as long as Australians could be convinced that it was compatible with their national interests. Although subjected to some strain during 1939-45, Australia did make a significant contribution to the war against Germany and Italy.

⁴⁶ G. Long, *The Six Years War ; A Concise History of Australia in the 1939-45 War*, The Australian War Memorial and The Australian Government Publishing Service, Canberra, 1973, p. 393.

DISCUSSION

Air Marshal R.G. Funnell: There is one comment more than anything else that comes particularly out of your paper John - thank you very much for that - but also about the whole of today. One of the themes that has been present in every single paper concerns the circumstances of 50 years ago and the relationship between Britain and the Dominions and the way in which the Dominions thought of themselves and the trends that have occurred since. It's very obvious that the world of 1939 is not the world of today. It's also very obvious from these papers that even if Australia was technically a state in 1939, we very definitely were not a fully fledged nation. At best we could be characterised as an immature nation. I suppose, too, that even to say technically we were a state, could be disputed by the fact that the Statute of Westminster, which had been enacted in London in 1931, was only ratified by Australia in 1942 under quite different circumstances and pressures. But, as I say, we're very different now, and it's unfortunate that, just as we seem to have reached maturity as a nation state, the whole nation state system, if not disintegrating, certainly is going through substantial and perhaps even fundamental change.

Well, out of all of that, what might we learn from these circumstances of 50 years ago? Well it seems that we weren't particularly well prepared, politically and diplomatically, to come to agreements with other nations in 1939. But we certainly have to be in 1994.

Dr Chris Coulthard-Clark pointed out that we had fought as a nation - but I would say not particularly well - against an Empire air connection. But I think that we were quite unprepared to sit down at a negotiating table in Ottawa in 1939 and put together that agreement that was so fundamental to the whole of our operations during the second world war. For instance, you have to think out these critical issues well before you reach the actual crucible of conflict. Essentially, you must determine exactly what your requirements are before you enter into multinational agreements. And given that, the conflicts of the future are going to be less cut and dried, much more ambiguous than what occurred in 1939, where very much more we're going to be involved in subnational levels of conflict, even down to tribal levels. We Australians had sure as hell better work out now how we're going to sit down and work with people, how we are going to participate, and under what conditions, in conflicts of the future.

Dr John Mordike: Thank you for those comments. I couldn't agree more. In fact, I think that's one of the powerful lessons that I thought came out of these considerations today. And that is Australia, if it deploys its national forces in any arena in any form, has to think seriously about those questions, as Air Marshal Funnell just commented. Also from a professional Service point of view, it has to think about the support and administration of the force - it has to work

out all those questions beforehand. Because, as I hope it has been illustrated, the members of the force require things like pay, equipment, uniforms and supplies, and good administration.

In relation to the issue of present and historical perspectives, I'd just like to underline for the people here that the comments that I have made today in this paper have been derived chiefly, as I said at the outset, from three sources. One was John Herington, the other Richard Williams and also Douglas Gillison. All of these people lived through the period in question. So I want to avoid the accusation that I'm imposing today's values on the past - to a degree I am, that's unavoidable - but looking at the comments of those people, the tension between nation and empire is evident. I was surprised to find it, quite frankly, in the official histories. All those questions that I included in my presentation were real questions that concerned those people at the time.

Air Commodore T. Trinder: Doctor, you said it was a pity that the RAAF didn't have someone like Thomas Blamey in it at the time. With due deference to the front bench here, I wonder if the failure of RAAF officers to reach any significant ranks during World War II was due to the quality of the officers that were around? In other words, did the RAF think that Australians weren't capable of holding those ranks, or conversely were there sufficient Australians around that the British considered, but it would have been inconvenient if they did get to that rank?

