

Chapter One



The First Ace

It is generally agreed that the title 'ace' applies to any fighter pilot who has destroyed five or more enemy aircraft in air to air combat. It is also generally agreed that the term originated with the French in the early part of 1915. It is not generally known, however, that the first pilot to earn this accolade was a Frenchman named Roland Garros, who was a lieutenant in the French air force.

At the time he was trying out a new device which was fitted to his Morane monoplane. This was very much his own idea, and allowed him to fire a fixed machine gun through the arc of his propeller. It consisted simply of fitting deflector plates to the airscrew blades.

The story is told in more detail in later paragraphs, but for the present it is only necessary to note that his success was immediate and decisive. Garros shot down five German aircraft in just over two weeks between 1 and 16 April 1915. This was a feat absolutely unheard of at the time, and seldom equalled since. He received the Legion of Honour, and his victories were given prominence in most of the Allied newspapers. He became a hero overnight.

How the term 'ace' came to be applied to him and to future airmen is best told by Arch

A Morane-Saulnier Type N aircraft. (AWM H04376)

Whitehouse in his book *Decisive Air Battles of the First World War*:

Five victories in sixteen days! That was the initial harvest of Roland Garros' front-firing guns. He was cited for the Legion of Honour, and nearly every newspaper in France and Great Britain carried the astounding news of his aerial accomplishment. The gay boulevardiers screamed their cheers and toasted the newest hero in champagne. 'Oh, that Garros', they cried. 'Roland Garros our aerial saviour! Five enemy flying machines he has destroyed. Garros is an ace!'¹

The French word ace was a popular catchword of the day in Paris, particularly in relation to athletes, and was applied to anyone who had performed anything unusual. The latest Grand Prix winner was an ace; the newest cycling hero was an ace; popular jockeys were included in this newest category of headliners. It was natural that the word should be applied to Roland Garros.

This continued reference was caught by an American newspaperman in Paris who interpreted it to mean any pilot who had downed five enemy planes and, in his next dispatch to New York, applied the reference to Roland Garros without bothering to explain how the Frenchman had run up his score or with what new weapon. It thus became the journalistic standard by which a French fighter pilot was rated.

The French word 'l'as' for ace, or 'top of the pack', was soon adopted by the French Army. The title was awarded officially to every pilot who destroyed five (or more) enemy aircraft. Their destruction had to be confirmed by at least one witness or 'other good evidence'. Most other countries also adopted the term and it soon became universally recognised. Occasionally, and in some countries, the score for recognition was raised from five to ten, but five is the figure now accepted by all who use the term. However, it was never adopted officially by the original British air forces, and it is still not recognised by either the RAF or the RAAF.

The British ignored all references to individual fighting scores and still did not accept the ace designation. Not until late in 1915 did they compile authentic records of enemy aircraft shot down, and they did not publish the names or the day-by-day scores of their outstanding airmen. It was only on the publication of decorations and awards that the victory scores of their heroes were mentioned. Nevertheless, it is a well established and internationally recognised term and the above definition is the one which has been used throughout this book.

Even to this day, neither the RAF or the RAAF have ever recognised the term in the official sense, and as a consequence, no official records of enemy planes shot down by individuals have ever been produced. More importantly, neither air force have ever published the names of their aces or outstanding pilots. On the other hand, the subject has been deeply researched and written about for so long that there is now little argument about 'who did what'.

¹ Arch Whitehouse, *Decisive Air Battles of the First World War*, Duell, Sloane & Pearce, New York, 1963, p. 86.

Garros thus not only gave us the first fixed gun fighter. He also demonstrated its effectiveness beyond doubt. It was this weapon and this weapon alone which led to the highly specialised role of the fighter pilot, and the long line of aces which followed. Without such an aircraft there would be no story to tell. We should now go back and trace the events leading up to this unique combination of man, machine and weapons.

(For a brief biography of the life of Roland Garros see Appendix Three.)

Reporters interview Roland Garros (centre) after one of his prewar flights.

CHAPTER TWO



Development of the Fighter World War One

In August 1914, at the start of the World War One, each of the major powers had some form of an air force. However, none of the aircraft were armed, nor was any form of air to air combat foreseen. There was little difference between military or civilian aircraft, or in the way they were flown. Military aircraft were intended purely for reconnaissance and the duty of the military aviator was 'to see, and not to fight'. In fact the real task that any aviator had at that time was to keep his machine in the air. Any other duties were quite secondary. The aviators' real enemies in the early days were the weather, their own lack of skill, and the general weakness and unreliability of their machines.

If, in the early days of the war, aircraft from opposite sides did meet, they would either ignore each other completely, or the pilots might wave to each other before going on their separate ways. As aerial reconnaissance developed and became more important, it was soon necessary to try and stop the enemy planes from crossing the lines, or if they did so, to try and chase them away. Airmen began carrying personal weapons such as pistols, rifles and shotguns. These were readily available, were light, and the most popular. Pilots, and later observers, would take potshots at each other with these hand-held weapons, but not with any recorded success. Some even tried hanging grenades below their machines, which hopefully would detonate on contact when dropped on an enemy aircraft.

It was not long, however, before machine guns were fitted on improvised mountings, but the added weight was a real problem. The gun also needed a lot of ammunition, and this further added to the problem of weight and space. Also, in most aircraft, there was no way that the gun could be fired forward or downward, as the propeller, wings, struts and rigging wires got in the way.

Soon new aircraft came into service designed to carry machine guns as standard equipment. Many of the problems remained, however, particularly in aircraft with the engine in front. The observer could only fire to the rear, and in an arc over the tail. This gave some protection in a defensive role but was no good in the offensive or attack role, which was the original purpose in arming the aircraft.

With rear-engined, or pusher type machines the position was quite different. The gun could be mounted in the nose and fired forward free of all obstructions. The observer consequently had a wider and much safer field of fire. This type of installation was ideally suited for the attack role, and was quickly adopted.

As a matter of interest, the French are credited with the first confirmed victory in this new style of warfare. As early as 5 October 1914 the observer of a Voisin (a pusher type) shot down a German Aviatik two-seater with a Hotchkiss machine gun mounted in the nose. Nevertheless it remained a difficult and hazardous operation until a new breed of aircraft was designed and built.

Whether the engine was mounted at the rear or in front, there were problems common to both. The gunner normally had to direct the pilot into a position where the guns could be brought to bear on the target. This usually called for sudden and unexpected changes of direction. In turn this put a considerable strain on both pilot and machine. Performance was still very marginal, and it was difficult enough in most cases to control the aircraft without the extra weight of gun and ammunition, or the drag induced by the gun and other fittings. The net result was that it was usually extremely difficult to get close enough to the enemy to be effective. In many cases the intended victim was able to pull away unscathed. However, as the object was in fact to chase the enemy away, the results were to some extent successful, whether or not he was destroyed.

Nevertheless, the new technique continued to achieve a comparatively high rate of success, and a high degree of skill and team work soon developed between pilots and observers. Where an enemy aircraft was destroyed, the pilot and observer were each credited with one enemy destroyed.

However, as the single seat fighter gradually overtook the role of destroying enemy aircraft, when two or more aircraft were involved in shooting down a single aircraft, each pilot was only credited with a half each. The system of crediting one each to the pilot and observer of a single aircraft ceased, and the two crew members received a shared half each, and their previous record adjusted accordingly.

For the record, however, under the old system, the following Australian observers were originally credited with a single kill each, and they achieved ace status where their score was five or more:

Name	Score
Finlay, Lieutenant Garfield	8
Sutherland, Lieutenant Leslie William	8
Kirk, Lieutenant Walter Alister	7
Traill, Lieutenant James Hamilton	6
Weir, Lieutenant William James	6
Fysh, Lieutenant Wilmot Hudson	5
Mustard, Lieutenant Andrew (Pard)	5

Table 2.1: Scores of Australian Observers

Under the new and universally adopted system, the above observers would now have had their scores halved and none of them would have achieved the required five to achieve the accolade of 'ace'. Consequently no Australian observers have been recorded in the final list of World War One aces as presented in this text. However, it was considered of general interest to place their names on record as set out above.

It was soon realised, of course, that most - if not all - the problems would disappear if the pilot himself could aim the gun by just pointing the aircraft. Some way had to be found of mounting a fixed machine gun firing forward along the axis of flight, but without shooting off your own propeller. As early as December 1914 both the French and the British had begun to develop some form of mechanical device to interrupt or synchronise the rate of fire so the bullets would pass harmlessly through the arc of the propeller and between the blades. By April 1915 they had actually perfected such a gear, but it had not yet been fitted to an operational aircraft.

In the meantime, other developments were going on, and it is claimed that the world's first true fighter was the British designed and built FB5 'Gunbus'. This was a two-seater pusher type aircraft with a rear-mounted engine. A machine gun was mounted on the nose, with the observer still in front and the pilot behind. The Gunbus began to arrive in France as early as February of 1915, but was soon replaced by the DH2. This was also a pusher type of similar design, but was a single seater, and the pilot sat alone in the nacelle with a Lewis gun mounted in front of him. This gave an almost uninterrupted forward field of fire, and left the pilot completely in command of gun and machine. The aircraft was light and manoeuvrable and achieved a high rate of success from the start. In fact it was to be the standard fighter aircraft for the British for some time to come.

About the same time the Germans and French developed single-seater aircraft with the engine in the nose. These were fitted with guns facing forward on the upper wing in front of the pilot. They had to be angled upward to avoid the propeller, and the pilot needed to allow for the offset from his line of flight. All this required a certain judgement and skill, but in general was fairly successful as a compromise. The best known, and perhaps the most successful of these was the French Nieuport II, with a Lewis gun mounted on the top wing.

At the time of the history-making events described in Chapter One, the aircraft being flown by Garros was a Moraine-Saulnier Type N. It was a 'parasol' type monoplane with the mainplane mounted on a canopy above the fuselage. Its speed and manoeuvrability were such that when war came the best pilots were able to intercept all German aircraft. Besides being noted as one of the first natural interceptors in aviation history, the Type N gained its fame as 'the first true fighter of all time embodying that special harmony of aircraft, armament and system of aiming'.¹

The fixed gun, mounted slightly to starboard of the pilot, was a 7.7 mm machine gun, firing forward but to starboard of the axis. Whilst a system of synchronising propeller and gun systems was being worked on as early as 1914, in the meantime there was a system of steel wedges set into the propeller trailing edge to repel bullets. However, this was a crude and potentially dangerous system, because it both lowered the propeller efficiency and diverted bullets in unpredictable directions.

Operationally the aircraft was quite efficient, but only in the hands of expert pilots, as these early monoplanes had very sensitive controls, and as a result were extremely manoeuvrable. One of the negative points was the rather high landing speed.

¹ Apostolo, Georgio, *War Birds: Military Aircraft of the first World War in colour*, Macdonald and Jane's (Macdonald & Co.) (Publishers) Ltd, London, 1974, p. 105.

The British used the French machine because their only indigenous fighter, the Bristol Scout, could not be supplied in sufficient quantities. The French Type N was the only one available to oppose the Fokker threat at the crucial time.

The sole duty of these new fighter aircraft (or 'scouts' as they were known) was to protect the unarmed two-seater observation planes, and one or two were attached to each squadron for this purpose. The day of single-purpose squadrons, or even units made up solely of the same type of aircraft was still very much in the future. The prime role of the air force was still reconnaissance, and everything revolved about this central mission. The early doctrine for the new fighters required them to provide 'close escort' to the observation machines.

For special missions it was not unusual for a single reconnaissance aircraft to be escorted by as many as twelve fighters. Soon, however, some of the more aggressive pilots found it was better to go looking for the enemy rather than to wait for him to attack. Thus began the offensive tactics which the Allies adopted of carrying the battle over to the German side of the lines.

The next development also occurred in the early part of 1915. This was the device being tested by Garros when he became our first 'ace'. It consisted of metal deflectors fitted to his propeller in the form of steel collars attached to the boss at the foot of each blade. The gun was then fixed to fire forward through the airscrew disc along the axis of flight. It appeared from his early and immediate success that a mechanical interrupter or synchronising gear might not now be required. However, there were some sceptics, and when he failed to return from a mission only three days after his fifth victory, it was immediately believed that he had shot away his propeller.

In fact, this was not the case. He had been forced down through engine trouble and made a safe landing, but in German territory. He was captured before he could destroy the aircraft and special device. The aircraft was sent to Anthony Fokker who at once realised the significance of the metal collars. Fokker at that time was working on the design for a new fighter, but as yet had not even thought of providing any arrangement for firing through the propeller blades. However, he did not think the simple collars would be reliable or safe enough, and set to work at once to design a mechanical interrupter gear.

Only one month later, on 20 May 1915, the new device was ready and fitted to one of his new Fokker M5K monoplanes. For the first time it was now possible for a stream of bullets to pass through the arc of the airscrew without hitting the blades. This enabled the pilot to point his aircraft at the target aircraft and he could sight directly along the axis of his machine. This was a remarkable achievement in research and development by any standards, and was to change the whole concept of fighter operations. In less than a month, aircraft equipped with the new device, were shooting French and British planes out of the sky.

The day of the friendly wave from an enemy pilot was gone forever. Now a shooting war was being fought in the air as well as on the ground.²

The new aircraft was put straight into operation and the first score was made by Lieutenant Boelcke on 30 June 1915. By early July of the same year the Germans were flying the Fokker E1 single-seater fighter, which was the production model developed from the modified M5K described above. However, there were still some bugs, and the testing and development was taken over by the already well known

² Gurney, Gene, *Flying Aces of World War I*, Scholastic Book Services, New York, 1965, p. 21.

Lieutenant Immelman. His successes were even more devastating and dramatic than the early results by Garros. The era of the true single-seater fighter had begun.

Fortunately for the Allies, the new Fokkers were only available in small numbers, as the DH2 and the rugged FE2 were the only aircraft capable of engaging the new German machine. In fact the Fokker E1 was not a particularly good aircraft except for its superior fire-power. Although already obsolete, the DH2 was still somewhat superior in performance, and with the FE2 was to some extent able to hold the E1 in check. Then fate intervened once again in the rapidly developing saga of the fighter.

On 11 August 1915 one of the pilots flying the new Fokker E1 became lost. He ran out of petrol and landed intact in French territory, thus returning the earlier call by Garros. The effect was electric. The discovery that the Germans already had an operational aircraft fitted with an interrupter gear set off an intensive effort to put an Allied fixed gun machine into the air as soon as possible. In the meantime, it was the French Nieuport II which took over from the DH2 and began to clear the Fokker E1 from the skies.

The first British aircraft to carry a forward firing gun with a workable interrupter gear was the Sopwith 1½ strutter, which did not come into operation until April 1916. It is interesting to note that although the 1½ strutter had a forward firing machine gun, it was a two-seater with the observer firing another machine gun in the back from the newly developed Scarff ring. It was closely followed by a scaled down single-seater version, the Sopwith Pup.

With the introduction of the new style fighters, there was an urgent need to develop a doctrine for their use. In the early days combat tactics were either non-existent or were very much an individual affair. Fighter aircraft were at first only introduced in small numbers and the fighter pilot remained a lone flyer, stalking the enemy on his own. It was soon noticed, however, that there were advantages in flying in pairs. One would attack from the side, usually from long range, whilst his partner would attack from behind and below at close range. They could also give each other mutual support.

With the increase in numbers and the specialisation of units, squadrons began to take the air together and fight in formation. Then, as will be seen later, several squadrons would be combined into wings or 'circuses', and the true 'loner' finally disappeared. Fighter pilots became more and more dependent on teamwork and on each other for success. The true war in the air was about to begin. Soon the specialised fighter pilot was to emerge and the cult of the 'ace' to begin in earnest.

As the early aces began to emerge in 1916, so the demand for better fighters increased, and the Sopwith Pup was followed by the Nieuport 17. Both of these aircraft were in turn outclassed by the new German Albatros DIII, introduced by the beginning of 1917. It was fitted with twin Spandaus having a combined rate of fire of 1000 rounds per minute compared with the Pup's 300 rounds per minute. This time the Germans did not introduce the new fighters a few at a time, but concentrated them into the first of the 'hunting' squadrons. The express purpose of these squadrons was to seek out and destroy enemy aircraft. They were not in any way diverted by escort duties or other missions.

The impact of this new aircraft, together with the new tactics, was absolutely shattering, and the Albatros gained complete mastery of the air. Recovery by the Allies began with the arrival of the British SE5 in April 1917, and the French Spad XIII in May. The SE5 was a rugged biplane with two machine guns, although one of them was a Lewis gun mounted on the top wing, but it was a very stable gun platform. The Spad was equipped with two forward firing Vickers guns, both synchronised to fire through the airscrew. Final superiority was made certain by the arrival of the Sopwith Camel in July.

Both the Spad and the SE5 had excellent performance characteristics and were sturdily constructed. They proved to be amongst the best two Allied fighters of the war, and were in production and service to the very end of the war. The Camel was also an excellent machine which had outstanding aerobatic capabilities. It too was fitted with two forward firing Vickers. These three aircraft between them soon obtained complete air superiority against the Albatros. The Germans produced no replacement for the Albatros DIII and so lost their supremacy, never to regain it.

However, by August 1918, when the final Allied offensives began, two new types of scouts had just begun to appear. These were the British Snipe, and the German Fokker DVIII. The Snipe was intended to replace the Camel, although by the end of the war a few months later, only two squadrons had been re-equipped. The Fokker DVIII was also too late to become effective, although it had already begun to make its mark. It is interesting to note that the new Fokker was a monoplane, as had also been its earlier predecessor, the Fokker EIII, perhaps the most successful fighter of its day.

As we have seen, when the war began in August 1914, the aeroplanes of the day were elementary in design. They were frail and unstable, very underpowered and most unreliable. They were small in numbers and only used in the simplest of roles as observation vehicles. By the end of the war, only four years later, they had matured into deadly, fast, high performance machines used in a wide variety of roles, and were operating in their thousands. However, they were still basically constructed of wood, wire and fabric. The pilots and crew, even in the large bombers which had been developed, sat in open cockpits. They all had fixed undercarriages and with one or two exceptions were all biplanes.

Chapter Three



The Australians Arrive

The Squadrons

Whilst the above developments had been going on, Australia had not been idle. In fact the Australian Army had received official approval as early as September 1912 to form a Central Flying School for 'training in the art of flying',¹ and the Australian Flying Corps had been formed as a part of the army organisation. The school opened at Point Cook in March 1914, and the first course of pilots actually began training on the 14 August - just ten days after the start of World War One.

The first Australian flying unit to see active service left Melbourne on 30 November 1914, with a total strength of two officers and two aircraft, for the campaign in German New Guinea.

The second operational unit was the famous Half Flight, which went into action in Mesopotamia in April 1915. The first full squadron to become operational was No. 1 Squadron, which formed in Australia in early 1916. It was sent to Egypt where it arrived on 14 April 1916, but was not fully equipped, nor trained and ready for operations until some time in July. The next fully Australian unit was No. 3 Squadron which formed in England and moved to France on 9 September 1917.

Both these units were basically reconnaissance squadrons, equipped with two-seater aircraft such as the BE2c and RE8. However, as mentioned previously, it was still the practice to provide some fighter aircraft for escort duties as part of the strength of each observation squadron. Nos. 1 and 3 Squadrons ARC were no exception to this policy.

No. 1 Squadron was equipped with a flight of Bristol Scouts which were replaced later by Martinsydes. Later again these were replaced by the two-seater Bristol Fighter. By early 1918 the role of the squadron was changing and the number of Bristol Fighters with the squadron had increased to eighteen. No. 3 Squadron was at first provided with protection by RFC units and did not receive any Bristol Fighters of its own until September 1918.

The first of the Australian fighter squadrons was No. 2 Squadron which formed in Egypt in September 1916 but moved at once to England for training. This took almost a year, and the unit did not arrive in France until September 1917. However, it was quickly followed by No. 4 Squadron which had also been training in England and arrived in France in December 1917. No. 2 Squadron was originally equipped with DH5s, later replaced by SE5As. No. 4 Squadron was originally equipped with Sopwith Camels which were replaced by Sopwith Snipes in October 1918.

¹ Military Order 570 of 1912: Section 6 (i).

As the Australian squadrons came under command of the RFC, upon their arrival they were automatically given RFC squadron numbers:

No. 1 Squadron AFC became No. 67 Squadron, RFC
No. 2 Squadron AFC became No. 68 Squadron, RFC
No. 3 Squadron AFC became No. 69 Squadron, RFC
No. 4 Squadron AFC became No. 71 Squadron, RFC

As it came to be recognised officially that there was in fact a separate and individual Australian Air Force, the squadrons reverted to their original Australian numbers. As previously noted, Australia was the only Dominion to provide and maintain a separate and individual air force throughout World War One. The other Dominions contributed the personnel for individual squadrons, which then became an integral part of the RFC.

There was great rivalry between the AFC squadrons, particularly the two fighter units, and very soon the aces began to appear. Altogether a total of 276 German aircraft were destroyed by these four squadrons, and over fifty of the pilots were to earn the accolade of 'ace'.

In addition to the four operational squadrons Australia also maintained a training wing in England consisting of four training squadrons to keep up the flow of needed replacements for the units in the field.

Initially, the first two squadrons, Nos. 1 and 3, were formed as complete units with a full complement of personnel, before receiving any equipment or conducting any training of personnel, except that pilots were given a very elementary course of instruction, little better than a rudimentary aircraft familiarisation course. Further training was undertaken in England by arrangement with the Royal Flying Corps (RFC).

Officers selected for training in England as pilots, were sent to either No. 1 School of Military Aeronautics, Reading, or to No. 2 School of Military Aeronautics, Oxford, for a course of six weeks duration.

Air Mechanics were trained at a school of technical training at Halton camp, divided into eight sections, depending on the grouping of the technical trades, courses varied in length from five to eight weeks.

It can rightly be claimed that Australia was the first and only Dominion to have established its own flying corps in World War One. In addition, many hundreds of Australians volunteered as individuals for service with the Royal Flying Corps and the Royal Naval Air Service.

The reason for this exodus was that there were many more volunteers wanting to fly than the infant Australian Flying Corps could accept, particularly in the early days. On the other hand, the British were always calling for volunteers to train as pilots, and many hundreds of Australians responded, and were accepted. They entered the RFC, or the RNAS, and remained with those services throughout the war.

Early in the war it was not clear whether Australia would send its own flying units, or like New Zealand, South Africa and Canada, would allow volunteers to make their own way to England, where they could enlist directly into the RFC. The flow of men from the dominions was remarkably high, and included many who later made their names as leading aces. The next stage for the RFC was to seek permission for direct recruitment in Australia, but this was rejected out of hand by the Australian Government, although they did agree to a reasonable compromise in July 1916.

Praising Australians already in the British services, in a letter dated 11 February 1916 from the War Office to AIF Headquarters, and quoted in Cutlack's official history of the Australian Flying Corps, which stated (in part):

In view of the exceptionally good work which has been done in the Royal Flying corps by Australian-born officers, and the fact that the Australian temperament is specially suited to the flying services, it has been decided to offer 200 commissions in the Special Reserve of the Royal Flying Corps to officers, non-commissioned officers, and men of the Australian Force.²

The campaign for RFC recruits was widely published throughout the AIF and recruiting went ahead, with the result that of two hundred applicants some one hundred and eighty were commissioned in the RFC.

² F.M. Cutlack, *The Australian Flying Corps*, University of Queensland Press, St Lucia, 1984.

The Australian Half-Flight at Bombay, May 1915

Officers of No. 1 Squadron, Australian Flying Corps, at Mejdal, Palestine (AWM B01475)

Officers of No. 2 Squadron, Australian Flying Corps, after the Battle of Cambrai. (AWM E01436)

Officers of No. 4 Squadron, Australian Flying Corps, near Clameras, France. (AWM E02543)

Chapter Four



Development of the Fighter World War Two

From the end of World War One until the early thirties fighter aircraft design seemed to be frozen round the concept of the single-seater biplane with two guns firing forward through the arc of the propeller. The big change came with the development of the monoplane and the capacity to fit guns in the wings, clear of the propeller entirely.

The rapid development of civil aviation, however, led to considerable technical advances. Already by the early thirties, monoplane design had begun to come into its own, whilst enclosed cockpits and cabins were now almost standard. Aircraft designers were also turning more and more to all-metal construction, which led to stronger and larger aircraft with improved load carrying capacity. Vastly improved engines had also been developed and these, together with the development of retractable undercarriages, improved performance to a marked degree, particularly in regard to speed and altitude. Perhaps one of the greatest advances was in the rapid development of reliable air-to-ground radio links, particularly in the use of voice transmissions.

Gradually these developments came to be adopted in the design of military aircraft. In addition, armament became heavier whilst methods of sighting and ranging became more accurate. However, although the new fighters were now being made with metal frames and wings, many still relied on fabric covering for most of the fuselage. This was considered to make repair of battle-damage easier. More importantly, perhaps, certain combat criteria were agreed by all as necessary in the design of a successful fighter. These included manoeuvrability, speed, ceiling, rate-of-climb, endurance, sturdiness, firepower and crew comfort, and all such criteria were sought after in varying degrees by the aircraft designers.

It was the Spanish Civil War which began in 1936, that gave the necessary impetus to the development of the new generation of fighters. The Great Powers had agreed to a policy of non-intervention, although Italy and Germany very soon began to support Franco. Meanwhile, the Republicans on the other side, were receiving air support almost exclusively from Russian units, manned and commanded by Russians.

Although forbidden under the terms of the Treaty of Versailles to have an air force, Germany had been secretly training military pilots for a number of years. This was done under cover of the German civil airline, Deutsche Lufthansa, together with the establishment of clandestine flying schools in Sweden and, of all places, in Soviet Russia. With the rise to power of Hitler and the Nazi party in 1933, this was brought out into the open with the creation of an Air Ministry and the official announcement of the existence

of a German air force, the Luftwaffe. A rapid expansion program was immediately undertaken to increase the strength of this force to 4000 aircraft by September 1935.

The civil war in Spain was then seized upon by the Germans as a perfect training ground for the newly established Luftwaffe, as well as providing it with a ready-made proving ground for weapons and tactics. Some Junkers bomber-transport together with a small number of Heinkel 51 biplane fighters were flown to Spain with volunteer pilots. This initial effort was quickly expanded by the formation of a tactical air force, known as the Condor Legion. This was a completely self-contained force, consisting of bomber, fighter, ground-attack and reconnaissance squadrons, with its own communications, medical and supply units. It soon developed into a highly mobile force, capable of moving from airfield to airfield, and even had its own anti-aircraft units.

Early operations quickly showed that the Heinkel 51 biplane fighter was inferior not only to the Russian Polikarpov I-16 (known as Rata), but also to the American Curtiss biplane, both types being flown by the Republicans. The Rata was a low-wing monoplane fighter with four machine guns, and was undoubtedly the best and most modern aircraft of the time, with a speed of 280 mph (450 kph) in level flight, and could climb to 16,400 feet (4998 metres) in six minutes. Accordingly, the He51 was restricted as far as possible to close air support until a better fighter, already under development, arrived from Germany. This was to be the Messerschmitt Bf 109, which quickly proved itself to be far superior to everything else in Spain.

The Bf 109 was a single-seater, low-wing monoplane, armed with three 7.9 mm machine guns, and it was the forerunner of a long series of fighters from the same stable. It was equipped with a 670 HP Jumo engine which gave it a top speed of just under 300 mph (482 kph) at an altitude of 13,000 feet (3962 metres). It entered service just a few weeks before the British Hawker Hurricane first flew, and only a few months before the Supermarine Spitfire, which became its chief opponent in World War Two. These three high-powered aircraft were all cabin monoplanes, and marked the definite end of the long reign of the open cockpit, biplane fighter.

All were also equipped with radio telephones and for the first time fighter pilots could now receive and transmit in clear speech between themselves and with ground control stations. Previously, control from the ground was limited to morse code transmission and the equipment carried in fighter aircraft was of necessity limited in range. Messages took time to transmit or receive and were a definite distraction to the pilot, so the use of radio was strictly limited in its application. Communication between aircraft in formation was until then limited to rocking of wings or firing of coloured lights. The information or orders which could be passed by this method was obviously limited. Until the introduction of radio telephony, or R/T as it became known, air fighting was an inarticulate affair. In Spain it became articulate for the first time, and this led to closer control from the ground, and far better teamwork in the air. This was almost as big a step forward as the new aircraft themselves.

At the end of the Spanish civil war, the Condor Legion returned to Germany, but the lessons learnt were closely studied. For example, the three light machine guns were proved inadequate for modern combat, compared to the four in the Curtis P.36, or the heavy cannons used by the Italians. Accordingly, the new Messerschmitts were equipped with the Oerlikon 20 mm cannon. Also, the range of the Bf 109 was found to be inadequate, and drop tanks which could be jettisoned before action, were ordered. A good rate of climb, high speed and good manoeuvrability, to get out of trouble, were once more found to be essential, and the higher fire power now available enabled an opponent to be destroyed or put out of action in only a few seconds.

Fortunately for the British, a few far-sighted designers had been keeping up with these developments, and had produced the Hawker Hurricane, which flew for the first time in November 1935, entering service with the RAF a year later, and the Supermarine Spitfire which first flew in March 1936, and entered service in August 1938. As is well-known, these two fighters were highly successful and remained in front-line service, with various improvements in performance, throughout the war, and saw action on many fronts.

Among the first of these was the Spitfire, with four guns in each wing. This development led to a terrific increase in firepower, and subsequently the machine guns were replaced with small cannon. It also became possible to mount rocket propelled missiles under the wings and, in more recent times, sophisticated electronic guided missiles.

The Hurricane was designed in 1935 as a simple but tough aircraft. Structurally, it was in many ways rather old-fashioned even at the time it was designed. It still had fabric covering on the fuselage and a fixed-pitch wooden airscrew. On the other hand, it had a revolutionary armament consisting of eight .303 inch Browning machine guns located, with their supply of ammunition, within the monoplane wing. It was powered by the 1030 horsepower Rolls Royce Merlin liquid-cooled engine which gave it a speed of just on 310 mph (499 kmh) and ceiling of 34,000 feet (10,363 metres) although lack of gun heating restricted its maximum operational height to 15,000 feet (4572 metres).

It was easy to fly, easy to aim and fairly easy to repair, and a total of 14,533 were built. In the Battle of Britain, Hurricanes are claimed to have shot down more enemy aircraft than all other aircraft and anti-aircraft guns combined. Many of their victories were against the Me110 twin engined escort fighters, considered in many ways to be much more modern than the Hurricane.

The Spitfire, on the other hand, was one of the first all-metal stressed-skin aircraft built in Britain. As a result it was more difficult to build or repair than the Hurricane, but it had a significant edge in performance. It was powered by a 1478 horsepower Rolls-Royce Merlin v-12 liquid-cooled engine, and could reach 369 mph (593 kmh) at heights of between 13,000 and 20,000 feet (3960 and 6090 metres) with a ceiling of 37,000 feet (11,280 metres). It had a large elliptical shaped wing which gave it the ability to turn very tightly. This latter characteristic, however, was the only major advantage it had against the almost comparable Me109E. One particular advantage the latter had over the Spitfire was the special design feature of the engine which allowed it to run under negative gravity, such as in a dive or when inverted.

The Bf 109 which, of course, was the real fighter opponent to the Spitfire, had a 1270 horsepower Daimler-Benz v-12 liquid-cooled engine which gave it a speed of 373 mph at 20,000 and a ceiling of 36,000 feet. However, it obtained its speed and superb handling capability at the expense of firepower. Initially it was only armed with one 15 mm Mauser cannon and two 7.92 mm machine guns. It was later equipped with both more and larger guns, but this in turn greatly reduced its manoeuvrability.

The single-seater, single-engined fighter remained the major design criteria for most air forces, including in particular the Americans and the Japanese. On the outbreak of the Pacific War, the leading American fighter was the Curtiss P-40, while the Japanese had developed the well-known Zero. The P-40 was powered with an Allison v-12 liquid-cooled engine of 1090 horsepower, giving it a speed of 340 mph (547 kmh). A large number of them had been ordered by France, and this order was taken over by the British.

The RAF named the type the Tomahawk, but despite further developments, it was never equal in speed, firepower, climb or manoeuvrability to the Zero or the best Allied or German fighters, and was eventually relegated to ground-attack duties. It was ideal for this purpose, being strong and rugged and armed with four rifle calibre Browning guns in the wings, or alternatively with two rifle calibre Browning guns in the wings and two heavy .5 inch Browning guns mounted above the engine firing through the airscrew. Later versions were also capable of carrying up to 1500 pounds (680 kilograms) of bombs.

The standard US Navy fighter was the Grumman F4F Wildcat, and this aircraft saw early action at Coral Sea and Midway in 1942. It was also flown by the US Marines, particularly in the fighting for Guadalcanal. It was powered by a 1200 horsepower Pratt & Whitney Twin Wasp 14-cylinder air-cooled radial engine. This gave it a speed of 331 mph (532 kmh) at 20,000 feet (6096 metres), a ceiling of 37,500 feet (11,277 metres), with a range of 845 miles. Armament was four .5 inch Browning heavy machine guns in the wings, and could carry two 100 pound (45 kilogram) bombs. The American pilots flying the Wildcat soon found it could hold its own against the Zero, provided they did not engage it in a dogfight.

The Zero, on the other hand was a particularly successful aircraft. It was developed during the earlier war with China, from the need to have a fighter which would be able to escort the Japanese bombers to any target in China. The targets in China were well defended by Chinese fighters and even a target such as Shanghai was 1250 miles (2011 kilometres) from the Japanese bases on Formosa. The bombers suffered heavy losses, and unescorted bombing raids were soon completely abandoned until a suitable escort fighter could be found. The answer was the Zero and it had already had over eighteen months combat experience when the Pacific War began.

Despite several drawbacks, the Zero was a superb fighter. It was heavily armed with two 20 mm cannon and two 7.7 mm machine guns, and had a speed of 300 mph (480 kmh). These advantages, when combined with its outstanding agility and rate of climb, made it more than a match for any opposition it was likely to meet. In 1940 it had set world records for combat range over China, on one occasion flying 1000 miles (1610 kilometres) in one round trip. Later versions could operate at up to 1500 miles (2414 kilometres).

For the Americans in the Pacific and Far East the biggest problem was how to combat the Zero. In the first six months or so of the war with Japan it was all-conquering. The original Zero Wing which had operated against the Chinese from Formosa moved to the East Indies in early 1942. From here they moved to Rabaul in New Britain, and then across to Lae on the east coast of New Guinea. From there they began to fly on operations over Port Moresby where by this time the Americans, and the Australians, were operating P40s.

The USAF and RAAF squadrons would climb to meet them as they passed over the 15,000 feet (4570 metres) high Owen Stanley Mountains. The Japanese with the advantages of height, speed and experience would be amongst the defenders before they knew it, and casualties among the Americans and Australians were very heavy initially. It was here that teamwork began to play a very important part in the air fighting, a factor in which the Japanese at first, fortunately, appeared the weaker.

Thus, the Japanese entered the war with an already established and proven long range fighter. This was something the allies sadly lacked, and it was to be several years before the deficiency was made good. On the other hand, the Germans did in fact have a type of long-range escort fighter in the Messerschmitt Bf110. This was a two- or three-

seater twin-engined low-wing monoplane. It was of all-metal construction, fitted with a retractable undercarriage, and powered by two 1270 horsepower Daimler-Benz liquid-cooled inverted V-12 engines. It had a top speed of 349 mph (560 kmh), and a ceiling of 32,000 feet (9753 metres). Its armament was most impressive, being fitted with two 20 mm cannon and four 7.92 mm machine guns in the nose, while the observer operated an additional 7.92 mm machine gun. Although its range was only 680 miles (1094 kilometres), this was at least twice the range of any Allied fighter at the time. However, they proved unwieldy in combat, and were no match for the Hurricane. They were eventually withdrawn from their primary roles and converted to night-fighters for home defence of Germany.

Many early attempts were also made by the British to produce a long-range escort fighter. Generally speaking, these were all designed as two seaters, with an observer/gunner in the rear. He was provided with a moveable machine gun for defence from the rear. The most sophisticated of these was the Boulton Paul Defiant which was actually fitted with a power-operated turret, similar to those fitted to British bombers, and operated by the observer. It was designed to provide 360 degree radius of fire above the aircraft, but no forward-firing guns were fitted.

However, all these various attempts at two-seater fighters and longer range aircraft suffered from the same limitations as did the Me110. They were just not nimble enough to engage the true fighter of the time with any chance of success. Eventually they too were relegated to other duties. In the meantime, bomber losses continued to mount in the daylight raids which were then so current, and as a result long range bombing raids by the British were switched to night operations very early in the war. The Germans very shortly followed suit.

When the Americans entered the war they were originally committed to operating their bombers, both in Europe and the Pacific, in the daylight role. In turn, their losses became so heavy that a solution to the problem of long range fighter escort had to be found, and found quickly.

Weapons are now in use which can be fired at unseen targets up to one hundred miles distant, being entirely aimed and fired by radar, assisted by on-board computers. Thus we have seen the demise of individual dog-fight type engagements of the past, and a much more impersonal, but undoubtedly more deadly, way of air fighting. This has already led to the almost total disappearance of the fighter pilot as we once knew him. There will certainly not be many aces, claiming five or more individual victories. It would appear that with modern weapons and aircraft that the days of the fighter pilots of old are indeed limited. It is time their stories were told.

CHAPTER FIVE



The Aces

Introduction

The accolade of 'Ace' is now generally applied to any airman who has destroyed five (or more) enemy aircraft in air-to-air combat. Although not generally accepted that the accolade should be officially bestowed on a pilot, the term has universally come to apply to any pilot who meets the requirement. It will be of interest to learn who have actually qualified for such recognition, and where and when they served.

The first ace was in fact Eugene Gilbert who scored his first victory on 10 January 1915, but this was gained by fire from his observer. Eventually, as a pilot, he shot down five German aircraft before he was killed in the summer of 1915. However, the title of ace had not then been introduced and, as we have seen, the first pilot to have this accolade bestowed on him was Roland Garros on 15 April 1915.

Although not universally recognised officially, particularly in the British services, where no specific and official records are maintained or published, most of the facts relating to fighter aces can be obtained from official individual and unit combat reports, and in the citations for decorations and awards. There are also a variety of private diaries and books written either officially or by individuals. Much of this material has been published over the past several years, and many official personal records have become available for open access. It is, therefore, possible to arrive at a consensus of the data by cross-reference of the material available.

The data presented in this paper has been carefully checked against a variety of sources and then finally checked against such official records as do exist and are available. These latter checks are very pertinent to personal details, such as date and place of birth, units in which served, and promotions and appointments. The information presented here is therefore considered to be as accurate as can be expected. In this regard, all personnel records for the first AIF, including those of the Australian Flying Corps, are held by the Australian Archives, and those for the RAAF are held by the RAAF Discharged Personnel Records Section, and a good deal of more general and statistical information is held by the RAAF Historical Section. It is wished to record the thanks of the author for the efficient, able and ever tactful and cheerful assistance by the staff of all three groups in attending to his many enquiries. It should not be implied from this, however, that the figures are in any way official, and any errors are entirely the responsibility of the writer.

Having set the background, as it were, let us now look at the actual scores of the leading aces, and see how the Australians fit into the picture.

World War One

The top twenty fighter aces in World War One are set out in Table 5.1 below. There has never been any doubt that Richtofen, with a total of eighty victories, was the top ace of World War One. Next in line came Fonck of France with seventy-five, closely followed by Mannock (Britain) and Bishop (Canada) with scores of seventy-three and seventy-two respectively. Surprisingly, Rickenbacker, the well known and much publicised American ace, was well below these figures with a total of only twenty-six.

NAME	COUNTRY	NUMBER
Richthofen	Germany	80
Fonck	France	75
Mannock	Britain	73
Bishop	Canada	72
Udet	Germany	62
Collishaw	Canada	60
McCudden	Britain	57
Lowenhardt	Germany	56
Beauchamp-Proctor	South Africa	54
MacLaren	Britain	54
Guynemer	France	54
Fullard	Britain	53
Barker	Britain	52
McElroy	Britain	48
Voss	Germany	48
Little	Australia	47
Nungesser	France	45
Rumey	Germany	45
Loerzer	Germany	44
Berthold	Germany	44
Baumer	Germany	43

Table 5.1: The Top Twenty Fighter Aces - World War One (All countries)

By comparison, the top-scoring Australian airman of that period achieved a score of forty-seven. He was captain R.A. Little, DSO & Bar, DSC & Bar, CdeG, who served with the Royal Naval Air Service (RNAS). His score places him in eighth position on the list of British aces, and within the top twenty aces from all countries in World War One.

A complete and detailed list of all Australian aces in World War One, sorted by individual scores, is presented at Table 5.2.