Dr John Mordike: It's a complex question. As a student of Australian Military History, I have never believed the story that we could not produce the officers to command our own forces. I think it's a load of bunkum, quite frankly. I believe wholeheartedly that we can and we have done it in the past, and quite effectively. But at the same time, I think you have to make some allowance for the Air Force in this particular situation because it was in such a deprived state up until World War II. It didn't have a solid core of trained officers and experience to draw on immediately. In that sense, they certainly didn't have the pool of experience that the Army could turn too. For instance, I mentioned Tom Blamey. Well, Tom Blamey reached the rank of brigadier in World War I and most of the first division (the 6th Division) - or certainly a high percentage of it - that went to the Middle East had officers who had World War I experience. So the Army had that springboard of experienced personnel to assist its mobilisation at the outset. Now, I don't think the Air Force had it right at the crucial time of 1939 - 40. But I share William's attitude in that over the period of the war, we could have developed those senior officers.

Dr Chris Coulthard-Clark: On this particular issue, I think it's important to recognise the fact that one element that the Army was able to use to its advantage was to abolish the Military Board and transfer

the prestige of that body to a Commander-in-Chief in Blamey. There were proposals to create an Air Commander-in-Chief which were not implemented. It's interesting that, before World War II, the British Air Ministry had opposed any suggestion that in war there would be an Australian Air Commander-in-Chief. Also Burnett's Deputy Chief of the Air Staff, Air Vice-Marshal Bostock, earned a great deal of enmity for himself from the Minister for Air for daring to oppose the proposal that the Air Board should be abolished. So I think you need to look at what factors are going on at this time, I think it's entirely inadequate to suggest, as Gillison did, that the reason why the Air Force suffered in comparison to the Army was simply because the Air Force was a younger service. I think we have to look at factors, such as were suggested in the former question, in terms of the small pool of leadership material.

Dr John Mordike: I would agree with that. I think it still requires more study in this particular area. It comes back to Air Marshal Funnell's comments about national maturity. A study of our contribution to the Empire Air Training Scheme (EATS) is essentially a study about Australia's national perception at that time of its status and its degree of maturity and development. I think that's exactly what the study would be.

Squadron Leader Despina Tramoundanis: In your book, *An Army for a Nation*, you describe the parliamentary debates dealing with the first Defence Act. In that there was a recurrent theme, it seemed from a broad spectrum of the parties in parliament, that there was an insistence that Australian Army elements should remain under Australian Government control. In relation to that, the American revolutionary catch cry of no taxation without representation was invoked in various forms. We've heard from Air Marshal Funnell that perhaps the Australian nation state was immature in 1939. What was different between 1903-04, and 1939?

Dr John Mordike: That's quite right. It's a very good question, actually. The first Defence Act reflects a strong national sentiment, or I believe it does, in the Australian parliament of the time. Australians at that time were determined to establish control over their military forces. And yet we have the EATS, where John McCarthy suggested this morning, we surrendered control almost completely. I think John mentioned in his paper this morning that it was a unique event in Australian defence history. What actually happened? It is all that more intriguing because it would not have happened with the Army in 1939. What could be the answer to it? In one way I suspect it had something to do with the lack of understanding and familiarity with Air Force operations. Australians had plenty of understanding about Army operations - they could identify with this force and readily see it as a national force - but the Air Force was not so well known and once the Air Force went over the horizon it was 'out of sight - out of mind'. It is less

tangible than the Army. It seems to me that people didn't understand how an Air Force should be established and controlled. This is not an adequate answer and I believe it needs more intense study and understanding.

Air Vice-Marshal E.M. Carroll: I come back to the remark that you made about the Army and the Air Force. I think there's one problem here as far as politicians are concerned and Australians are concerned, and that is with the difference between Army and Air Force, and perhaps Navy and Air Force. Every citizen in the street probably believes that the Army is a first step in any military force because he can identify with firing a gun and doing that sort of thing. I believe also the Army has a very dedicated following throughout Australia and it has established a very strong core there.