AUSTRALIAN FIGHTER ACES - WORLD WAR ONE (Listed by Scores)

NAME	INIT	RANK	DECORATIONS	AFC UNIT	RFC/RNAS UNIT	SCORE
Little	R.A.	CAPT	CdGDSOBarDSCBar		RNAS,1W,8(N),203	47
Dallas	R.S.	MAJ	DSO,DSC&Bar,CdeG		RNAS,1W,1(N),40	39
Cobby	A.H.	CAPT	DSO,DFC&2Bars	4 AFC		29
King	E.R.	CAPT	DSO,DFC	4 AFC		26
Pentland	A.A.N.	CAPT	MC,DFC		16,19,29,87	23
McCloughry	E.J.K.	CAPT	DSO,DFC	4 AFC		21
Minifie	R.P.	CAPT	DSC&2Bars		RNAS,1W,1(N)	21
Johnston	E.C.	CAPT	DFC		24,88	20
Cowper	A.K.	CAPT	MC&2Bars	2AFC	24	19
Howell	C.E.	CAPT	DSO,MC,DFC		45	19
Holliday	F.P.	MAJ	DSO,MC		48	17
Hepburn	A.	CAPT	DFC		24.40.88	16
Smith	F.R.	CAPT	MC&Bar	2 AFC		16
Phillipps	R.C.	MAJ	MC&Bar	2 AFC		15
Hamersley	H.A.	CAPT	MC		60	13
Stephens	E.J.	CAPT	DFC		41	13
Baker	T.C.R.	CAPT	DFC,MM&Bar	4 AFC		12
Brownell	R.J.	CAPT	MC,MM		45	12
Manuel	R.L.	CAPT	DFC&Bar	2 AFC		12
Richards	C.R.	LIEUT	MC		20	12
Taplin	L.T.E.	LIEUT	DFC	1&4AF		12
Forrest	H.G.	CAPT	DFC,MID	1&2AF		11
Hooper	G.H.	CAPT	DFC		11	11
Hughes	G.F.	CAPT	MC,AFC		62	11
Larkin	H.J.	CAPT	DFC		5,87	11
Smith	R.M.	CAPT	MC&Bar,DFC&2Bars,AFC	1 AFC	67	11
Cole	A.T.	CAPT	MC,DFC	1&2AF		10
Goble	S.J.	MAJ	OBE,DSO,DSC		1W,5,8	10
Shepherd	A.S.	CAPT	MC,DSO		29	10
Coningham	A.	MAJ	DSO,MC		32,92	9
Cummings	E.D.	CAPT	DFC	2 AFC		9
Drinkwater	A.T.	CAPT			57,40	9
Drummond	R.M.	CAPT	OBE,DSO&Bar,MC	1 AFC	40,111	8
Howard	R.W.	LIEUT	MC	2 AFC		8
Alberry	F.	LIEUT	DCM	2 AFC		7
Barkell	T.H.	LIEUT	DFC	2 AFC		7
Davies	E.E.	LIEUT	DFC	2 AFC		7
Jones	G.	CAPT	DFC	4 AFC		7
Kenny	E.P.	LIEUT	DFC	1 AFC		7
McGinness	P.J.	LIEUT	DFC,DCM	1 AFC		7
Palliser	A.J.	CAPT	--	4 AFC		7
Peters	G.C.	LIEUT	--	1 AFC		7
Richardson	L.L.	CAPT	MC		25	7
Thompson	C.R.J.	LIEUT	DFC		19,84	7
Trescowthick	N.C.	CAPT	DFC	4 AFC		7
Blaxland	G.H.	CAPT	--	2 AFC		6
Brown	A.R.	LIEUT	DFC	1 AFC		6
Malley	G.F.	CAPT	MC	4 AFC		6
NAME	INIT	RANK	DECORATIONS	AFC UNIT	RFC/RNAS UNIT	SCORE

McKenzie	R.W.	CAPT	MC	2 AFC		6
Rigby	H.A.	CAPT			1,40	6
Wellwood	J.J.	LIEUT	DFC	2 AFC		6
Clark	A.G.	CAPT	--	2 AFC		5
Cox	G.	LIEUT	--	2 AFC		5
Edwards	H.J.	LIEUT	DFC		32,92	5
Lingham	G.A.	LIEUT	DFC		43	5
Robertson	A.E.	LIEUT	MC	4 AFC		5
Simonson	E.L.	CAPT	--	2 AFC		5

Table 5.2: Australian Fighter Aces - World War Two (Listed By Scores)

Although not making the top twenty, it will be noted that as well as Little, another Australian serving with the RNAS at the time who also achieved a high score was Major R. S. Dallas, DSO, DSC & Bar, CdeG, with a total of thirty-nine. These two scores remain unbeaten to this day by any other Australian.

The top-scoring Australian in World War One, and actually serving with the Australian Flying Corps, and in Australian uniform, was undoubtedly the (then) Captain A.H. Cobby, DSO, DFC&2Bars, with a total of twenty-nine confirmed victories. His record also remains unbeaten by any other Australian, although Group Captain C.R. Caldwell, DSO, DFC&Bar, came close indeed in World War Two with a score of 28.5. Nevertheless, Cobby remains the top scoring airman of any of the Australian services, and his record is even the more remarkable when it is realised it was achieved in only ten months of front-line service.

In summary, this list also confirms the fact that well over half of our World War One aces were serving with the RFC/RNAS, and not with any Australian units. In summary, the figures are as follows:

Squadron	Number of Aces
No. 1 Squadron	8
No. 2 Squadron	16
No. 3 Squadron	0
No. 4 Squadron	9
AFC	33
RFC/RNAS	24
Total:	57

Table 5.3: Australian Aces of World War One

World War Two

The figures for the top scoring twenty fighter aces from all countries in World War Two are set out at Table 5.4, and a comparison of top scorers from the allied countries is presented at Table 5.5.

COUNTRY	NAME	SCORE
Australia	Gp Capt C. R. Caldwell	28.5
Austria	Maj W. Nowotny	258
Belgium	Maj Count Ivan de Bergendal	8
Bulgaria	Lt S. Stoyanov	14
Canada	Flt Lt G. F. Beurling	31.5
Czechoslovakia	2nd Lt R. Rezny	32
Denmark	Gp Capt K. Birksted	10.5
Finland	L E. Junttilainen	94
France	Capitaine Marcel Albert	23
Germany	Maj E. Hartmann	352
Hungary	2nd Lt D. Szentgyorgyi	34
Italy	Magg A. Visconti	26
Japan	W Off H. Nishizawa	103
Netherlands	Capt C. Viotman	4
New Zealand	Wg Cdr C. F. Gray	27.5
Norway	Capt S. Heglund	14.5
Poland	Wg Cdr S. F. Skalski	21
Rumania	Capt C. Cantarnzene	60
South Africa	Sqn Ldr M. T. StJ. Pattle	51
United Kingdom	Gp Capt J. E. Johnson	38
United States	Maj R. I. Bong	40
USSR	Col I. N. Kozhedub	62
Yugoslavia	Lt C. Galic	36

**Table 5.4: The Top Twenty Scoring Aces - World War Two
(All Countries - Alphabetical)**

In general, however, it will be noted from the various tables that the top aces from the major powers in World War One were all fairly well matched, and scores were generally quite high, when compared with the figures for World War Two.

With a few outstanding exceptions, it will be noted that, in general, the overall scores in World War Two are considerably lower than those for World War Two. There are several reasons for this.

To begin with, in World War One the aircraft on both sides were fairly evenly matched. They also operated in similar roles and almost without exception flew in the same limited battle area under the same conditions. This was not so in World War Two, where the battles were fought right across the globe in widely differing conditions.

NAME	COUNTRY	SCORE
Pattle	South Africa	43
Bong	America	40
Johnson	Britain	38
McGuire	America	38
Malan	South Africa	35
Gabreski	America	34.5
Campbell	America	34
Closterman	France	33
Finucane	Ireland	32
Beurling	Canada	31
Braham	Britain	29
Tuck	Britain	29
Duke	Britain	28.5
Caldwell	Australia	28.5
Carey	Britain	28
Lacey	Britain	28
Johnson	America	28
Boyington	America	28
Gray	New Zealand	27.5
Macdonald	America	27
Lock	Britain	26
Foss	America	26
Meyer	America	26

Table 5.5: The Top Twenty Fighter Aces - World War Two (Allies only)

On the Allied side, in particular, it will be noted that the figures for World War Two top scoring aces are just half those obtained in the World War One. The top scorers were Squadron Leader M.T. Pattle, DFC & Bar, a South African serving in the RAF, with a total of forty-one, and Major Richard I. Bong, MH, DSC, SS, DFC, AM, the American ace with a total of forty.

It is interesting to note that the top scoring Australian ace in the World War Two also makes the top twenty top scorers on the Allied side. This is Group Captain C.R. Caldwell, DSO, DFC & Bar, Polish Cross of Valour, whose total score was 28.5.

A complete and detailed list of all Australian aces in World War Two, sorted by individual scores, is presented in Table 5.6. From this it will be noted that the next highest score to that of Caldwell by an Australian in World War Two was well below his total, and in fact is only just over half that figure.

The second Australian top-scorer in World War Two was Flight Lieutenant A.P. Goldsmith, DFC, DFM, MID, with a score of seventeen, while Flight Lieutenant K.W. Truscott, DFC & Bar, MID, was only just behind this with sixteen. However, it will be noted that these scores are well below that achieved by Caldwell, and in fact are only a little over half his score. Compare these figures with Little's forty-seven and Cobby's twenty-nine in the earlier conflict. The difference in figures is even more outstanding when it is considered that the total obtained, for example, by Cobby in World War One were obtained in less than a year; while Caldwell's and the other scores for World War Two were spread over four years and three or four different areas.

AUSTRALIAN FIGHTER ACES - WORLD WAR TWO (Listed by Scores)

NAME	INIT	RANK	DECS	RAFUNIT	AUSTUNIT	THEATRE	SCORE
Caldwell	C.R.	GPCAPT	DSO DFC* PCV	250 112	1W 80W	ME PAC	28.5
Goldsmith	A.P.	FLTLT	DFC DFM MID	234 126	452	EUR MEPAC	17
Clisby #	L.R.	FLGOFF	DFC	1		EUR	16
Cullen #	R.N.	FLTLT	DFC	80 267		ME	16
Truscott	K.W.	SQNLDR	DFC* MID		452 76	EUR PAC	16
Hughes #	P.C.	FLTLT	DFC	164 234 247		EUR	15
Waddy	J.L.	SQNLDR	DFC MID AM	250 4 SAAF	80	ME PAC	15
Scherf	C.C.	SQNLDR	DSO DFC*	418		EUR	14.5
Shipard	M.C.	FLTLT	DFC*	68 89		EUR ME	14
Armstrong	H.T.	SQNLDR	DFC*	129 611 72	452	EUR PAC	12
Barr	A.W.	SQNLDR	MC DFC*	23	3 71W	EUR	12
Bretherton	B.A.	FLGOFF.	DFC MID	73 255 267		ME	12
Gaze #	F.A.O.	SQNLDR	DFC*	41 44 64 610 616		EUR	12
Turnbull	P. StG B.	SQNLDR	DFC	208	3 75 76	ME	12
Yarra	J.W.	FLTLT	DFM	64 233 185	453	EUR	12
Crombie	A.	FLTLT	DSO DFC	25 176 39		EUR ME PAC	11
Mayers	H.C.	WGCDR	DSO DFC* MID	94 601		EUR ME	11
Whittle #	R.J.	SQNLDR	DFM	250	86	ME PAC	11
Arthur	W.S.	GPCAPT	DSO DFC MID*	--	3 75 76 81 71W	ME PAC	10
Brennan	V.P.	FLTLT	DFC DFM	64 249	452 79	UK ME PAC	10
Coate	E.E.	FLTLT	DFC*	252 227 272		ME	10
Cock #	J.R.	SQNLDR	DFC	87 72	3 453 1W	EUR PAC ME	10
Gibbes	R.H.B.	WGCDR	DSO DFC*	--	3 450 80W	ME	10
Parkinson	C.H.	FLTLT	DFC	19 56 603 229		EUR ME	10
Perrin	J.R.	WGCDR	DFC MID	87 54	3 5 24 76	ME PAC	10
Rawlinson	A.C.	GPCAPT	DFC*	--	3 79 73W	ME	10
Curchin #	J.	FLTLT	DFC	600 609		EUR	9
Kearney	B.J.T.	FLGOFF	DFC	--	30	PAC	9
Jackson	J.F.	SQNLDR	DFC MID	--	23 3 75	ME PAC	8
McDonald	K.N.	FLTLT	DFC CG	--	31	PAC	8
Russell #	I.B.N.	FLGOFF	DFC*	245 607 609		EUR	8
Steege	G.H.	GPCAPT	DSO DFC MID	11 260	450 3 73W	ME	8
Storey	W.J.	FLTLT	DFC	135		FE PAC	8
Wilson	R.K.	SGT	DFM	--	3	ME	8
Bisley	J.H.S.	FLTLT	DFC	126	452	ME	7
Hampshire	K. McD.	GPCAPT	DSO* DFC	456	12 22 23	PAC EUR	7
Leu	R.M.	FLTLT	DFM	112		ME	7
Tweedalee	G.R.	PLTOFF	DFM	43 126 155	--	ME	7
Foskett	R.G.	SQNLDR	OBE DFC MID*	80 94	--	ME	6.5
Bowes	R.H.	FLTLT	DFC	79		UK FE	6
Chisholm	K.B.	FLTLT	MC DFM PGC	--	452	EUR	6
Constantine#	A.N.	WGCDR		141 273 136		EUR FE	6
Cowper	R.B.	SQNLDR	DFC*	108	456	EUR ME	6
Fry	C.A.	FLTLT	DFC DFC*	112		ME	6
NAME	INIT	RANK	DECS	RAFUNIT	AUSTUNIT	THEATRE	SCORE

Gordon	R.L.	SQNLDR	DFC*	--	24 31	PAC	6
Mailey	W.H.A.	SGT	DFM	--	3	ME	6
Olive	C.G.C.	WGCDR	DFC	65	456	EUR	6
Rees	S.W.	FLTLT	DFC	600		ME	6
Saunders	J.H.W.	FLTLT	DFC		3	ME	6
Sheen	D.F.B.	WGCDR	DFC*	212 72		EUR	6
Simes	R.H.	SGT	DFM	--	3	ME	6
Thorold-Smith	R.E.	SQNLDR	DFC		452	EUR	6
Atherton	G.C.	WGCDR.	DFC* MID	--	24 75 82 80 78W	ME	5
Bartle	J.P.	SQNLDR	DFC MID	112	450	ME	5
Boyd	J.L.	PLTOFF	DFM	135 242		ME	5
Bungey #	R.W.	WGCDR	DFC	226 145	452	EUR	5
Bunting	B.	WOFF	DFC	93		ME	5
Cameron	A.C.	FLTLT	DFM	--	3	ME	5
Clare	A.W.B.	SQNLDR			453 24 5	PAC	5
Cronin	F.M.	FLGOFF	DFC	81	453	EUR ME	5
Cundy	W.R.	FLTLT	DFM DFC	135 260	452	EUR ME	5
Giddy	P.R.	FLGOFF		--	3	ME	5
Glyde	R.B.	FLGOFF	DFC	87		EUR	5
Goold	W.A.	FLTLT	DFC	607		EUR FE	5
Hammond	R.F.	WOFF	DFM	248		EUR ME	5
Jackson	L.D.	WGCDR	DFC*	--	21 23 75 80 78W	PAC	5
Jeffrey	P.	GPCAPT	DSO DFC MID*	--	3 75 76	ME PAC	5
McBurnie	D.H.	FLTLT	DFC DFM	238	450 451	ME	5
Rankin	R.	SQNLDR	DFC	236 227	30	EUR ME	5
Ratten	J.R.	WGCDR	DFC	72	453	EUR	5
Reid	L.S.	FLTLT	DFC	504 130 185	79	EUR ME PAC	5
Smith	D.H.	WGCDR	DFC SMV	126 41	453	ME EUR	5
Spurgin	A.L.M.	FLTLT	DFC	68 87		EUR ME	5
Bell	M.H.	PLTOFF	DFC	19		EUR	5
Boyd	A.H.	SQNLDR			3 75 84 76	ME PAC	5
Burney	H.G.	FLGOFF		112		ME	5
Curtis	V.F.	FLGOFF			3	ME	5
Hillary #	R.H.	FLTLT		603		EUR	5
McIntosh	L.	FLTLT		122 111		EUR ME	5
Nitschke	R.H.	PLTOFF		250		ME	5

Served with Royal Air Force

* Denotes a Bar to Decoration

Table 5.6: Australian Fighter Aces - World War Two (Listed By Scores)

These comparisons are not meant to detract from the performance of any pilot, nor do they in any way suggest that one was better than the other. The figures are merely used to emphasise the difference between the conditions in the two conflicts. In fact they can be used as a very strong argument in support of the RAF and RAAF policy of not officially adopting the ace system, and of not giving publicity to any pilot or his score. Whilst on this subject, however, it is also of interest to note that the number of Australian airmen who can be defined as aces in World War One totals fifty-seven, whilst the

number for the World War Two stands at eighty, a comparatively low figure, considering the huge increase in numbers of pilots and units participating on both sides.

In further support of the danger of trying to draw any specific conclusions by comparing scores, it is worth while to look at the two top scoring Austro-German aces in World War Two, as set out in Table 7. One of them exceeded a score of three hundred, and the other two hundred, by wide margins. In actual fact there were eight Austro-German pilots who individually shot down more than a hundred of the enemy. For the record, these were:

NAME	SCORE
Hartmann	352
Movoton	258
Barkhorn	301
Phillip	213
Rall	275
Holders	115
Kittell	267
Galland	103

Table 5.7: Austro-German pilots with more than one hundred victories

Most of these victories were achieved on their Eastern (or Russian) front, and were obtained by experienced pilots with vastly superior machines. Given the same conditions as the Germans experienced, there is no doubt that many Allied pilots might have been equally successful.

It may be of further interest to note that although the number of Australian airmen who can be defined as aces in World War One totalled fifty-seven, only thirty-three of these, or a little over half, were actually members of the Australian Flying Corps and wearing Australian uniform. The rest were all serving with the RFC/RAF or RNAS. The reason for this was simple. There were many more volunteers wanting to fly than the infant Australian Flying Corps could accept, particularly in the early days. On the other hand, the British were always calling for volunteers to train as pilots.

Many Australians, both within and without the AIF, responded and were accepted. They entered the RFC, or the RNAS, and remained with these services throughout the war. Whereas the number of Australian aces in World War Two stands at seventy-three, and all but seven of them were serving members of the RAAF and wore Australian uniform. The comparison is even more striking when it is realised that the total number of pilots in the Australian Flying Corps could be counted in hundreds against the thousands in the RAAF in World War Two.

In World War One Australia only had four squadrons on active service. One of these was confined to a small area of the Middle East, and was only active for about two years. The other three squadrons were always together in the same part of France, and were operational for less than a year. Only one of these units was a true fighter squadron, the role of the others was primarily that of reconnaissance. The number of pilots could be measured in hundreds, but the fighting was concentrated and their scores were high. The aces in World War One achieved all but six of their victories in France, with the remaining six being gained in Palestine.

In World War Two our airmen served in all parts of the world, and they were numbered in thousands. The vast majority of them served in RAF squadrons, under the Empire Air Training Scheme, in every theatre of war from the United Kingdom to Burma and the Far East. Our purely RAAF squadrons were also dispersed between Europe, the Middle East, the Far East, and the Pacific. The roles and activities of our airmen were as diverse as the areas and the squadrons in which they served. There was great mobility of men and units across the globe, and our airmen were active in one way or another throughout full six years of war.

As previously noted, the scores by the top-scoring aces of World War One were almost double the scores in World War Two, and some reasons have been given. However, there are other factors to be considered. For example, many excellent and skilful pilots were never able to become aces because of lack of opportunity. Also, a great number of them were killed or injured before they obtained the required number of victories. Others served in quiet areas. To judge a fighter pilot entirely by the number of victories is unjust, and this is the prime reason why the RAAF has never officially recognised the concept of an ace. To compare the scores from the two world wars would be equally unfair unless one takes into account the vastly different circumstances.

As a matter of particular interest to Australia, the top-scoring Japanese fighter pilot was Sub-officer Hiroyoshi Nishizawa, with a total of one hundred and three to his credit. The next top-scoring Japanese was Lieutenant Saburu Sakai with a mere sixty-four. The Russians even claim to have a top woman ace in the person of Lieutenant Lila Litvak with a score of thirteen, all won on the German Eastern front. To complete the picture, the top Russian ace appears to have been Maj Gen Ivan Nikitaevich Kozhedub with a total of sixty-two.