I am concerned that politicians seem unable to make hard decisions about the deployment of Australian forces and tend to procrastinate, especially in times of war. To give another example, look at sending forces overseas on peacekeeping missions. We can never work out just what conditions, including the pay and administrative arrangements, they're going to serve under overseas until they're halfway through their tour. What seems to be lacking here is an understanding by politicians of how they'll use the military forces when the time comes. And the decisions are always taken, to a certain extent, after the event. Can you comment on that?

Dr John Mordike: Well, can I take the first part of your question first? I feel more confident with that. You say that Army is more firmly set in the national psyche. I think that's absolutely right. And I think it comes out of World War I, initially, and the huge commitment of people to the military forces at that time. This morning, John McCarthy's paper mentioned the figure of 360 000 Australian men serving in World War I. That's out of a total Australian population of 4 million. So assuming that 2 million of them were men, about one in six Australian men were involved in the Army. And they would have been from a narrow age spectrum, predominantly 19 - 30 but also up to 40 years of age. I don't think you would have found a family in Australia without either a father, a brother, a son or an uncle, that was not in the Army. As a result, Army service was firmly established in the national experience. And I think, the experience of World War I with emphasis on Army service was a major factor in distorting force structure developments in the inter-war period. I would have thought that the Air Force was a natural defence force for Australian conditions and circumstances. Yet the Air Force was not developed as an effective defence force before World War II. It was William Morris Hughes - he was a Cabinet Minister in the Lyons Government - who published a book in 1934 calling for the Australian Government to establish an effective Air Force in the face of an emerging Japanese threat. He recognised this as an absolute urgency and also claimed that the

natural defence force for the defence of Australia was an Air Force. Not only did nothing happen as a result of that book, but Hughes was sacked from Cabinet for stepping out of line on the Government's defence policy which embraced the imperial strategy, leading to large amounts of expenditure on the Navy.

Turning to the second part of your question, politicians today seem to be inexperienced of the ways of the world, especially in relation to defence. Perhaps that's a price we pay for the isolation that we have and the relative security we enjoy. We don't have a strong tradition of established political thought on the need to maintain the constant vigilance and the necessary preparations for mobilising defence forces. I share with you that worry, that politicians mightn't be able to make the right kind of decisions in a timely fashion if hostilities break out or forces are deployed on other types of operations.

CLOSURE

Air Marshal I.B. Gration

My notes always say that after a conference of this nature I'm supposed to summarise the main points that come out in both the papers and the periods. I think I said it last year and the year before, and I'm certainly saying it today. I have no intention of doing that. However, I do have a couple of comments to make which will be no surprise to people who know me.

On the subject we've just been talking about, some passing thoughts went through my mind as the discussion was running, especially when Air Marshal Funnell talked about the maturity, or lack thereof, of the nation in 1939. I think John Mordike, in his comment on that subject, got very close to explaining the situation but actually didn't say it. But I think most of us understand it. The Air Force at that time was certainly an immature organisation. It was also a very small organisation and we could have a lot of theoretical, philosophical debates about whether we should or shouldn't have done this at that time. The fact was, I don't believe the Air Force was in a situation to develop the sorts of command relationships that people were contemplating, or even to have the numbers of people to fill those positions at that point of the war. Certainly, as John Mordike said, later in the war there was the capability and the numbers for us to take some of the higher command positions that ought to have been made available to us.

I certainly agree with Air Marshal Funnell's point that, whatever the situation was in 1939, the fact is today we had better be thinking about that particular problem. On the other hand, as DCAS mentioned in a comment earlier this morning, the facts are that we have quite a deal of experience now in things like United Nations and other multinational cooperative arrangements. I believe we are in a better position now than in 1939 - certainly within the Air Force - to deal sensibly and intelligently with questions of what command arrangements ought to be; what is the proper place for a nation like ours, or an Air Force like ours, to participate in whatever way it does. For example, I mention the RAAF participation in Cambodia, which most people don't even know about. Our representation in the command arrangements in Cambodia reflect the contribution we are making. That arrangement was reached in a sensible way and certainly reflected the views of those who were involved in the decision making. Another example would be Somalia where we have some people - in fact they just started heading on their way home yesterday and today. Again, we need to take account of the contribution we are making in an organisation like that before we start standing on our national dignity and demanding this, that and the

other. We are a small nation - a middle power in economic terms - and we have a professional, but small, defence force. Yet we do an awful lot of navel gazing and wringing of hands about our national sensitivities and I wonder if we yet have, in that national sense, the maturity that Air Marshal Funnell referred to.