Australians in the RAF —World War Two

Following the formation of the RAAF in 1921, a Flying Training School was established for the training of pilots. It had been agreed that officer training would be carried out at the Royal Military College, Duntroon, and then selected officers would be trained at Point Cook as pilots to serve a four year period in the RAAF on a short term commission - after which they would revert to the Army. However, at the very outset it was obvious that for a flying training school to be viable, or at the least economical, it needed a certain minimum number of students. The figure was variously estimated from between twenty and thirty and even with the later decision to train its own officers, rather than depend on the army, and added to the increased need for pilots as the service grew, there would be little hope of absorbing this number yearly into the RAAF.

An agreement was soon reached with the Royal Air Force that they would take any graduates who could not be absorbed by the RAAF on a short service basis. It should be recalled that both the RAAF and the RAF had a much greater need for junior pilots than could be absorbed into their higher ranks, and both had introduced a short service commission (SSC) scheme to overcome this problem.

Accordingly, at the Imperial Conference of 1923 the UK proposed offering four-year short term commissions in the RAF to RAAF graduates surplus to RAAF requirements. By this method it was reasoned a reserve of trained aircrew would also be built up within both the RAF and the RAAF to reinforce squadrons in an emergency, and the RAAF would benefit when the SSC officers returned after being trained to operational level at RAF expense.

The scheme was accepted by the Australian Government and began in 1926 when the first Point Cook graduates took up their commissions. This continued with the

majority of Point Cook graduates being accepted by the RAF, and only very few taken by RAAF until 1937. At that time the RAAF had begun its own expansion, and only a minimum number was declared surplus for the RAF, with the majority being absorbed into the RAAF.

It should be explained that the course was a twelve month one, with entries every six months so that there was always a senior course and a junior course, graduating in turn in July and December. By this time the course strengths had increased to about forty per course, and cadets on entry signed a declaration on enlistment that they would serve either in the RAF or RAAF. It should also be noted that quite a number of the Australians accepted for short service commissions, actually received permanent commissions in the RAF.

To demonstrate the great change in the distribution of graduates at the change over in 1937, of a course that graduated in June with a strength of forty, thirty-six went to the RAF, and only four remained in Australia. At the December graduation, from a course of about the same number, only four went to the RAF and the remainder stayed in Australia.

As a result of this scheme which ran for just on sixteen years, it can be seen that a very large number of Australians became members of the RAF, and many of these were offered permanent commissions, which explains to some extent the large number of Australians in the RAF, many having reached higher ranks by the time World War Two began.

The scheme was officially suspended in Australia in July 1938, but short service commissions in the RAF continued to be advertised in the Australian press, and intakes continued until mid-1939. Those accepted under this modified scheme were selected by a board of RAAF officers, but were not given any initial flying training at Point Cook, and at the outbreak of war in 1939, several who had been accepted did not have any flying training at all.

Also to be considered were the large number of Australians still serving on short service commissions, going back to the graduating classes from Point Cook, up to and including those accepted by the RAF between June 1935 and 1939, amounting to a figure of about two hundred and fifty.

The Battle of Britain

The Battle of Britain officially took place between 2 am 10 July 1940 and 2 am 31 October 1940. The issue of a silver-gilt rose emblem denoting a clasp to the 1939-45 Star was made to flying personnel who flew in fighter aircraft during this period but was also confined to service with certain stipulated squadrons.

There appears to be a unanimous assessment from all authorities that there were only twenty-one Australians who took part in the battle, and of these fourteen were killed. Seven of the Australians achieved ace status during the battle, and all were serving in the RAF. Of these, Flight Lieutenant P.C. Hughes, with a score of fifteen, was the third highest scorer in the battle, shared with four other pilots (not Australians) with the same total. He was killed on 7 September 1940.

Korea

By way of yet further comparison with the scores in the two world wars, it is of particular interest to note the extremely low scores which occurred during the Korean war. This was the first time that jet was matched against jet, and the initial advantage was definitely with the Chinese.

Initially the United Nations fighter units were equipped with World War Two piston engined aircraft. Early in the conflict they came up against Chinese operated Mig jet fighters, and despite the skill and experience on the United Nations' side, they were outmatched initially, until re-equipped with jet aircraft. It is recorded that the first jet versus jet combat in the world took place in Korea on 8 November 1950. On that date an F-80C flown by Lieutenant Russell J. Brown (USAF) shot down a Mig 15.

The very first jet ace in history was Lieutenant Colonel James Jabara flying an F-86 (Sabre) who shot down his first Mig-15 on 3 April 1951 and became an ace on 20 May 1951 after shooting down two Mig-15s on the same day. The top-scoring ace was Captain J.C. McConnell, with a score of sixteen Migs, who entered the fight much later, and did not shoot down his first Mig until 14 January 1953, and his fifth a month later.

There were no Australian aces in the Korean War, and in fact there were only thirty-nine on the entire United Nations' side. They were all Americans, and all but one of them achieved their scores while flying F-86 Sabres. A list of the top twelve with individual scores is set out below:

Name	Score
McConnell, Capt Joseph C.	16
Jabara, Lt. Col. James	15
Fernandez, Capt Manuel J.	14.5
Davis, Lt. Col. George A.	14
Baker, Col. Royal N.	13
Blesse, Maj Frederick C.	10
Fischer, Capt. Harold E.	10
Johnson, Col. James K.	10
Garrison, Lt. Col. Vermont	10
Moore, Maj Lonnie R.	10
Parr, Capt. Ralph S.	10
Low, Lt James F.	9

Table 5.8: Top twelve Allied aces of the Korean War

The RAAF was represented in the Korean conflict right from the beginning, as the Australian government made No. 77 Squadron available a few days after hostilities began. This unit had been part of the RAAF element of the British Commonwealth Occupation Force in Japan, and was about to return to Australia. Although there were no Australian aces in Korea, the unit claimed six kills, including three while flying the piston-engined Mustangs with which the unit was originally equipped. These were later replaced by Meteors. The total score for the squadron as a whole consisted of three Mig 15s in the air, with three other aircraft destroyed on the ground. No pilot destroyed more than one of the enemy.

Vietnam

It is difficult to obtain any really accurate figures for the Vietnam war, but there does appear to be only five allied airmen who reached ace status. This distinction seems to have been shared between two American two-man crews, and one lone Weapons-Systems Officer (WSO). They were Captain R.S. Ritchie (pilot) and Captain C.B. DeBellevue (WSO) of the USAF, flying together in an F-4, and Lieutenant R. Cunningham (pilot) and Lieutenant W. Driscoll (WSO) of the USN, also flying as the

crew of an F-4. The fifth member of this select group was Captain J.S. Feinstein of the USAF, flying as a WSO also in an F-4. Captains Ritchie and DeBellevue were credited with destroying five and six MiG's respectively, while Lieutenants Cunningham and Driscoll and Captain Feinstein each obtained a score of five.

It is interesting to note, by way of contrast, that there were at least fifteen North Vietnamese pilots who are believed to have qualified as aces, at least eleven of whom scored six or more victories, with thirteen being claimed as the top score. In general, most of these victories were obtained while flying MiG 17s and MiG 21s.

The RAAF was initially represented in this conflict by six RAAF Caribou transport aircraft. These arrived in Vietnam on 8 August 1964, and their mission was to help in providing airlift support for Vietnamese troops. This unit, initially known as RAAF Transport Flight Vietnam was expanded in June 1966 to become No. 35 Squadron RAAF. A few days later, this unit was joined by No. 9 Squadron RAAF, equipped with Iroquois helicopters, in direct support of the expanded role of the Australian army in Vietnam. The presence of the RAAF in Vietnam was further increased in April 1967 with the arrival of No. 2 Squadron RAAF, consisting of eight Canberra jet bombers, to provide ground support for the Australian and Allied forces.

No fighter squadrons were deployed to Vietnam, although the RAAF was directly involved in that conflict for seven and a half years, from August 1964 until February 1972, and just on 4500 members served there during that period. A few RAAF officers did serve on exchange duties with USAF tactical and fighter units, but mainly as Forward Air Controllers, or Air Liaison officers. These were in fact, mainly fighter pilots, but again, as in Korea, there were no aces.

It has already been noted that in World War One a total of fifty-seven Australians qualified for the accolade of 'ace', and most of these only served for less than twelve months on active service. In the World War Two we only had a total of eighty aces, despite the far greater numbers and the much longer period on active service. This only serves to show that it had become much harder to qualify for the necessary five aircraft destroyed. The overall lower scores, however, not only reflect this fact, but make the feats even more noteworthy. In Korea, of course, there were even lower scores although the conflict lasted for three years, and the lack of large numbers became even more apparent in the Vietnamese conflict.

Conclusion

Whatever their score, and whatever their country, there is one thing which is certain. Wherever they fought, and whoever they were, there was no way of knowing if they would ever be aces. They were as different as they were individuals. Perhaps the qualities of a fighter ace are best described by Stanford Tuck, himself one of the highest scoring British aces of the last war. In a foreword to a book on fighter aces, he writes:

The term fighter ace always seemed to me to conjure up the mental picture of some gay, abandoned, almost irresponsible, young pilot leaping into his aircraft, and tearing off into the sky to chalk up victories like knocking off glass bottles in the circus rifle-range. Nothing could be further from the truth. Any fighter pilot, after his first combat is very well aware that air fighting on the scale of the last war was a cold, calculating, cat and mouse type of combat, which required great

preparation, lightning reactions, first-class team work and above all, cool decisive leadership.¹

¹ Shores, Christopher, and Williams, Clive, *Aces High, A Tribute to the Most Notable Fighter Pilots of the British and Commonwealth Forces in WWII*, Grub Street, London, 1994, p. 4.

FOUR OF A KIND ~ ACES HIGH

THE TOP FOUR AUSTRALIAN ACES

CAPTAIN R.A. LITTLE

MAJOR R.S. DALLAS

CAPTAIN A.H. COBBY

GROUP CAPTAIN C.R. CALDWELL

CHAPTER SIX



FOUR OF A KIND ~ (ACES HIGH)

Introduction

Our poker hand, 'four-of-a-kind - aces up' displays the four top-scoring Australian aces from both world wars. They are:

Captain R.A. Little of the Royal Naval Air Service (RNAS), with a total score of forty-seven, is undoubtedly the top scoring Australian ace for all time, and all his victories were obtained in World War One.

Major R.S. Dallas, who was also a member of the RNAS, can well claim the next highest score by an Australian, with a total of thirty-nine, also all gained in World War One.

Captain A.H. Cobby, with a total of twenty-nine, has the third highest score by an Australian and again all gained in World War One. However, he has the distinction of being the highest scorer in Australian uniform, as a member of the Australian Flying Corps.

Group Captain C.R. Caldwell, with a total of 28.5 was the top scoring Australian in World War Two and, as a member of the RAAF, is recorded as the Australian with the fourth highest score ever, and the second highest wearing an Australian uniform.

This completes our 'four-of-a kind', and it is with the story of Little that we begin the personal biographies of our four leading aces.

CAPTAIN ROBERT ALEXANDER LITTLE

DSO and Bar, DSC and Bar, Croix de Guerre, MID

Captain Robert Alexander Little, DSO and Bar, DSC and Bar, Croix de Guerre, MID, of the Royal Naval Air Service, was the top-scoring Australian airman for all time with a score of forty-seven, all gained in World War One. His score also placed him in eighth position on the list of British aces, and within the top twenty aces from all countries, in World War One. His score remains unbeaten to this day by any other Australian.

He was born in the Melbourne suburb of Hawthorn on 19 July 1895. His father, James Little, was born in Ontario, Canada, of Scottish descent, but had migrated to Victoria, where he met his Melbourne-born wife, Susan, and they were married in Melbourne in 1892. James Little was an importer of medical and surgical equipment who ran his own business from Collins Street Melbourne. Robert Little was educated at Scotch College, Melbourne, where he won a medal for swimming. After leaving school he was employed by his father in the family business, and when World War One was declared, he was living in the family home in Punt Road, Windsor.

Like many Australians of the day, he had developed a keen interest in aviation. Several early pilots from overseas were barnstorming their way round Victoria, and a Victorian sheep farmer, named Duigan, had built the first successful aircraft in Australia, while a Sydney dentist, William Hart, had become the first Australian to hold a pilot's licence. More to the point, as far as Little was concerned, the newly created Australian Flying Corps had just started flying in Victoria at Point Cook. Little decided he would go to war as a pilot.

So did hundreds of others when the first military flying training course was announced in August. The new flying corps was swamped with applications, but there were only four vacancies, and they went to serving army officers. With no military experience, Little realised it would be years before he could be trained in Australia, and decided to go to England at his own expense. He sailed on 27 July 1915, just a few days after his twentieth birthday, and on arrival in England found that his best chance of

acceptance as a military pilot was to first obtain a civilian licence. He enrolled in the Royal Aero Club's flying school at Hendon as a student pilot, at a cost of £100, and gained his basic pilot's licence on 27 October 1915. It worked like a charm.

He immediately applied to join the Royal Naval Air Service, and within three months was commissioned as a probationary Flight Sub-Lieutenant in the RNAS. On 25 January 1916 he was posted to the RNAS Flying School at Eastchurch, where his basic civilian flying skills were soon polished up and extended. By May 1916 he was stationed in Dover with the Naval Air Station War Flight, whose purpose was to engage German bombers coming across the North Sea to attack England. However, there was little action, except for the occasional Zeppelin raid on London. In fact no aircraft attacked the capital until a year later.

In the meantime, Little was suffering from continuing air sickness, and often climbed from his aircraft white-faced and retching. It was thought this was caused by the effects of the fumes from castor oil used as a lubricant in the early engines, and which the propeller splashed liberally over the pilot.

On 9 May 1916 he married Miss Vera Gertrude Field, an English girl from Dover, just ahead of a posting to No. 1 Wing, RNAS, at Dunkirk on 30 June. The unit was engaged in bombing attacks on the German submarine bases at Zeebrugge and Bruges, flying single-seat Sopwith Pups, which had been successfully modified for bombing operations.

Captain R.A. Little, DSO and Bar, DSC and Bar, Croix de Guerre and Star – top Australian fighter ace of World War I with his wife Vera. (AWM A05196)

His earlier medical problems cleared up, probably with the change of aircraft, and the operational atmosphere at Dunkirk, after the lack any action at Dover. He was finally in action and enjoying every moment. His fearless determination on the various bombing

missions and his eagerness and devotion to duty soon distinguished him as a valuable war pilot was soon noticed by his superiors, and he rapidly gained a reputation as one of the leading operational pilots in the squadron.

His first successful engagement was on 9 July when he was initially attacked by a Fokker, but was able to quickly turn the tables by shooting down his opponent. He continued to take part in the bombing raids, and fighter patrols, but with no further successes, and in August he went down with pleurisy. However, by October he had recovered and was one of the original group of pilots posted to No. 8 (N) Squadron on its formation, and was assigned to 'B' Flight, commanded by another Australian ace, Flight Lieutenant S.J. Goble (q.v.).

In the early autumn of 1916 the Royal Flying Corps was being hard pressed by the introduction of a new series of enemy fighter aircraft. In October 1916, the German Flying Corps had been re-equipped with the latest Albatros DI and DII aircraft with two forward firing guns, which created havoc among the RFC with their slower single-gun fighters.

The Navy was asked to send fighter units to strengthen the RFC on the western front, and were forming ten special new squadrons for the purpose. Naval Eight was the first to go, with personnel all selected from Dunkirk resources, and Flight Sub-Lieutenant Little was one of the pilots chosen. It was armed with the new Sopwith Pups, the first really effective British fighter and was in the field with the RFC in early October 1916.

Naval Eight, as it became known, was attached to 5th Brigade, Royal Flying Corps, as part of No. 22 Wing, and quickly achieved an extraordinary reputation for fearless fighting and esprit de corps. By 19 October all but three of its aircraft had arrived, and five days later the unit flew its first operation, but much to their disappointment failed to attract the attention of the Germans. Naval Eight went into action on the Western Front on 9 November, and Little had his first victory with the new unit on the 23rd, when he engaged an Aviatik C and shot it down in flames. From then on, he recorded victories with a regularity which soon earned him an enviable reputation. By March 1917 he had claimed four victories and was awarded a DSC, and also about this time, the squadron was withdrawn from the frontline service and went back for a short rest and to re-arm with the new Sopwith Triplanes.

The Sopwith Pup until then had been the RNAS's best fighter, but it had only one gun, with a very low rate of fire, timed with the engine speed. It also had many stoppages, caused by the extreme cold at altitude. The Triplane was a great advance over the Pup, and achieved immediate success with the RNAS in combat with the Germans and helped the British gain air superiority for the first time since the beginning of the war.

After the conversion to Triplanes, the unit rejoined the RFC at the front in April 1917. It quickly became obvious that the new aircraft were particularly suited to Little's personal style of combat tactics. Only considered an 'average' pilot, his successes were due to his superb marksmanship and he had realised very early that in a dogfight, a pilot only got one chance to fire a telling burst at the enemy.

Many lost that chance by firing from too far away or without taking accurate aim. They simply fired long bursts, spraying them around, hoping that one or two bullets might hit the pilot or some vital part of the engine or fuel tank. The successful pilots all came in close and concentrated on putting a concentration of destructive fire into the cockpit and engine area. They made this first, and usually only, burst count.

It was frequently said of Little that he was not so much a leader as a brilliant lone hand, but all commented on the fact that there were few better shots. Once Little came

within range of the enemy, he did not give up until either the enemy was shot down, or his own engine failed, or he ran out of ammunition. It was said of him that he had the fighting characteristics of a bulldog, and he never let go. For as long as petrol and ammunition held out, Little held on until the enemy machine either broke up or burst into flames.

Little became known to his squadron comrades by the nickname of 'Rikki', after the mongoose called 'Rikki-tikki-tavi' which outstruck the cobra in Rudyard Kipling's tale.

Following his return to the front in April, Little had already added six to his score during the month when on the 30th, together with three other pilots, they dived on twelve Albatros D II's which were attacking two RE 8s, and they shot down five of them. He personally accounted for two, bringing his own score to twelve, and in May recorded another eight victories. This was followed in June by the destruction of a further four and the award of a Bar to his DSC.

Then in July he shot down the extraordinary total of fourteen enemy aircraft and the fourth of these victories, on the 10th, was his last victory with the Triplane. He then flew Camels for the rest of the month, for a further ten victories. At the end of the month his total score stood at thirty-eight, with twenty-four of them gained while flying Triplanes. He was posted to England for a rest, and did not see any further action until March 1918.

He was awarded a Croix de Guerre on 11 July, and was one of the first three British airmen, including Dallas, to receive the award. On 11 August he received the Distinguished Service Order, the citation for which referred to his gallantry and skill in combat and the numerous aircraft he had destroyed in May and June of that year. When the award was gazetted, Little was back in England. As he was one of the few who had survived a year at the front and had become the Navy's leading ace, the Admiralty decided that he needed a rest from combat, and at the same time could pass on some of his expertise to those being trained at home. In September a Bar to the DSO was gazetted and was awarded for a series of actions during his last month in France. It read:

For exceptional gallantry and skill in air fighting. On July 16, 1917 he observed two Aviatiks flying low over the lines. He dived on the nearest one, firing a very long burst at very close range. The enemy machine dived straight away, and Flight Lieutenant Little followed him closely down to 500 feet, the enemy machine falling out of control.

On July 20, 1917, he attacked a DFW. After a short fight the enemy machine was seen to dive vertically, its tail crumpled up and it was completely wrecked.

On July 27, 1917, he attacked a BFW Aviatik and brought it down completely out of control.

On July 27, 1917, in company with another pilot, he attacked an Aviatik. After each had fired about twenty rounds, the enemy began to spin downwards. Flight Lieutenant Little got close to it and observed both occupants lying back in the cockpit as if dead. The machine fell behind enemy lines and was wrecked. Flight Lieutenant Little has shown remarkable courage and boldness in attacking enemy machines.

Little remained in England during the winter and in October he was attached to the Dover station, where he was able to spend some time with his wife and infant son, living in the nearby town. The son, christened Robert James Alexander, had been born earlier in the year. A Mention in Despatches was gazetted on 11 December, but Little could no longer remain inactive and he volunteered to return to the front.

He elected to join No. 3 Naval Squadron as there had been a change in command of Naval Eight, and in March 1918 he joined No. 3 (N) squadron as a flight commander. Naval Three was commanded by Lieutenant Colonel Reginald Collishaw, a Canadian, who later became the top scoring ace in the RNAS with a final score equal to Little of forty-seven, but was already at this time credited with twenty-seven victories. He remained in the RAF after the war, and retired as Air Vice-Marshal Reginald Collishaw, CB, DSO, OBE, DFC.