Let me make a couple of other points. I wondered this morning, listening to the passing comments about the other nations which participated in the Empire Air Training Scheme, nations such as Canada. Canada had different arrangements from us and I'm not familiar with the details, but I wonder if today the Canadians wring their hands and agonise over what the arrangements were some 50 years ago. I think the time we spend on that subject probably reflects a degree of immaturity even at this stage. That is, of course, not a comment on the presentations.

Another thought that passed through my mind concerned Professor John McCarthy's paper. I was pleased that Al Stephens was able to present John's paper this morning but I wish John had been able to do it. Those of you who were here last year will remember - at least the ex-Bomber Command people will certainly remember - John's presentation. There was a small revolution over it and we were delighted to be able to close that first day without actually coming to blows. This morning I detected that there was a substantial shift in John's paper, about half way through. It seemed to me that John McCarthy was suddenly remembering last year and felt that there needed to be some conciliatory comments made to the members of Bomber Command. He certainly achieved it in his presentation today. His paper dealt very fairly with the subject. I wish he'd been able to deliver it, and I'm sure we all wish him a speedy recovery.

Another comment on the papers was that I was delighted to hear the one this afternoon on RAAF personalities. I think when we address these matters in a historical sense, we generally deal with concepts of strategy and the wider policies involved and the wider national impacts of things like, for example, the effect of Bomber Command's activities. And we do tend, in a conference like this, to lose sight of the fact that real people played parts in this. We were reminded in Dave Schubert's presentation that, in many ways, the personalities were just ordinary people doing extraordinary things. I think that we really do need to keep in sight two aspects. Firstly, we are talking about real people and, secondly, the sorts of pressures that were upon them and the way they rose to the occasions under extraordinarily difficult, not to mention terrifying, circumstances. Ordinary people doing extraordinary things. But we are not only dealing with aircrew. Next year it is planned to deal with the wider issues of the support function. As 'Moe' Walkley commented earlier today, we need to acknowledge the contribution of ground staff. So I was delighted to hear that fascinating presentation on personalities by Dave Schubert. It reminded us that we are not just

dealing with dry, old history. These are real people who did those fantastic things.

So I hope you will all go away this afternoon feeling satisfied. This, our third conference, was comprised of presentations which, I thought, were particularly thoughtful and reflected the hard work done by all of the speakers in preparing their papers. It was a very thoughtful day and, personally, I found it a fascinating day. I don't want to keep harping on the fact that I'm no history student but I learn a lot every time I come to one of these conferences, and I think most of us are in that situation.

A conference like this depends on the efforts of a lot of people and it's very important that, at this stage, I don't overlook thanking them. Some of them are behind-the-scenes-type people, but, obviously, the staff from the Air Power Studies Centre who actually conceived the theme of the conference and then recruited the speakers should be thanked. To the the staff of the Air Power Studies Centre I say a real sincere thank you on behalf of everyone here.

I'd also like to comment on our chairperson, to use the politically correct title. Air Commodore Brendan O'Loughlin really made the day run smoothly. He kept us on time, he introduced a note of originality in many of his comments and I think he added a nice touch to the proceedings. So again, on your behalf, thanks for running such a good conference.

And lastly I'd like to come back to the speakers. I think, if you'll accept the comments I just made about the thoughtfulness of the papers, those of you who have been in the position of preparing a paper of that nature, would realise the amount of work that goes into the research. The standard of presentation from all of them was also excellent. I'd like you to join with me in sincerely thanking all speakers, and that includes Al Stephens who looked after John McCarthy's paper, for doing such a great task today.