In later years Collishaw wrote an appreciation of Little in which he described him as 'an outstanding character, bold, aggressive and courageous, yet he was gentle and kindly. A resolute and brave man.'

On 1 April 1918, the Royal Flying Corps and the Royal Naval Air Service were amalgamated into a single service to become the Royal Air Force, and Little now became Captain Little, RAF. The Navy squadrons were all renumbered by adding the prefix 200 in front of their existing numbers, and No. 3 (N) Squadron thus became No. 203 Squadron, RAF.

Flying Camels once more, he shot down a Fokker Triplane on 1 April, and claimed eight more victories during the next two months, a run which ended on 22 May with the destruction of two two-seater Albatros Cs, and by March the following year, had claimed four more victories.

As the Allies once again began to regain control of the air, enemy aircraft were now becoming hard to find. However, a few weeks earlier the Germans had started some new tactics and their large twin-engined Gotha bombers had begun to bomb areas behind the Allied lines at night. Collishaw and Little had decided to try to bring one of the Gothas down with some new tactics of their own. Their Camels were not equipped for night flying and lacked any cockpit lighting or blind flying instruments, so that flying at night was still a rather risky business.

However, they had both been airborne on several moonlit nights, but without sighting any of the new enemy machines. Little then decided that when the next full moon occurred, he would again fly by night and resume his search for a Gotha.

On the night of the 27 May, Gothas were reported to be bombing St Omer, a nearby town. Collishaw was on leave, and Little was in temporary command of the squadron. There was a full moon and as soon as the report came through, Little ordered his Camel prepared for action. At 9.00 pm he took off alone without lights but, as confirmed later, it was still light, and arrangements had been made in advance for a flare path to be lit on his return as soon as his engine was heard.

He managed to intercept the Gotha and was closing in when his aircraft was illuminated in a searchlight beam. He was hit by a single bullet, either from one of the gunners in the bomber, or from the ground, which passed through both thighs, causing him to crash-land in a field, where he bled to death.

The squadron pilots waited for his return and on the airfield his ground crew stood, ears tuned for the first sound of the lone Camel. It never returned, and when his petrol endurance was known to have expired, Little was posted as 'Missing'. The next morning his aircraft was found by a gendarme in a field, and a message was received from the army for the squadron to send someone to identify the body.

On his return the next day Collishaw carried out a thorough investigation, but nothing was learnt other than Little had crashed after he had received a fatal wound in the groin. It was never established whether he had been killed by a bullet from the ground or from the Gotha. In the final analysis, as suggested by Collishaw, 'Little fell to a bullet fired by an unknown assailant'. He was twenty-two and was buried in the St. Evan's Cemetery. Apart from the fatal wound in the thigh, Little had suffered a fractured skull and ankle in the resulting crash-landing.

His final score was forty-seven destroyed, plus many damaged or driven down, making him the most successful Australian fighter pilot of the war.

An obituary was published in *The Times* on 24 July 1918, and it was revealed that Captain Robert Little held the record for the late RNAS for its enemy destroyed. Little's wish was that, should death befall him, his wife and son would emigrate to Victoria and that his son be educated at Scotch College. His widow carried out his wish and migrated with their son and made Victoria their permanent home until her death at Elsternwick in August 1977.

As it transpired, it was not practical to send their son to Scotch College, and he attended Wesley College which was located nearer their family home. Captain Little's son became an electronic engineer, and for twenty years was on the staff at the University of Melbourne. He died at Elwood, Victoria, in August 1976.

When the new Australian Defence Force Academy (ADFA) was established, the names of distinguished servicemen and servicewomen were honoured by being selected as the names of the ADFA cadet divisional accommodation blocks. As stated officially, cadets: 'will receive inspiration during their training from the legacy of service provided by those after whom the buildings are named'. One of the blocks now bears the name of Flight Commander R.A. Little DSO and Bar, DSC and Bar, and a short account of his life and service is inscribed on a brass plaque displayed in a prominent place in the block.

The two aircraft allotted to Little and most frequently flown by him in France were Sopwith Pup No. N5182 and Sopwith Triplane N5493. The Pup was found in France in 1960 in very poor condition and over the next sixteen years was privately restored to perfect flying condition and then presented to the RAF Museum at Hendon for permanent display. On 23 October 1976 the RAF celebrated the Diamond Jubilee of No. 8 Squadron RNAS/208 Squadron RAF with a parade and fly-past and other activities at RAF Station Honington. The restored Sopwith Pup No. N5182 led the flypast.

NOTE

Little's log books and medals are held at the Australian War Memorial, but are not on display.

The propeller from his Triplane has been on display at the Australian War Memorial, but was recently withdrawn on a temporary basis. His brother officers had mounted a clock in it as a tribute and presented it to his widow.

There is a painting at the Australian War Memorial which depicts Little flying his Triplane in a lone attack against eleven enemy machines.

Captain R.A. Little's decorations. DSO and Bar; DSC and Bar; French Croix de Guerre and Star. At the bottom is his Scotch College swimming medal. (AWM A05219)

MAJOR RODERIC STANLEY DALLAS

DSO, DSC&Bar, CdeG,

Major Roderic Stanley Dallas, DSO, DSC&Bar, CdeG, was the second top-scoring Australian in the first world war, and sixteenth on the list of British aces, with a score of thirty-nine.

He was born at Mount Stanley, Queensland, on 30 July 1891. The Mount Stanley station property was extremely isolated, involving a long rough ride by horse and buggy from the town of Esk, and trips for supplies were only made at intervals of many months. After the birth of another son in January 1893, the family moved to Tenterfield, in New South Wales, which was his mother's home town.

Five years later they moved to Mount Morgan, where his father became a shift boss at the mine, and where Dallas attended the Mount Morgan state school for the next six years. In 1907, at the age of sixteen, he became an assayer with Mount Morgan Gold Mines, while continuing chemistry studies at the local Technical College. He was extremely popular at school with his fellow students and teachers and had begun to show the qualities for which he was later to be greatly admired. He extended a natural air of good fellowship with a quiet sense of humour, combined with an extremely high intelligence.

He had also become interested in aeronautics, which soon proved to be a turning point in his life, and he began to study all the textbooks he could find on the subject. He also designed and built model aircraft, and he and his brother even built a glider, but it was wrecked in an early flight. He would sit for hours studying the flights of birds. Another factor which increased his interest in flying was the formation of the Mount Morgan Aero Club, and their purchase of an early model biplane, which was soon flying in the local area.

While these interests occupied most of his spare time, the other qualities which began to mould the character and made him so popular everywhere also began to appear. He did not drink or smoke, except very rarely. He was physically large, being 6 foot 4 inches (193 centimetres) in height, 224 pounds (102 kilograms) in weight, and squarely built. He took great pride in his fitness and was a keen rugby union player. In private conversations he spoke quietly and was never heard to swear. He later became known as the 'Gentle Giant'.

By now he had also become a Lieutenant in the local Port Curtis militia, but when war was declared he became more than ever determined to achieve his ambition to fly. He decided to go to England to join the Royal Flying Corps, where he felt his chances of acceptance would be far greater than with the newly-launched Australian Flying Corps. Paying for his own passage, he arrived in London early in 1915 with a letter of introduction to Sir George Reid, the Australian High Commissioner.

He immediately applied to join the RFC but was rejected, despite help from Captain Collins, Secretary to the High Commissioner. However, he was persuaded by an Australian acquaintance to sit for the competitive examination for entrance to the Royal Naval Air Service which he passed with top marks. He was accepted and appointed a Flight Sub-Lieutenant in the RNAS. He commenced training at Hendon in June 1915, completing his course on 5 August.

He was posted to No. 1 Naval Wing at Dunkirk on 3 December 1915, with a total flying time of thirty-one hours, and was soon flying reconnaissance sorties in Nieuport Scouts and Caudron two-seaters. He claimed his first victory on 22 April 1916 when, flying a Nieuport, he destroyed one of an enemy formation attacking Dunkirk. His next victory came on the 20 May when he shot down

Major Stan Dallas, went into action flying defensive patrols from France in the Channel area. His squadron mates were amazed to see his six foot frame fitted into a Baby Nieuport. (AWM A04840)

an Aviatik in flames, and on the 21st was on patrol at 12,000 feet (3650 m) when he sighted a formation of five enemy two-seaters.

Diving on them from directly above, he broke them up into single units which did not quite know which way to turn. He pounced on a straggler, giving it a burst from his wing-mounted gun, and the enemy plane lost a wing, rolled over and crashed into the sea. The remainder then headed off for home, but not before he was able to account for one more of the enemy.

The next day the Germans carried out a series of heavy raids on Dunkirk, dropping three hundred and seventy bombs and killing thirty-two persons, and No. 1 Wing was soon heavily engaged in the defence. Dallas was flying alone when he sighted an enemy formation and immediately went to the attack. He engaged two of the enemy, one after the other, at 7000 feet (2130 metres), but expended all his ammunition without success. He landed at the aerodrome, quickly reloaded and took off again.

He caught up with the enemy formation at 10,000 feet (3050 metres) and diving at the rearmost aircraft, gave it an accurate burst, when it caught fire and dived into the sea. He attacked another, but by this time not only was his ammunition again exhausted, but he had also run out of fuel and had to make a forced landing on the beach. The following day he was out again and, in the company of another aircraft from the unit, engaged a large enemy formation and was able to add one more victory to his score.

By mid-July he was flying a prototype Sopwith Triplane on a trial basis, and although he was in many engagements with the new aircraft, most were inconclusive. However, he did score his first victory with the new aircraft on 1 July, and another on 30 September. His score continued to mount and on 6 September he received a DSC and was appointed a flight commander. The citation stated that:

Flight Sub Lt. R.S. Dallas, in addition to performing consistently good work in reconnaissance and flying patrols since December 1915, has been brought to notice by the Vice Admiral, Dover Patrol, for the specially gallant manner in which he carried out his duties.

By the end of the year he had brought his total score of enemy aircraft destroyed to seven, and except for the Triplane victories, all had been on Nieuport Scouts.

He soon began to earn a reputation for being quite indifferent to making official claims for enemy aircraft destroyed. In fact, several of his victories were reported by British anti-aircraft gunners or other ground observers reporting that there had been a successful engagement by a British aircraft resulting in one of the enemy being shot down. From details of time and place, the pilot might later be identified as Dallas, who had either not reported the event, or had been late filing his combat report.

In the new year No. 1 Wing became No. 1 Squadron, RNAS, and began to re-equip with Sopwith Triplanes, as did many RFC units.

The Sopwith Triplane which, because of its unique staggered wings, was quickly nicknamed the 'Intoxicated Staircase'. It received a mixed reception when it appeared on the Western Front and the RFC units offered to exchange their 'Tripehound', as it became more generally known, for RNAS Spads. The main objection to the Triplane by the RFC pilots was that it was considered structurally weak and that the wings would fold if the plane was put into a steep dive. Nevertheless it could out climb any German fighter on the Western Front at that time.

In the hands of leading naval aces like Dallas and Little, the 'Tripehound' was almost unbeatable, and became the main scourge of the Germans. It quickly became a

favourite with Dallas, and he took the first one delivered to his squadron into action on 5 April and shot down an Albatros, followed by another on the 8th. His first major action with the new aircraft occurred shortly afterwards, when Dallas with another member of the squadron, was on patrol at 16,000 feet (4800 metres) when they sighted an enemy formation of fourteen DFW two-seaters and Albatros single-seat fighters in the distance. The two of them immediately gave battle.

Attacking from opposite sides they repeatedly split the enemy formation with short dives, firing a rapid burst and then regaining height to turn back to launch a fresh attack. The Germans repeatedly closed formation to protect their observation planes from the continuing and determined attacks of Dallas and his partner. The two continued their attacks for the next forty-five minutes, maintaining complete tactical command and completely frustrating the Germans from their task, which appeared to be a special photographic mission of some importance.

The pair forced the formation lower and lower until it was in complete disorder, and broke off the dogfight and retreated back to their own lines. The Germans had lost two Albatros DIIs shot down and another Albatros which broke up in combat. This engagement has been described as one of the great tactical air battles of the entire war, and a superb example of skill, courage and mastery of battle tactics.

Dallas received the French Croix de Guerre, First Class, for this action, and was one of the first three British airmen, including Little, to receive the award.

In April the Germans launched a major offensive on the Western Front, and the British airmen in France were outnumbered and their losses reached calamitous proportions. No. 1 Squadron was moved to the Somme front, together with other RNAS units, to reinforce the RFC. The joint effort by the two services, finally managed to contain the Germans by their superior tactics and skill. During the remainder of the month Dallas claimed eight more victories and was awarded a Bar to his DSC.

On 14 June he was appointed to command the squadron, by which time he had destroyed thirty enemy aircraft. In February 1917 his squadron became the first to be fully equipped with the new Triplane, and he continued to lead the unit until March 1918.

On 16 June he shot down an Aviatik two-seater and six days later received a Bar to his DSC for an action in which he shot down three more aircraft. In the morning he destroyed an AEG two-seater that had been protected by six scouts and in the afternoon another AEG and a Halberstadt.

On 16 August he shot down an Albatros DV during an attack on an enemy aerodrome. However, by now another phase of the war in the air had been reached, with the eclipse of the Triplanes by a more a modern fighter. The squadron was rested and re-equipped with Sopwith Camels, and on 10 November 1917 moved back to Dunkirk, with the task of protecting units operating along the Belgian coast.

The squadron was up to full establishment within a month and was ordered to Dover, but on 16 February 1918 it was transferred to a new base at Teteghem. Their role now was to protect units operating along the Belgian coast and in some adjacent inland areas. Dallas continued to claim a rising number of victories and on 18 March was posted as Commanding Officer of No. 40 Squadron.

On 1 April 1918 the RAF was formed by merging the RFC and RNAS and he continued in command of the squadron, where he shot down nine more aircraft. He shot down a two-seater on 11 April, and three days later was wounded in the leg by ground fire while attacking a column of enemy motor vehicles but carried on until wounded a second time, when he returned to the airfield where he made a perfect landing.

Recovering from his wounds, he returned to active duty and on 26 April had increased his official score to thirty-seven enemy aircraft and was awarded the Distinguished Service Order. On 18 May while on patrol he shot down another enemy and his final victory came when leading a patrol of three and they attacked a formation of Pfalz scouts, and destroyed one each.

Dallas had become a legend in the methods he adopted for training new pilots to give them confidence in engaging the enemy. He would take the newcomer up with him, lead him into action and then manoeuvre an enemy machine into a position where the new pilot could fire a good burst and make his first kill.

On 1 June he was on a lone patrol along the lines, just west of the forward trenches, when he sighted three Fokker DRIs and immediately went after them. He was concentrating on his attack, when he was surprised by two Albatros scouts flying out of the sun from behind him. They opened fire before he could regain the initiative, and he was killed instantly. His aircraft went into a steep dive and came down on the German side of the lines.

He had been on active service almost continuously since late 1915. With a final score of thirty-nine, he was second only to Little as the leading Australian ace of the war.

The irony of his death was that he had been promoted to wing commander that day. A message telling him to take over command of a wing and not to fly any more was on his table waiting for him to read on his return. Writing after his death, one of his contemporaries, Lieutenant Colonel E.A. Ewart, wrote:

Dallas was one of the finest flying men I have ever met and put up some amazing performances that made his name famous amongst the airmen, by whom he was affectionately called the Admiral.

When the news of his death reached England, the well-known and respected editor of the *Aeroplane* magazine had this to say:

Roderic Dallas had become almost a legendary character in the RNAS. He was a pilot of quite extraordinary skill, a fighting man of astonishing gallantry, a humorist of a high order, and a black-and-white artist of unusual ability. But, above all this, he was a great leader of men. To be in Dallas' squadron was quite one of the highest honours open to a young fighting pilot of the RNAS and the high reputation held by certain of the RNAS squadrons operating with the RFC during the past year or two has been largely due to the training, example and leadership of Roderic Dallas.

It is known that he was several times recommended for the Victoria Cross, which was never confirmed. The Aero Club de France struck a gold Medal in his honour, and American aviation recognised his deeds by awarding him the Bronze Medal and Diploma. Perhaps the outstanding, and most authoritative, testimony was recorded by Admiral Sir Reginald Bacon in his book *The Dover Patrol 1915-17*:

I must mention one of the finest fighting pilots of the R.N.A.S. – Lieutenant Dallas. He was attached to the squadron at Furnes and the skill and courage with which he carried out his attacks served as a wonderful example and incentive to all the pilots with whom he came in contact; later (on) he was posted to a naval

squadron, lent to the Army, and exhibited his fighting qualities in the same vigorous manner.¹

Amongst his brother officers he was always extremely popular, his quiet and unassuming nature being in direct contrast to his fighting tactics.

Dallas was credited with thirty-nine confirmed victories, but his indifference to official claims suggests that he may have in fact accounted for the destruction of more. He was one of the great fighter pilots in World War One.

His home town of Mount Morgan continues to honour his memory, and the local Historical Society Museum proudly displays his medals, uniform, ceremonial sword, photographs and propeller from his aircraft.

¹ Bacon, Sir Reginald H.S., KCB, DCVO, DSO, *The Dover Patrol 1915-1917*, Hutchinson & Co., London, 1932, p. 567.

CAPTAIN ARTHUR HARRY COBBY
CBE, GM, DSO, DFC & 2 Bars, MID,
US Medal of Freedom

Captain (Later Air Commodore) Arthur Harry Cobby, CBE, GM, DSO, DFC & 2 Bars, MID, US Medal of Freedom, was top ace of the Australian Flying Corps in World War One with a score of twenty-nine, and his record remains unbeaten.

He was born in Prahran, Melbourne, on 26 August 1894. He started work at the age of fifteen, and by the time World War One broke out was a young executive in the newly formed Commonwealth Bank. He had joined the militia some years before, and in 1912 had received a commission in the 48th Infantry (Brighton Rifles). He immediately applied to join the AIF, but the bank refused to release him, declaring his job a reserved occupation.

Despite constant pressure from him, it was not until 1916, at the age of twenty-two, that he was finally released. He chose to join the Flying Corps because several of his friends in the Brighton Rifles had already done so, and he felt there was a better chance that way of being released from his 'exemption'. As he notes in his autobiography that: '... my decision to join the Flying Corps was not based on any strong desire to fly'.¹

He was sent to Point Cook for flying training in October 1916 and became an original member of No. 4 Squadron. By the time they sailed from Melbourne none of the pilots, including Cobby, had any more than thirty minutes actual flying instruction, and on arrival in England they all went off to a variety of flying schools. After some initial training with the RFC, Cobby went on to complete his training with an Australian squadron to wings standard. He was then sent to do a conversion course on Sopwith Camels before he returned to No. 4 Squadron, and moved with the unit to France in December.

¹ Cobby, A.H. DSO, DFC & Bars, *High Adventure*, Kookaburra Technical Publications Pty Ltd, Melbourne, 1981, p. 19.

Cobby has recorded that at that time his total flying experience, both dual and solo was 12 hours, and this had been obtained on no less than seven different types of aircraft. Some of the other pilots had even less experience and many, including Cobby, had not even fired their guns in the air. Again, in Cobby's own words: 'We were novices almost to a man'.²

After some weeks of familiarisation flights over the area, and some gunnery and formation practice, Lieutenant Cobby made his first patrol on 9 January, but without any contact with the enemy. This came four days later when he was one of a flight of three Camels which were 'jumped' by three Albatros. The Australian formation broke up, and one of their number was forced down and taken prisoner, although Cobby and the other pilot got home safely.

Then, on 3 February, he made his first 'kill'. He was again in a flight of three, but this time they were able to surprise three enemy two-seaters by diving on them from above. There was quite a hectic dog fight, but they shot down all three of the enemy, scoring one each, without any damage to themselves.

On 20 March, Cobby himself was leading a patrol of ten Camels, divided into two flights, when he had his first brush with the famous Richoften Circus. He was over enemy territory, but the countryside was obscured by a heavy mist, and Cobby was not too sure of his position. He could see a line of observation balloons poking up through the mist, and decided to fly along them towards home. Suddenly three red Albatros poked their noses through the mist, followed by a string of other aircraft, all painted red. They were flying on a course parallel to Cobby's formation, only a little lower, and about a hundred yards away. Cobby immediately attacked, and a wild dogfight began. In a few minutes it was all over, with the enemy disappearing again into the mist. In the meantime, the Australians had destroyed five, two of which fell to Cobby, with no casualties to themselves.

The very next day a heavy German offensive began, forcing the Allies to retire, and the squadron became heavily committed to a ground attack role. In this activity the aircraft were continuously exposed to ground fire by everything from field guns to rifle fire, and many of their aircraft were severely damaged, although casualties were extremely low. Cobby's main complaint was that even if they did surprise an enemy machine everyone was too close to the ground for a proper dogfight, and such engagements usually became hit and run affairs. However, by the end of April the Germans had been stopped, and the squadron resumed its normal offensive air patrols. Whereas in March the squadron had scored twenty-seven victories, there was a total of only eight for April.

On 21 May, Cobby started a new sport. On that day he shot down his own - and the squadron's first balloon. This may seem a simple task, but it was entirely the reverse. Balloons were always an attractive but dangerous target. They were usually protected by aircraft standing patrols and surrounded by anti-aircraft artillery and nests of machine guns. At the first approach by a hostile aircraft they would be pulled down by winch. If the attacker persisted in following the balloon down - and it took a lot of shooting before it would catch fire - he would come within range of fierce ground fire. Sometimes a balloon basket would be filled with explosives as an added hidden danger. Shooting down a balloon was thus often more hazardous than the destruction of an enemy aircraft. However, all the pilots were soon at it, and the squadron eventually was credited with the destruction of thirty-three balloons, of which thirteen went to Cobby.

² *Ibid.*, p. 35.

By this time, he was regularly leading the flight and carried out three or four patrols a day. He was also one of only three pilots remaining from the original batch. On 25 May he was promoted to Captain and given command of 'A' Flight. The squadron score began to rise again in May, with Cobby's own total increasing by another four during the month. For much of May, however, the squadron was again employed in ground attacks. In fact during the month they dropped eleven tons of bombs which is quite an effort when it is considered that each Camel only carried two 25 lb bombs.

The bombing and strafing continued into June, but Cobby still managed to shoot down another nine aircraft, plus one balloon during the month. For his courage and initiative he received his first decoration, the Distinguished Flying Cross. The citation reads as follows:

Award of the Distinguished Flying Cross. His Majesty the King has been graciously pleased to confer the above award on the undermentioned officer of the Royal Air Force, in recognition of gallantry in flying operations against the enemy.

Lieutenant (temporary Captain) Arthur Henry Cobby, Australian Flying Corps). He has proved himself a very gallant and successful fighter and patrol leader, setting a fine example to the squadron. Within the last few months he has destroyed a number of enemy balloons and aeroplanes.

Within a month he had received a Bar to his DFC, and almost immediately afterwards received a second bar. The citation for this last award speaks for itself:

One evening this officer, in company with another machine, attacked five Pfalz scouts, destroying two; one fell in flames, and one broke up in the air. The officer who accompanied him brought down a third machine out of control. While engaged in this combat they were attacked from above by five tri-planes. Displaying cool judgement and brilliant flying, Captain Cobby evaded this attack, and returned to our lines in safety, both machines being undamaged. A determined and most skilful leader, who has destroyed twenty-one hostile machines or balloons, accounting for three machines and two balloons in four days.

On 16 August the squadron took part in what, up to then, was the largest bombing raid carried out by the Allied air forces in France. The objective was the enemy aerodrome at Haubourdin. There were sixty-five aircraft in the raid, mixed AFC and RFC, and each carried four 25 lb bombs which they dropped at roof-top height. Heavy damage was done to hangars and buildings and large numbers of enemy aircraft were destroyed. The attack was led by Cobby, and all the aircraft returned safely. An identical raid with sixty aircraft was carried out the next morning against an airfield at Lomme. Again the mass attack was led by Cobby, and again there was heavy damage inflicted on the enemy. All but one of our aircraft returned safely. For his leadership and gallantry in these two raids, Cobby received an immediate award of the Distinguished Service Order.

On 14 September, Cobby was posted back to England to be Wing Fighting Instructor at the Australian Training Wing, leaving behind him yet another record. For the whole of the time he had been leading 'A' flight, both before and after he became flight commander, not a pilot had been lost on patrol.

As can be imagined, he did not take too kindly to his new job, and tried all he could to be returned to France. However, the end of the war saw him still with the training wing. He admitted that he found the strain of his work there far worse than flying in France, but he did well at it and became a Grade A1 instructor.

Still in England for the first Anzac Day march, which was held in London on 25 April 1919, Cobby led a fly-past of the AFC. The salute was taken by the then Prince of Wales outside Australia House, and Cobby got so low that he was flying along the Strand. He was unable to get out again because of the overhead wires, and had to fly along the street for nearly a mile before he could climb away at Trafalgar Square. This was definitely his last flight before he sailed for home in May.

After demobilisation from the AFC, he joined the newly formed RAAF as a foundation member on 21 March 1921 with the rank of flying officer (Honorary Flight Lieutenant). He was to hold various flying and staff appointments, including that of Director of Operations and Intelligence from 1931 until he resigned from the RAAF in April 1936 with the rank of wing commander to join the Department of Civil Aviation as Controller of Operations.

Cobby was into uniform again as soon as World War Two started and was appointed Director of RAAF Recruiting in July 1940 with the rank of Group Captain. By August 1942 he had been promoted to the rank of Air Commodore and was posted to be Air Officer Commanding (AOC) Headquarters, North-Eastern Area (HQNEA), Townsville, which at that time included responsibility for control of all RAAF units and their operations in New Guinea.

In December 1943 he was returning from a tour of inspection of his area, when the Catalina in which he was a passenger, crashed on landing on the water at Townsville. One of the depth charges on board exploded, and thirteen of the nineteen on board were killed. Cobby survived the original crash and explosion and managed to get clear. Although injured, and knowing there was still an unexploded depth charge, he nevertheless immediately re-entered the wreck in an attempt to rescue some of the survivors still trapped inside and managed to save two.

For his outstanding heroism on this occasion he was awarded the George Medal, and the full story is best told in the words of the citation, which reads as follows:

On the 7th September, 1943, Air Commodore A.H. Cobby, was returning from Dutch New Guinea and upon arrival at Townsville the Catalina aircraft in which he was travelling crashed on alighting, exploding one of the two depth charges with which the aircraft was armed. The aircraft was badly shattered and thirteen of the nineteen occupants were either killed or drowned.

Air Commodore Cobby managed to extricate himself from the wreck and, although injured, he re-entered the submerged hull on three occasions to rescue members of his staff.

As a result of his strenuous efforts against the great pressure in the cabin he was able to assist Wing Commander W.L.B. Stephens, who had a badly broken arm, and brought him to the surface. The second time he extricated Wing Commander B.P. Macfarlan and brought him to a position on top of the blister. He re-entered the cabin a third time, but was unable to effect further rescues.

Owing to the fact that at least one other depth charge was unexploded, and that at any moment the wrecked aircraft might slip under the water, Air Commodore Cobby displayed outstanding courage in risking his life while effecting the rescues of these members of his staff. His devotion to duty on this occasion is worthy of the highest praise.

After recovering from his injuries Cobby was posted as Commandant of the RAAF Staff School at Mount Martha, Victoria, for a year, before taking up his next appointment as AOC No. 10 (Operational) Group in August 1944. In the meantime, he had also been made a Commander of the Order of the British Empire (CBE) for his tour of duty with North-Eastern Area, described in his citation as 'one of the busiest areas in the RAAF'. The citation went on to state:

At all times he has ably commanded his area, which includes Dutch New Guinea and the units therein. Under his command, effective offensive operations have been conducted continuously against the enemy, and that (his): 'efforts have taken the form of good leadership, personal example, keen understanding and continued encouragement'.

No. 10 (Operational) Group controlled all RAAF units in New Guinea, and in October 1944, with Cobby still in command, it became 1st Tactical Air Force (TAF) and was set to be a mobile striking force, controlling Nos. 81 and 78 (Fighter) Wings and No. 77 (Attack) Wing, together with Nos. 61 and 62 (Airfield Construction) Wings. It came under the operational control of 13th Fighter Command, which in turn was part of the 13th Air Force. By the end of 1943 the Japanese air force had to all intents been destroyed by the American and Australian air forces.

Originally the new air force command arrangements were intended to support the Americans in their return to the Philippines under the operational command of the US 13th Air Force but, together with all other Australian forces, they were finally excluded from any direct part in the Philippines campaign, and were left to concentrate on the by-passed areas.

One such particular operation was the planned assault on Borneo to establish a base for the right wing of any invasion force and a harbour for the Royal Navy in support of future British operations against Malaya. The efforts of 1st TAF became concentrated in support of the Australian Army operations in this area, which involved a series of assaults on Tarakan and Balikpapan which came to be known as the *Oboe* operations. The air effort was aimed in neutralising enemy defensive positions and installations in these areas, particularly those in the immediate area of Balikpapan.

With the capture of Morotai the way was now clear for the invasion of Borneo. The task had been allotted to 1st Australian Corps, and the responsibility for the supporting air effort was delegated to RAAF Command under the command of Air Vice-Marshal Bostock. He established an advanced headquarters on 15 March at Morotai, and was given direct control of the USAF 5th and 13th Air Forces as well as the RAAF 1st

Tactical Air Force and his own force of heavy bombers based at Darwin and Western Australia.

The Borneo operations were planned in three phases. The first was to be against Tarakan on 1 May, and the second against Labuan on 10 June. The defences of both areas were formidable, with well-placed gun sites and strong concrete bunkers. The air attacks and other military targets before each landing were so successful that the attacking forces all reached their objectives with only light casualties. In a message of congratulation General MacArthur described the air campaign as a 'flawless campaign'.

The third operation was an assault on Balikpapan, the most important refinery installation in the East Indies. Air photographs showed at least 120 concrete gun emplacements, many with two or more guns, and all of which could bear on the landing beach. The army expected very heavy casualties, estimated to be as high as 10,000 seriously wounded or killed on the beaches alone. In fact they did not expect the first two assault waves to even get ashore.

In the pre-invasion stage Bostock directed a continuous assault upon the defences, and with aircraft coming from distant and widely separated bases, this required the most precise and skilled timing and control. The attack began on 1 July and not one soldier was killed at the actual landing, nor later while the supporting forces were coming ashore.

**Air Commodore A.H. Cobby, CBE, DSO,
DFC&2Bars, GM, Air Officer Commanding
No. 1 Tactical Air Force**

The defences had been almost eradicated

by the air assault. It was found that only six guns could fire on the beach, and these were quickly silenced by the supporting aircraft.

The RAAF had shot down their last enemy aircraft on 19 June 1944, and the fighter pilots were looking for action. There was to be no RAAF participation in the Philippines campaign that offered any alternative to the tedium of attacking targets of questionable military value, and their dissatisfaction continued to grow. They considered they were being employed in bombing and strafing ground targets, often quite heavily defended, and considered they were suffering unnecessary casualties in operations that seemed to them to be of no consequence.

All were highly experienced pilots who had served with distinction, and they viewed the operations they were being asked to conduct were, in their opinion a waste of time and was a reflection in fact of the sense of frustration felt by all RAAF aircrew over the negative roles allotted to them. Cobby and his senior staff officers also appeared to be either unaware of this dissatisfaction, or chose to ignore it.

Chief of the Air Staff, Air Vice-Marshal G. Jones (right) discusses the plans for his visit to the RAAF's most forward operational areas with the Air Officer Commanding 1st Tactical Air Force, RAAF, Air Commodore A.H. Cobby, Morotai 1945. (AWM OG2291)

Discontent reached a climax on 19 April 1945 when eight senior pilots, including two group captains, two wing commanders and nine squadron leaders, the commanders of two wings and eleven squadron commanders, presented Cobby with identically worded resignations. This action on the part of senior officers was absolutely unprecedented and became known as the Morotai mutiny.

An official enquiry was conducted by Mr. Justice Barry who found that the two main factors which brought about this action were 'the opinions generally held about the nature of the operations on which the squadrons were engaged, and the attitude of the senior staff'. He further found that as this 'widespread condition developed and existed without his being aware of it, the AOC 1st TAF failed to maintain proper control over his command'.

Air Commodore Cobby and his two senior staff officers, Group Captain W.N. Gibson, Senior Air Staff Officer, and Group Captain R.H. Simms, Senior Administrative Officer, were subsequently sacked.³

³ A full account of what became known as the Morotai Mutiny is dealt with at some length and detail in George Odgers, *The Official History of Australia in the War of 1939-45*, Series 3 (Air), Volume II 'Air War Against Japan', 1943-1945, Australian War Memorial, 1957.

In the event, the air campaign against 'senseless, unimportant ground targets, etc' was so successful that all the troops and equipment got ashore at Balikpapan, with only one casualty ... and as if to put the cap on it all, the Americans awarded Cobby their Medal of Freedom with Bronze Palm for:

Meritorious service which has aided the United States in the prosecution of the war against Japan from 28 September 1944 to 31 January 1945. While under the operational control of the 13th Air Force, Air Commodore Cobby directed his planes in continuous action against enemy installations ... and inflicted heavy damage on enemy shipping, supply areas and radar positions.

His services were distinguished by exceptionally sound judgement and far sighted planning, and his forces were so well coordinated with those of the Thirteenth Air Force that all available aircraft were employed with maximum effect. He greatly assisted in denying the enemy water or land movement ... and materially assisted in support of the operations in the Philippine Liberation Campaign. Air Commodore Cobby rendered a material contribution to the success of the United States Army forces in the South-West Pacific Area.

Shortly after these events, Cobby returned to Australia, but the war was over before he could be settled into any new appointment, and his appointment was terminated on 19 August 1946.

It was indeed an unfortunate and unhappy way to have ended his career, particularly when so many of the basic causes at the root of the complaints were largely out of his control. It is felt by some that his two senior officers were aware of the discontent, but did nothing to correct it, and certainly did not alert Cobby in any way.

With the end of hostilities, Cobby returned to the Department of Civil Aviation, where he held several senior appointments before becoming the Director of Flying Operations. He died in Melbourne quite suddenly on 11 November 1955. He was sixty-one years old.

GROUP CAPTAIN
CLIVE ROBERTSON CALDWELL
DSO, DFC and Bar, Polish Cross of Valour

Group Captain Clive Robertson Caldwell, DSO, DFC and Bar, Polish Cross of Valour, with a score of 28.5 was the fourth highest scorer of any Australian in either the first or second world wars. He also holds the added distinction of being the second highest scorer in Australian uniform as a member of the RAAF. All his victories were obtained in World War Two.

He was born in Sydney on 28 July 1911, and began his flying career in 1938 when he joined the Royal Aero Club of NSW. He soloed after only 3.5 hours and had logged eleven hours by the time World War Two began in September 1939. He enlisted in the RAAF the day after war broke out but was not called up until May 1940, when he was posted to an officer pilot course. However, on learning that they would all be employed as instructors on graduation, he somehow managed to change over to the Empire Air Training Scheme and began his basic flying training all over again as an AC2 aircrew trainee. He was twenty-nine years of age.

The various stages of his EATS training were carried out wholly within Australia and he finally graduated in January 1941. He was commissioned off course and sent to the Middle East with a posting to No. 250 Squadron, RAF. This unit had only just been formed the month before Caldwell and seven other Australians joined it on 5 May 1941. The unit was equipped with Tomahawks and formed part of No. 262 Wing, which was later to include No. 3 Squadron, RAAF, and most of the Australians serving in the Middle East.

The unit was at first engaged in shipping-escort duties, but by 11 June they became heavily engaged in the operations leading to the relief of Tobruk. The first positive engagement for the squadron came on 26 June while escorting Blenheims on a bombing mission to Gazala. They were attacked by a force of thirty enemy aircraft and Pilot Officer Caldwell scored his first success by shooting down a Bf 109.

Only four days later, nine Tomahawks were escorting a Tobruk convoy when it was attacked by twenty Stukas escorted by a force of thirty enemy fighters. During this engagement Caldwell destroyed two Ju87s and shared in the kill of a Bf 109. On 7 July he had yet another victory when on that date he met up with two G50s and after a brief engagement shot one of them down.

In a special reference to him at this time, the *Official History of Australia in the War of 1939-1945* 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 his own aircraft's shadow when other targets were lacking.⁴

The squadron continued with convoy escort duties during July and August, being heavily attacked on 18 August and again on the 29th. Although the enemy tried to break up the escort on each occasion, they did not succeed and the attacks were beaten off. In one such attack on 29 August, Caldwell was hit and wounded over Tobruk by two Bf 109s. The story is best told in his own words, quoted directly from his combat report:

At approximately 1905 hours whilst acting as weaver ... I was attacked by two Bf 109s, one coming from astern and the other from port side, neither of which I saw personally. Bullets from astern damaged tail, tail trimming gear, fuselage and starboard mainplane, while the aileron on that side was destroyed and a sizeable hole made in the trailing edge and flap ... evidently by cannon shells, a quantity of splinters from which pierced the cowling and side of the cockpit, some entering my right side and legs. Fire from the port side ... damaged the fuselage, a number of bullets entering my left shoulder and hip, small pieces of glass embedding in my face, my helmet and goggles being pulled askew across my nose and eyes - no doubt by a near miss. As a result of the hits on the mainplane and probable excessive avoiding action the aircraft spun out of control. Checking the spin, I blacked out when pulling out of the ensuing dive, recovering to find flames in the cockpit. Pulling the pin from the safety harness, I started to climb out to abandon the aircraft, when the fire, evidently caused by burning oil, and not petrol as I thought, died out, so I decided to remain and attempt a landing.⁵

Looking behind me as I crossed the coast at about 500 feet some six miles east of Sidi Barrani ... I saw a number of planes manoeuvring ... in a manner suggesting an engagement. As my plane seemed to answer the controls fairly well, apart from turns ... I made a gradual turn and climbed back towards said aircraft, finally carrying out an attack on what I believed to be an Me-109. Having previously lost the pin to my harness, I was holding the straps in my left hand for security which, together with damage sustained to aircraft, ... (made it) ... inadvisable to attempt much in the way of a quick change of altitude, so I carried straight on to very low level and continued to base arriving at 2010 hours. Using half flap only (because of damage), I landed to find the starboard tyre flat as the result of a bullet hole

Although not mentioned in the above account, it is recorded elsewhere that the attack he made on the Me 109 on his way home, whilst wounded and in a badly damaged aircraft, was successful, and it was officially added to his score. For this exploit he was awarded the Distinguished Flying Cross.

September was fairly quiet, with the squadron mounting standing patrols and continuing escort duty to convoys. It was about this time that No. 250 Squadron

⁴ *Official History of Australia in the War of 1939-1945*, Series 3 (Air) Vol III, Australian War Memorial, Canberra.

⁵ *Ibid.*, p. 105.

began operating as an integral part of No. 262 Wing. This brought together most of the RAAF pilots operating in the area, and as well as No. 250 Squadron, included No. 112 Squadron, RAF, and No. 3 Squadron, RAAF. In October these three units, operating as a wing, began to carry out sweeps over Cyrenaica to test enemy reactions but without any significant result. On 23 November, however, Caldwell shotdown another Bf 109 and damaged another.

On 5 December Caldwell succeeded in shooting down five Ju87s in the one sortie, and for this he received a Bar to his DFC. He had recently been made a flight commander, and on this occasion was leading No. 250 Squadron, with No. 112 Squadron as top cover, when they met forty Ju87s in company with fifteen enemy fighters.

The tactics were for No. 112 to engage the enemy fighters while No. 250 dived to

Squadron Leader Clive Caldwell and pilots of No. 112 Squadron, RAF, based in the Western Desert, 1942. (AWM O11944)

destroy the Stukas. Flight Lieutenant Caldwell's score of five was part of the total squadron score of eleven destroyed and three possibles. A further nine of the enemy were accounted for by No. 112 Squadron. Caldwell's success was undoubtedly due to his extremely accurate sense of gunnery and the determination with which he always pressed home his attack. The story is best told by extracts from his own combat report.

I was leading the formation of two squadrons, 112 acting as top cover to No. 250 Squadron, to patrol a line approximately ten miles west of El Gubi and had just reached this position at 1140 hours when I received R/T warning that a large enemy formation was approaching from the north-west at our own height. Both squadrons climbed immediately and within a minute the enemy formation, consisting of Ju-87s with fighter escort, was sighted on our starboard side ... 250 Sqn went into line astern behind me and as 112 Sqn engaged the escorting enemy fighters, we attacked the Ju-87s from the rear quarter. At ... three hundred yards I opened fire with all my guns at the leader of one of the rear sections of three, allowing too little deflection, and hit No. 2 and No. 3, one of which burst into flames immediately, the other going down smoking and went into flames after losing about 1000 feet, I then attacked the leader of the rear section ... from below and behind, opening fire with all guns at very close range.⁶

The enemy aircraft turned over and dived steeply down with the root of the starboard wing in flames ... I opened fire again at another Stuka at close range. The enemy caught fire and crashed in flames near some dispersed mechanised transport ... I was able to pull up under the belly of the one at the rear, holding the burst until very close range. The enemy aircraft dived gently straight ahead, streaming smoke, caught fire and then dived into the ground.