I think we have in the order of 250 people here today, making this our biggest conference. Last year there was something under 200 and the year before that was smaller again. I hope the growth in attendance signifies a recognition of the quality of the conferences. We've got a mix of people here, but I think it's wonderful that we are in a position to have people who were actually part of the history coming back to the conferences. Long may that continue. And at the other end of the scale, I am pleased to see a lot of younger people from the Air Force who, I think, really do learn many lessons from conferences of this nature.

As a group, the audience is a tremendously important part of ensuring the conferences are a success. You have been a good audience. I've appreciated your contribution and I think you've all made it an excellent day.

Finally, the tentative date for next year's conference is Friday 27 October. The topic is *The Australian Front : Mainland Australia and the South West Pacific Area*. The conference will address all those issues, other than direct operations and the aircrew, which supported the Air Force in action. It will encompass the support activities, from those which were located in advanced airfields to the factories in Australia.

I hope you are all able to make it next year, and if you have enjoyed today and you thought that this is a successful way of going about examining our history in a digestible way, please encourage your friends to come along. To all of you, thanks very much for your participation today. To all of those who made it work, again, sincere thanks.

**RAAF SQUADRONS IN EUROPE AND
NORTH AFRICA 1939-45**

No	Command	Role	Main Aircraft Types
3	Mediterranean Allied Tactical Air Force	Single Engine Fighter	Lysander Mk I Gauntlet Mk II Gladiator Mk I & II Hurricane Mk I Tomahawk Mk I Kittyhawk Mk I, II, III & IV Mustang Mk III & IV
10	Coastal Command	General Reconnaissance Flying Boats	Sunderland Mk I, II, III & V
450	Mediterranean Allied Tactical Air Force	Single Engine Fighter	Hurricane Mk I Kittyhawk Mk I, III & IV Mustang Mk III
451	Mediterranean Allied Coastal Air Force Fighter Command	Single Engine Fighter Tactical Reconnaissance	Hurricane Mk I & II Spitfire Mk V, VIII, IX, XIV & XVI
452	Fighter Command	Single Engine Fighter	Spitfire Mk I, II & V
453	Fighter Command 2nd Tactical Air Force Fighter Command	Single Engine Fighter	Spitfire Mk V, IX, XIV, & XVI
454	Mediterranean Allied Air Force	Light Bomber	Blenheim Mk V Baltimore Mk III, IV & Mk V
455	Bomber Command Coastal Command	Light Bomber Twin Engine Fighter	Blenheim Mk V Beaufighter Mk X
456	Fighter command 2nd Tactical Air Force	Single Engine Fighter Twin Engine Fighter	Defiant Mk I Beaufighter Mk II & VI Mosquito Mk II, VI, XVII & XXX
457	Fighter Command	Single Engine Fighter	Spitfire Mk I, II & V
458	Bomber Command Mediterranean Allied Coastal Air Force	General Reconnaissance Torpedo Bomber	Wellington Mk I, IV, VIII, XIII & XIV

459	Mediterranean Allied Air Force	General Reconnaissance Landplane	Blenheim Mk IV Hudson Mk III & VI Ventura Mk V Baltimore Mk IV & V
460	Bomber Command	Heavy Bomber	Wellington Mk IV Halifax Mk II Lancaster Mk I & III
461	Coastal Command	General Reconnaissance Flying Boats	Sunderland Mk II, III & V
462	Mediterranean Allied Air Force Bomber Command	Heavy Bomber	Halifax Mk II & Mk III
463	Bomber Command	Heavy Bomber	Lancaster Mk I & III
464	Bomber Command Fighter Command 2nd Tactical Air Force	Light Bomber	Ventura Mk I & II Mosquito Mk VI
465	<i>Not Formed</i>		
466	Bomber Command	Heavy Bomber	Wellington Mk II & X Halifax Mk II, III & VI Liberator Mk VIII
467	Bomber Command	Heavy Bomber	Lancaster Mk I & III

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