The land battle continued in pursuit of the enemy, and advanced past Benghazi. Tobruk had been relieved, convoys had greater freedom of movement, and the threat to Egypt was removed. The air force was engaged mainly in attacks on airfields and transport columns and supply dumps. Air opposition and anti-aircraft fire were negligible and squadrons were able to take a well-earned rest and begin re-equipping. Nevertheless Caldwell was able to obtain another victory on 20 December by shooting down yet another Me-109. On 13 January he was transferred to No. 112 Squadron, RAF, to command. His score had by now reached a total of eighteen.

No. 112 Squadron was the famous 'Shark' squadron which had been formed with Gladiators in 1939 for the defence of Cairo and the Nile Delta. During the latter part of 1940 it took part in the early campaigns in the Western Desert and was then moved to Greece, still operating Gladiators. It gave a good account of itself against the Italians, but was withdrawn to Palestine once the Germans appeared with their Messerschmitts. The squadron was then re-equipped with Tomahawks and moved once more to the Western Desert. It was at this time that the shark's head with open jaws began to appear on the nose of the squadron aircraft and became the squadron emblem. The unit had already been re-equipped with Kittyhawks in December, before Caldwell joined them.

In this new aircraft Caldwell had his first success in the squadron when he led them into battle on 21 February against seven Me-109s. He personally destroyed one of the enemy, with one other falling to the guns of another squadron pilot. On 14 March he was in action again, destroying a Macchi 202 and sharing the destruction of an Me-109. On another occasion he was not so lucky. He was leading six aircraft of the squadron when they were jumped by a large formation of German fighters. Caldwell and only one other survived, and even then he had a very close call. Two 20mm shells passed through his cockpit. One just flicked across the top of his leg and missed his wrist by a fraction, whilst the other exploded behind his armour plated back-rest. He was unharmed.

⁶ *Ibid.*, p. 207.

In the meantime, the concept of the fighter-bomber had been developing. Some partial success had been obtained with the Hurricanes, but it was decided the Kittyhawk would be a better vehicle, and No. 112 Squadron was selected to convert to this role. On 10 March Squadron Leader Caldwell carried out a test flight to check whether or not the bomb would damage the airscrew on release. The test went well with a dummy and Caldwell immediately repeated the trial with a live bomb. As a further proof of his confidence he then carried out a bombing attack on an enemy target with great success. The decision was then made officially to go ahead with using Kittyhawks in the fighter-bomber role, but Caldwell had already left for Australia before the first operational sorties took place.

Following on the Japanese entry to the war in December 1941, the Australian Government sought the return of experienced RAAF members to help build up the forces in Australia, and Caldwell was one of those specifically requested. About this time he was awarded the Polish Cross of Valour for his service with No. 112 Squadron. Like most RAF units at the time No. 112 Squadron had quite a mixture of members from the various Commonwealth countries. Unusually, however, it also had quite a number of Polish pilots, and the award of the Polish decoration was a recognition by the Polish authorities of their appreciation of his special brand of leadership. The Polish Cross of Valour is the equivalent of the British DSO, and Caldwell is one of the very few Australians to be so honoured.

When he left the Middle East, Air Marshal Tedder wrote the following personal assessment in his log book: 'A fine commander, an excellent leader and a first class shot'. This was a rare and highly valued honour from the AOC-in-C.

Caldwell came home via the United States, where he visited aircraft factories and addressed the workers on the performance and success of their machines. He also exchanged views on fighter tactics with the USAF and arrived back in Australia in September 1942. He was posted to the fighter operational training unit (No. 2 OTU) as an instructor, training new pilots and testing the new Australian designed and built Boomerang fighter. However, very shortly he was posted to the newly formed RAAF No. 1 Fighter Wing.

Mr Churchill had agreed on 28 May to a request by the Australian Government to send three Spitfire squadrons to Australia. Two of the squadrons chosen were Nos. 452 and 457, both of which were completely Australian EATS squadrons formed in England in June 1941. The third squadron was No. 54 Squadron of the RAF. The personnel arrived in Australia in August 1942, and seventy-one Spitfires had arrived by October. A further thirty-three were on the water, representing an estimate of four months' reserve. The squadrons began training at Richmond and were formed, with supporting elements, into No. 1 Fighter Wing before moving to Darwin, where the three squadrons were separately dispersed to auxiliary airfields. This was necessary for safety reasons but created problems in joining up and operating as one formation.

The wing was commanded by Group Captain A.L. Walters, of the RAAF, with the now Wing Commander Caldwell as wing leader. Of the ninety-five pilots in the wing, only six were fully qualified, while thirty-seven had had some fighter experience. The remaining fifty-six had no experience. However, Walters and Caldwell, assisted by experienced squadron commanders, soon managed to build them into an efficient fighting force. Caldwell always put special emphasis on gunnery, which he practised continually himself. He often expressed the view that: 'A pilot who cannot shoot straight may as well stay on the ground because he is useless in a fighter squadron'.

As far as the aircraft were concerned, the Spitfire was less manoeuvrable at low speeds than the Japanese Zero, however, in a dive and straight and level flight, the Spitfire was infinitely superior. Although the Zero could climb faster, the Spitfire was generally considered to be the all-round better aircraft. Nevertheless, it was considered unwise to engage in dogfight tactics with the Zero, and pilots were eventually forbidden to do so. The tactics subsequently adopted were to make a pass at high speed and then break away in a dive until out of range, with a possible climb again for another high speed attack.

The first victory for the new wing was claimed on 6 February when a pilot of No. 54 Squadron shot down a Dinah, but things generally remained quiet until 2 March. On that date, sixteen Japanese aircraft were detected approaching the Darwin area. Caldwell led No. 54 Squadron in a successful interception and he personally succeeded in shooting down his first Zero, as well as a Kate torpedo bomber.

On 7 March No. 457 Squadron had its first success, shooting down a lone Dinah over the sea just north of Darwin. Then another large raid by the Japanese occurred on 15 March, consisting of twenty bombers and an equal number of fighters. This time the raiders were intercepted by the whole wing and a general dogfight occurred over Darwin harbour. The Spitfires shot down seven of the enemy and were also credited with damaging seven others. Although four of the Spitfires were lost, three of the pilots were recovered safely.

From then until the beginning of May things were again very quiet, but on the morning of 2 May all squadrons were ordered into the air to intercept a large force of the enemy approaching Darwin. It was later confirmed there were eighteen bombers and twenty-seven fighters. With Caldwell leading, and the entire wing operating as a single entity, the thirty-three Spitfires climbed to a height of 26,000 feet at a position ten miles north-east of Darwin. The enemy bombers were seen to be at 27,000 feet, and as our fighters moved to attack, the enemy fighter escort was seen to be another 4000 feet above and in a much better position than the Spitfires. Caldwell made the decision to climb and attack the enemy fighter cover, rather than run the risk of attacking the bombers before they dropped their bombs. After dealing with the fighters, he planned to get the bombers on their way out.

In the meantime, the bombers continued on their way and, although heavily engaged by the Darwin anti-aircraft guns, they dropped their bombs on target without any loss to themselves. However, Caldwell did manage to get all his squadrons into good positions and at an altitude of 10,000 feet (3050 metres) above the enemy fighters. No. 54 Squadron was directed to attack the fighters while No. 457 engaged the bombers. No. 452 was to give protection to the others. At the right moment Nos. 54 and 457 went in to attack with an angle of dive of about 70 degrees and a speed of about 400 mph (640 km/h). The Zekes protecting the bombers turned head on to No. 457 Squadron, diverting them to such an extent that only four penetrated to the bombers.

All aircraft then immediately became engaged and there was a brief and furious dogfight. It was later agreed that six enemy aircraft had been destroyed, another four probably destroyed, and eight damaged. However, this had only been achieved with the loss of five Spitfires and two pilots killed. The other three were picked up safely from their rubber dinghies. In addition to direct battle casualties, there were others almost as serious.

Unfortunately, an excessive amount of fuel had been used in initially manoeuvring the wing and with the fast climb to altitude. A warning was issued by

Caldwell for all pilots to check their tanks and if low on fuel to return to base. The warning was also repeated by the ground controllers. Nevertheless, five of the aircraft had to carry out forced landings through lack of fuel before they could reach their base. A further three also made forced landings due to engine failures. All but two of these eight aircraft were later recovered, and none of the pilots were injured. At the time, however, it looked as if we had lost thirteen aircraft for a known loss of only four of the enemy. The damage to Darwin, fortunately, was only slight and there was only one casualty. The fact that all the bombers had got through to their target without loss only made the situation look that much worse.

As if this was not enough, an unfortunate press announcement was released by Allied General Headquarters which, while certainly referring to the ground damage from the bombing and the number of casualties as 'negligible', went on to say that 'our own air losses were heavy'. Much publicity was given to the fight and the press drew attention to the fact that this was the first occasion when any communique had reported heavy losses. The Japanese, of course, were able to make rich propaganda from the release. It all looked very bad at the time.

As a result, the Advisory War Council ordered a full enquiry and called for a special report from the Chief of the Air Staff. Following on the official investigation, the fuel capacity of the Spitfire was greatly increased and tactics were changed to allow for earlier interceptions, as well as the banning of dogfights by Spitfires. A more detailed analysis can be found in Volume II of the Official History, Series 3 (Air).

After this raid offensive Allied air activity in North-Western Area began to increase, whilst the fighter wing was eager to prove its mettle and refute earlier criticism. However, for a while there were only sporadic raids by small numbers of the enemy. The continuing attacks on enemy airfields and shipping by RAAF and USAF bombers were having their effect and it was not until 20 June that our fighters had their chance. On that date there was a heavy raid by the Japanese on Darwin and forty-two Spitfires took off to engage the enemy.

The raiders initially appeared to consist of a force of twenty bombers at high level protected by about an equal number of fighters. However, while the main engagement was developing a further enemy force of ten bombers came in at tree-top height. Despite this surprise, the new wing tactics were most successful and a total of nine bombers were destroyed, together with five Zeke fighters, including one by Caldwell, and another possible ten claimed as damaged. All this was achieved for the loss of only two Spitfires and their pilots. Congratulations were sent personally from General McArthur, and there was a complete and well-deserved restoration of confidence in the ability of the Spitfire wing.

They continued to fight with great skill and purpose until the end of July when the Japanese daylight raids finally ceased. From then on there were occasional small raids by night, but main Japanese activity over the area was by an occasional single reconnaissance plane. The combined efforts of the Allied bombers and fighters had finally achieved an outstanding victory in the area.

Meanwhile, Caldwell had taken over command of the wing from Walters and his score continued to mount. On 2 June he destroyed two more of the enemy and during the engagement of 20 June, described above, he had added one more Zeke to his total. On 28 June he destroyed a Betty bomber and on the 30th shot down yet another Zeke. Then on 20 August he scored a further victory when he destroyed a Dinah reconnaissance aircraft, but this was to be his last. His score had by now reached his ultimate tally of 28.5. He was awarded the DSO and posted to OTU as Chief Flying Instructor.

In May 1944 he was posted back to operations as wing leader of No. 80 Fighter Wing. Then in August he was promoted to Group Captain and appointed commanding officer of the wing. By this time the unit had moved to Morotai, but there was little work for the fighters to do in their primary role. They were mainly engaged in attacks against ground targets and barges. There was just no further opportunity for Caldwell to increase his score, or for that matter, for any of the other fighter pilots in the wing. While the main thrust of operations in the South-West Pacific was moving towards the Philippines, the units of First (RAAF) Tactical Air Force, of which No. 80 Wing was a part, had been left far to the rear. Their main task was to continue attacks and pressure on enemy forces which had been by-passed by the main advance.

Group Captain Clive Cladwell, pictured with his Spitfire from No 452 Squadron, talks to ground staff LAC W.V. Flynn and LAC J. Miller, Morotai, 1945. (AWM OG2000)

By the end of 1944, although the RAAF had been left far behind the main battle, there was strong pressure on them to produce a maximum effort in sorties and flying hours. Most of the targets were of no apparent importance and did not appear to justify the efforts involved. A growing number of RAAF pilots, including some squadron commanders, while not denying that by-passed pockets of the enemy had to be kept under surveillance, did start to question the nature of the targets they were sent to attack. They considered their role in the war had become unimportant and their tasks just not worthwhile. Morale began to suffer and pilots felt their lives were being risked on operations which would make no contribution to winning the war.

This conflict of opinion about unnecessary operations was, of course, not confined to the Air Force. The army had similar, and probably even more justified, complaints from the units left behind in the Solomons and New Guinea. Also, there was growing criticism of the same sort expressed in the press and in parliament.

No. 80 Wing, now under command of Group Captain Caldwell, had only just moved to Morotai from Darwin. Caldwell noted at the time of the move that the spirits of his pilots had risen noticeably as they expected they would once more become engaged in fighter operations. This exuberance was short lived when they found there was little opportunity of meeting the Japanese in the air. Caldwell also rapidly came to the conclusion independently that the purely strafing operations they were expected to carry out failed to produce sufficient results to justify the accompanying loss of aircraft and crews. He reported his views privately to the Chief of the Air Staff, but otherwise kept them to himself.

In December 1944 the commanding officer of No. 81 Wing had drawn the attention of the Air Officer Commanding First Tactical Air Force to the loss of aircrew and aircraft against unsuitable or ineffective targets. He was acting from a very high sense of duty and expected the position to be rectified. By April nothing appeared to him to have been done and he felt the operational tasks to be even more wasteful than ever before. Accordingly, he discussed the problem with other senior operational leaders, including Caldwell, and the commanding officers of several independent squadrons. Eight of them, including Caldwell, resigned together as a body on the one day as a protest and in the hope that something would be done.

**Group Captain C. Caldwell, Commander No. 80
(Fighter) Wing, RAAF, Morotai, 1945.
(AWM OG1970)**

They were asked to reconsider, but refused, and there was then a high level investigation conducted on the spot - and personally - by both the Chief of Air Staff, RAAF, and General Kenney, Commander Allied Air Forces. As a result, the AOC and the two senior staff officers at 1st TAF were relieved of their appointments on 10 May. The Government also set up an independent judicial commission of inquiry under Mr (later Justice) J.V. Barry, KC, to inquire into the resignations and other matters affecting 1st TAF. The commission found that the complaints were justified and the officers who had resigned, including Caldwell, were fully cleared and each was returned to his post and fully reinstated. The findings of the commission made it quite clear that they had acted from the highest possible motives.

Meanwhile, on 8 May 1945, the war in Europe ended. With the immediate prospect of at least 17,000 airmen returning from Europe, it was fairly obvious that there would soon be a huge surplus available in the Pacific. Accordingly, the War Cabinet

stopped any further aircrew training and ordered the release to civilian life of those surplus to requirements. Preference was to be given to those who had served the longest.

During June Labuan was captured and following on this operation No. 80 Wing Headquarters was disbanded on 30 July. All personnel and units were absorbed into the newly formed, and larger, No. 11 Group. This released Caldwell, who was posted back to Melbourne and released from the RAAF in February 1946. He went into private business of his own, which he soon developed most successfully, and in which he continued to take an active and very effective part.

He died on the 7 August 1994 and was farewelled at a private cremation service, the following day.

His special qualities have been well summed up by George Odgers, the Official Australian War Historian, who has this to say:

Wing Commander Caldwell ... combined great bravery with capable leadership ... was an alert, fast-talking, quick acting man with an exuberant confidence ... It was his belief that a man must have faith in himself. If he did not he could not expect the confidence of others. He showed great aggressiveness in combat.⁷

⁷ Odgers, 'Air War Against Japan, 1943-1945', p. 45.

APPENDIX ONE

THE ACES ~ BIOGRAPHIES

WORLD WAR ONE

AUSTRALIAN FIGHTER ACES - WORLD WAR ONE

NAME	INIT	RANK	DECORATIONS	AFC UNIT	RFC/RNAS UNIT	SCORE
Alberry	F.	LIEUT	DCM	2 AFC		7
Baker	T.C.R	CAPT	DFC,MM&Bar	4 AFC		12
Barkell	T.H.	LIEUT	DFC	2 AFC		7
Blaxland	G.H.	CAPT	--	2 AFC		6
Brown	A.R.	LIEUT	DFC	1 AFC		6
Brownell	R.J.	CAPT	MC,MM		45	12
Clark	A.G.	CAPT	--	2 AFC		5
Cobby	A.H.	CAPT	DSO,DFC&2Bars	4 AFC		29
Cole	A.T.	CAPT	MC,DFC	1&2AF		10
Coningham	A.	MAJ	DSO,MC		32,92	9
Cowper	A.K.	CAPT	MC&2Bars	2AFC	24	19
Cox	G.	LIEUT	--	2 AFC		5
Cummings	E.D.	CAPT	DFC	2 AFC		9
Dallas	R.S.	MAJ	DSO,DSC&Bar,CdeG		RNAS,1W,1(N),40	39
Davies	E.E.	LIEUT	DFC	2 AFC		7
Drinkwater	A.T.	CAPT			57,40	9
Drummond	R.M.	CAPT	OBE,DSO&Bar,MC	1 AFC	40,111	8
Edwards	H.J.	LIEUT	DFC		32,92	5
Forrest	H.G.	CAPT	DFC,MID	1&2AF		11
Goble	S.J.	MAJ	OBE,DSO,DSC		1W,5,8	10
Hamersley	H.A.	CAPT	MC		60	13
Hepburn	A.	CAPT	DFC		24.40.88	16
Holliday	F.P.	MAJ	DSO,MC		48	17
Hooper	G.H.	CAPT	DFC		11	11
Howard	R.W.	LIEUT	MC	2 AFC		8
Howell	C.E.	CAPT	DSO,MC,DFC		45	19
Hughes	G.F.	CAPT	MC,AFC		62	11
Johnston	E.C.	CAPT	DFC		24,88	20
Jones	G.	CAPT	DFC	4 AFC		7
Kenny	E.P.	LIEUT	DFC	1 AFC		7
King	E.R.	CAPT	DSO,DFC	4 AFC		26
Larkin	H.J.	CAPT	DFC		5,87	11
Lingham	G.A.	LIEUT	DFC		43	5
Little	R.A.	CAPT	CdGDSOBarDSCBar		RNAS,1W,8(N),203	47
Malley	G.F.	CAPT	MC	4 AFC		6
Manuel	R.L.	CAPT	DFC&Bar	2 AFC		12
McCloughry	E.J.K.	CAPT	DSO,DFC	4 AFC		21
McGinness	P.J.	LIEUT	DFC,DCM	1 AFC		7
McKenzie	R.W.	CAPT	MC	2 AFC		6
Minifie	R.P.	CAPT	DSC&2Bars		RNAS,1W,1(N)	21
Palliser	A.J.	CAPT	--	4 AFC		7
Pentland	A.A.N	CAPT	MC,DFC		16,19,29,87	23
Peters	G.C.	LIEUT	--	1 AFC		7
Phillipps	R.C.	MAJ	MC&Bar	2 AFC		15
Richards	C.R.	LIEUT	MC		20	12
Richardson	L.L.	CAPT	MC		25	7
Rigby	H.A.	CAPT			1,40	6
Robertson	A.E.	LIEUT	MC	4 AFC		5
NAME	INIT	RANK	DECORATIONS	AFC	RFC/RNAS UNIT	SCORE

AUSTRALIAN FIGHTER ACES

				UNIT		
Shepherd	A.S.	CAPT	MC,DSO		29	10
Simonson	E.L.	CAPT	--	2 AFC		5
Smith	F.R.	CAPT	MC&Bar	2 AFC		16
Smith	R.M.	CAPT	MC&Bar,DFC&2Bars, AFC	1 AFC	67	11
Stephens	E.J.	CAPT	DFC		41	13
Taplin	L.T.E.	LIEUT	DFC	1&4AF		12
Thompson	C.R.J.	LIEUT	DFC		19,84	7
Trescowthick	N.C.	CAPT	DFC	4 AFC		7
Wellwood	J.J.	LIEUT	DFC	2 AFC		6

THE ACES ~ BIOGRAPHIES

WORLD WAR ONE

ALBERRY, Frank

Frank Alberry was born in Hobart on 29 September 1892, and as a young man worked his way to England where he joined the British Army, from which he later deserted and returned home. On the outbreak of war he enlisted in the AIF on 25 August 1914, joining the 8th Battalion and served with distinction at Gallipoli. He was promoted to sergeant and accompanied his battalion to France in March 1916 as a Lewis gun section commander. In July 1916 he was wounded in action, and awarded a Distinguished Conduct Medal (DCM) 'for conspicuous gallantry in action'. He was invalided to England where his right leg was amputated.

On recovery he personally petitioned King George V for transfer to the AFC, and this was approved. After initial flying training he was commissioned as a lieutenant and joined No. 2 Squadron AFC in France on 16 June 1918. Here he flew SE5s and in the last two months of the war gained seven victories, but on 13 August he was again wounded in action, although he was able to rejoin the squadron within a few days. He embarked for return to Australia on 20 November 1918 and his appointment was terminated on 6 March 1919.

He then became involved in the timber business, but subsequently joined the RAAF in September 1939. He served on recruiting duties until 30 June 1942, when he retired from the RAAF and was placed on the reserve list. He died at the Concord Repatriation General Hospital on 23 January 1968.

BAKER, Thomas Charles Richmond

Thomas Charles Richmond Baker was born in Smithfield, South Australia, on 2 May 1897. After attending school in Adelaide, he became a bank clerk, and was already a member of the 11th Royal Australian Engineers, CMF, when the war started. He enlisted in the AIF on 14 July 1915 and joined the 16th Battery, 6th Field Artillery Brigade, arriving in France on 1 July 1916. On 15 December he was awarded a Military Medal for his part in repairing telephone lines under fire in an action near Guedecourt, France, and in August 1917 received a Bar to that award.

He transferred to the AFC on 29 September 1917 and was sent to France as a lieutenant on 16 June 1918 to join No. 4 Squadron AFC, flying Camels. He was able to claim his first victory on 14 July by shooting down a Fokker DVII and gained a further three victories in August. In early September the squadron was re-equipped with Snipes and by the end of the following month he had accounted for a further eight of the enemy. On 24 October he was promoted to captain and appointed a flight commander, and the award of a DFC followed, the citation for which is reproduced (in part) below:

(Baker) had carried out forty low level raids on hostile troops, aerodromes, etc., and numerous offensive patrols, and destroyed eight enemy. In all these

operations he has shown exceptional initiative and dash, never hesitating to lead his formation against overwhelming odds, nor shrinking from incurring personal danger.

On 4 November, together with eight other members of the squadron, flying the new Snipes, he attacked a German aerodrome. On their return they were met by a large formation of Fokker DVIIs returning to their own base and flying high. They attacked from above, and four of the Snipe pilots were shot down, including Baker. He was originally reported missing 'while on offensive patrol', but was later confirmed killed in action.

He was credited with a final score of twelve victories.

BARCELL, Thomas Henry

Thomas Henry Barkell was born in Sydney on 22 May 1892 and was a motor mechanic at the outbreak of the war. He joined the AFC on 16 October 1916, being recruited directly into No. 2 Squadron at Laverton as a fitter. He embarked with the unit at Melbourne on 25 October 1916, arriving in England in December and completed a course in aerial gunnery at No. 4 (Training) Squadron, and in August 1917 rejoined No. 2 Squadron, AFC, (renamed, briefly, No. 68 (Aust) Squadron, Royal Flying Corps) as a gunner.

He was wounded in action on 24 November 1917, and after being hospitalised in England, was posted in May 1918 to No. 8 Training Squadron, 1st Australian Training Wing, for flying training. After qualifying as a pilot on 19 July he was commissioned as a 2nd lieutenant and posted to No. 4 Squadron AFC, initially flying Sopwith Camels, where he displayed such outstanding ability, that he was quickly appointed as a patrol leader only two months after joining the squadron.

He had already shot down four enemy aircraft, the last two on 22 September, when the engine of his aircraft was hit by enemy fire and he just managed to get back to the British lines before crashing, but without sustaining any injuries. The squadron then converted to Sopwith Snipes and he was able to claim the first two victories for the squadron with these new aircraft on 26 October. However on 29 November his aircraft was hit while over Tournai, and this time he was wounded in the leg, and had to land at Peronne, which was a long way from his home base. He was awarded a DFC for seven victories.

He returned to England and was invalided back to Australia, where he was struck off strength on 7 February 1919.

BLAXLAND, Gregory Hamilton

Gregory Hamilton Blaxland, grandson of the famous explorer, was born in Broken Hill on 10 March 1896. He was in Fremantle studying to be an electrical engineer when war broke out and he enlisted in the 10th Light Horse on 21 December 1914. He served at Gallipoli for five months, later serving in France where he was wounded in action 12 December 1916.

He transferred to the Australian Flying Corps in June 1917 and after an attachment to 29th/30th Training Squadron AFC for training as a pilot was posted to No. 2 Squadron in France on 21 March 1918. He had two early victories but on 4 May he shot down the adjutant of an adjoining French unit in his Spad by mistake, killing the pilot. There was an attempt by the squadron to cover up this unfortunate episode, but without success.

As a result, the commanding officer was posted and on 12 May so was Blaxland. In May he was posted to Headquarters 1st Wing for duty at No. 6 Training Squadron AFC as an instructor, but on 1 July was injured in a flying accident. On recovery he was returned to No. 2 Squadron in late September, and claimed six Fokker DVII's shot down during the last month of the war. He was promoted to captain and became a flight commander on 9 November but, perhaps because of the earlier unfortunate episode, he did not receive any decorations. He returned to Australia on 5 March 1919 and his appointment terminated.

BROWN, Allan Runcieman

Allan Runcieman Brown was born in Launceston on 24 April 1895 and before the war was a draper. He enlisted in the 9th Battery, Field Artillery, RAA, on the outbreak of war, and was wounded at Gallipoli on 22 May 1915. He rejoined his unit on 4 September and served in France before transferring to the Australian Flying Corps on 29 April 1916. After training in Egypt he was posted to No. 1 Squadron AFC in Egypt where he flew Bristol Fighters with Lieutenant G. Finlayson as observer. Whenever they met enemy aircraft, this crew was usually able to force them to land on the desert, where they would then destroy them with bombs and machine gun fire. On one occasion they were able to force down an enemy aircraft within the Allied lines. He was promoted to captain and flight commander on 29 May 1915.

On 16 July 1918 they attacked four Albatros scouts and forced all four to land, but without destroying them, and on 22 August their final victim was forced down and captured. This brought their total score to at least six, but by then they had already been recommended for decorations, and on 2 February 1918 separate awards of the DFC for Brown and his gunner were gazetted. He also received a Mention in Despatches, gazetted on 5 March 1919, and he returned to Australia on 21 March 1919.

BROWNELL, Raymond James

Raymond James Brownell was born in New Town, Tasmania on 17 May 1894 and after being educated at Scotch College, Melbourne, was apprenticed to a firm of accountants and auditors in Hobart. At the time war broke out he had already been a member of the 41st Battery, Australian Field Artillery for the past two years as a volunteer in what was then known as the Citizen Military Forces. The day after the declaration of war, Brownell together with every other member of the unit, immediately volunteered to join the AIF. He served with the newly formed 9th Battery Field Artillery, 3rd Field Artillery Brigade in Gallipoli, being in the original landing on 25 April until the night of the evacuation in December, and continued to serve with the unit in France. He was awarded a Military Medal on 10 October 1916, before transferring to the Royal Flying Corps on 3 November 1916 as second lieutenant.

In 1917 he was posted to No. 45 RFC Squadron in France, moving with the unit to Italy in November. On his first patrol on 10 September 1917 he found himself behind a German two-seater, opened fire, and saw the enemy go down in flames. Serving initially under Captain Norman Macmillan in 'A' Flight, he was later promoted to captain and awarded a MC, and by then had claimed twelve victories.

He continued to serve in the RAAF after the war, and was promoted to wing commander in 1936 and went to England on exchange with the RAF as second in command of No. 3 Flying Training School at Grantham. He served throughout the second world war and retired with the rank of air commodore having been appointed a CBE for his services. He wrote his autobiography under the title of 'From Khaki to Blue', but died on 12 April 1974 before its publication in 1978.

CLARK, Alexander Goodlet

Alexander Goodlet Clark was born in Sydney in February 1896 and was a grazier before joining the 12th Australian Light Horse as a corporal on 12 January 1915. He had previously served for three years in the senior cadet corps and for the past two years had been a member of the 46th Light Infantry where he had been a lieutenant for the past six months.

He transferred to the AFC on 14 December 1916, joining No. 68 (Australian) Squadron, RFC, later No. 2 Squadron, in Palestine and in January 1917 embarked at Alexandria for pilot training in the UK. He qualified as a pilot in October 1917 and was promoted to second lieutenant and posted to France to join No. 2 Squadron on 31 October 1917.

He was promoted to the temporary rank of captain and appointed a flight commander on 10 April 1918. On 5 May he fractured his left foot and was hospitalised, relinquishing his recent promotion and appointment. At the end of May, he was posted to No. 6 Training Squadron AFC, and was again promoted to temporary captain and appointed a flight commander. In June he was posted to No. 1 School (Special Flying) at Gostport and in July rejoined No. 6 Training Squadron as an instructor. The following month he was severely injured in an aircraft accident while low flying and admitted to hospital, again relinquishing rank and appointment.

He returned to Australia in December, and on 17 July 1919 his appointment was terminated. He was credited with five victories.

COBBY, Arthur Henry

Arthur Henry Cobby was born in Melbourne on 26 August 1899, and was one of the three top-scoring Australian airmen in World War One. A more detailed biography is recorded in the previous section, 'Four of a Kind'.

COLE, Adrian Trevor

Adrian Trevor Cole was born in Melbourne on 19 June 1885. He was a student at the outbreak of the war, and enlisted as a second lieutenant in the 55th Infantry on 1 August 1914. He transferred to the AFC on 28 June 1914 as a private but was appointed to a commission as a second lieutenant in No. 1 Squadron on 17 November 1916 and posted to the Middle East to join what was then known as No. 67 (Australian) Squadron, RFC (but later to again become No. 1 Squadron, AFC). On 21 April 1917 he was shot down over Tel el Sheria by ground fire, but managed to carry out a successful landing, unharmed, and was picked up by a brother pilot.

Then on 26 June he and another pilot landed to pick up a fellow pilot who had been forced to carry out an emergency landing due to engine failure. The second pilot then took off with the rescued man 'two-up', with Cole flying as escort. However, the rescuer in turn was forced to land with engine failure, and Cole tried to take off with both pilots in his Martinsyde, but he also experienced engine trouble and was forced to crash-land. The trio then began a long walk back, and were finally picked up by a detachment of Light Horse.

On 15 August Cole was promoted to acting captain and appointed a flight commander, after which he converted to Bristol Fighters, and on 14 August he was awarded a Military Cross for carrying out an attack against six enemy aircraft who were about to strafe a group of Allied cavalry. The following extract taken (in part) from the citation for the award describes the events in more detail:

For conspicuous gallantry and devotion to duty. With another officer he attacked and disorganised six enemy machines that were about to attack our cavalry with bombs. The engagement was continued until all six machines were forced to return to their lines. His skill and courage on all occasions have been worthy of the greatest praise.

In May 1918 Cole was posted to No. 2 AFC Squadron in France as a captain and flight commander. Here he began flying SE 5As and over the next five months claimed ten victories; being awarded a DFC after the fourth victory. In November 1917 he embarked for England and in January 1918 was attached to the Gosport school of special flying and on 13 May was appointed acting squadron commander of No. 5 Training Squadron.

Then on 2 June he was posted to No. 2 Squadron AFC with the rank of captain and appointed a flight commander and on 20 October was awarded a DFC. At the end of October he was admitted to hospital and on 27 November was struck off strength of No.

2 Squadron and in January was returned to Australia, arriving home on 7 February 1919. His appointment was terminated on 20 June 1919.

He joined the RAAF on its formation, being appointed on 31 March 1921, and became the Director of Training. In 1926 he was posted as Commandant of No. 1 Flying Training School at Point Cook, and in 1934 was Deputy Chairman of the McRobertson-Miller Air Race. He went on to have a distinguished career in World War Two, and was the Fighter Controller during the Dieppe Raid on 19 August 1942. He retired from the RAAF as an Air Vice-Marshal.

CONINGHAM, Arthur

Arthur Coningham was born in Brisbane but spent his early life in Wellington, New Zealand. At the beginning of the war he served with the New Zealand Expeditionary Force in Somaliland and Egypt. Then, in 1916, it seemed that his military career had come to an end when he was invalided out of the service with typhoid. However, he went to England and joined the RFC. In early 1917 he was posted to No. 32 Squadron, flying DH 2s and DH 5s, and was soon appointed as flight commander.

In July alone he was credited with at least nine victories and was awarded the DSO and MC. The following year he was appointed to command the newly formed No. 92 Squadron, which he took to France in June. He always flew at the head of his unit whenever possible, adding five more victories, and received an award of the DFC. He was wounded twice in action, once with No. 32 squadron and once with No. 92.

After the war Coningham stayed in the RAF, where his nickname of 'Maori' gradually became 'Mary', by which he was known for the rest of his life. During World War Two he was the Air Officer Commanding, Western Desert Air Force from late 1941 to early 1943, after which he was appointed AOC, 2nd Tactical Air Force, a post he held until 1945. He attained the rank of Air Marshal and was knighted for his services. He lost his life on 30 January 1948 while on a civil flight as a passenger to Bermuda with South American Airways.

COWPER, Andrew King

Andrew King Cowper was born in Sydney on 16 November 1898. Cowper joined the RFC and was posted to No. 24 Squadron on 26 August 1917, flying the DH5 fighter. He claimed his first two victories on this type before converting to SE 5As. With the change in aircraft type he had increased his score to nine by February 1918 and the award of the Military Cross was gazetted on 22 April. In the meantime he had claimed a further ten victories during March, bringing his total to nineteen.

He was appointed a flight commander and promoted to captain on 24 April, and received two bars to his MC before being finally posted to the Home Establishment. He later went on to serve in 1919 with No. 79 Squadron, based with the occupation force in Germany. He returned to Australia, where he died in the 1970s.

COX, George J.

George J. Cox was born in Melbourne on 17 July 1894, and was a cabinet maker before enlisting as a private in the AFC on 5 October 1916. He was posted to No. 4 Squadron in December and promoted to sergeant on 9 January 1917, just prior to embarking with the unit for UK. They arrived in Plymouth on 27 March and in August Cox was posted for flying training. On completing the course on 4 December he was appointed to a commission as second lieutenant and posted to France where he joined No. 2 Squadron AFC on 3 April 1918.

Cox had already scored two victories when, flying in a formation about midday on 22 September, they met 28 Fokker and Pfalz scouts at 17,000 feet (5180 metres). He was later to claim three of these as further victories when he was forced to land behind the German lines.

The squadron's account of the engagement recorded the his engine had failed but, after his repatriation at the end of the war, he gave a different account. He was about to attack an enemy aircraft over Lille when he collided with something that knocked the engine completely out of his aircraft. This put him into an uncontrollable spin followed by the inevitable crash. He believed he had been hit by an artillery shell.

He was reported Missing in Action 'whilst on offensive patrol' and on 14 October was reported as a POW in Germany. He was repatriated to England on 24 December 1918 and returned to Australia by sea on 6 May 1919, where his appointment was terminated on 24 July. He was credited with a final score of five destroyed.

CUMMINGS, Eric Douglas

Eric Douglas Cummings was born in Braidwood, New South Wales, on 13 September 1896, and was a cart driver before enlisting as a private in the 15th Btn AIF on 27 October 1914. He quickly became a member of the Australian Army Service Corps and was promoted to sergeant before leaving for overseas in December 1914. However, on arrival in the Middle East he was hospitalised with influenza and bronchitis, before rejoining his unit and embarking for Gallipoli in August 1915.

He subsequently moved with his unit to France in June 1916, before transferring to the AFC in September 1917.

On completing a flying course in December, he was appointed a second lieutenant and posted to No. 2 Squadron AFC in France, on 14 March 1918. He gained his first victory on 3 May but was then attacked by four Triplanes and shot down. He crashed in No Man's Land, but was thrown clear and rescued by Australian infantry. He was soon back on operations and claimed three victories during June and July. He was promoted to captain on 16 August and appointed a flight commander and in November received a DFC, the citation for which recorded that:

This officer has proved himself an able and determined leader of offensive patrols. In carrying out these raids he met with conspicuous success, heavy damage being inflicted on enemy material and personnel. This has been due in the main to his brilliant leadership and skilful navigation. Captain Cummings possesses in a marked degree, courage, combined with cool judgement.

Cummings embarked for return to Australia in November 1918 and disembarked in Melbourne on 5 January 1919. His appointment was terminated at Hobart on 11 March. By the end of the war he had scored a total of nine victories.

DALLAS, Roderic Stanley

Roderic Stanley Dallas was born in Mount Stanley, Queensland, on 30 July 1891, and was one of the three top-scoring Australian airmen in World War One. A more detailed biography is recorded in a previous section, 'Four of a Kind'.

DAVIES, Ernest Edgar

Ernest Edgar Davies was born in Kerang, Victoria, on 16 March 1890 and was a barrister and solicitor before the war. He enlisted in the Light Horse as a private on 10 November 1915.

He was appointed to a commission as a second lieutenant in the AIF in October 1916 and became adjutant of the Geelong Camp on the 15th. He transferred to the AFC on 1 May 1917 and embarked with other reinforcements for the AFC at Sydney on 16 June. Disembarking at Plymouth on 25 August he was posted to undergo a flying training course, which he completed in December, qualifying as a flying officer (pilot) and was gazetted a lieutenant on 5 March 1917. He was then posted to France in April where he joined No. 2 Squadron on 30 June 1918, and claimed his first victory on 27 August.

On 18 October, while on a bombing mission his SE 5A was hit by ground fire, but he managed to crash unhurt within Allied lines. On 15 September he destroyed an Albatros, and shot down another on 1 October. His most successful day was 4 November when he claimed three Fokker DVIIS, bringing his score to seven. He was promoted to captain and appointed a flight commander on 12 November. He embarked for Australia on 6 May 1919 and was later awarded the DFC, gazetted on 3 June 1919, after he had returned to Australia. His appointment was terminated on 16 July 1919.

DRINKWATER, Arthur Thomas

Arthur Thomas Drinkwater was born in Queenscliff, Victoria, and joined the RFC in November 1916. In August 1917 he joined No. 57 Squadron, flying DH4s, and by mid-November he and his observer had together accounted for six victories, all Albatros DVs. He was then posted to No. 40 Squadron in August 1918 and in October was promoted to captain and appointed a flight commander. His final score was nine.

DRUMMOND, Roy Maxwell

Roy Maxwell Drummond, known as Peter, was born in Perth on 2 June 1894, and served in the AIF as a private in the Medical Corps from 1914 to 1916. He then joined the RFC and served in Palestine, initially with No. 67 (Aust) Squadron RFC, later No. 1 Squadron, AFC. On 20 March he took part in the engagement during which Lieutenant McNamara was awarded his VC, and for which Drummond received a MC. He was then promoted to captain and posted to No. 111 Squadron where he scored eight victories flying Bristol Fighters and Nieuports. By the end of the war he had received a DSO and Bar and been promoted to major. He was credited with the destruction of eight enemy aircraft.

Drummond stayed on with what had by now become the RAF and during the 1920s was attached to the RAAF. In 1930 he attended the Imperial Defence College, was promoted to wing commander and received an OBE. In 1936 he was appointed to command RAF Northolt, followed by various appointments in the Middle East including the early years of World War Two. In 1943 he became Deputy to Air Chief Marshal Sir Arthur Tedder, served on the Air Council 1943-45, during which time he received a knighthood and attained the rank of Air Marshal. On 27 March 1945 he was killed in an aircraft accident while flying to Canada.

EDWARDS, Herbert James

Herbert James Edwards was born in Victoria on 20 November 1896. He failed a medical for the AIF but went to England, where he was able to join the British Army. He transferred to the RFC in September 1916 and was posted to No. 32 Squadron in May 1917. Promoted to captain on 1 January 1918 he was posted as an original flight commander in the newly formed No. 92 Squadron. However, he eventually had to leave the unit due to ill health and saw no further service. Meanwhile he had scored five victories and been awarded the DFC. He returned to Australia after the war, and lived in Maryborough, Victoria, until his death on 10 September 1967.

FORREST, Henry Garnet

Henry Garnet Forrest was born in Melbourne on 5 December 1895 and had been a clerk before he enlisted in the 23rd Btn, AIF, on 19 February 1915. He arrived in the Middle East on 27 December and moved with his unit to France in June 1916. He was promoted to lieutenant in the field in October and on 18 March 1917 was awarded the (Italian) Silver Medal for Military Valour.

On 26 April he transferred to the AFC and was one of the first pilots to go to France, when he was posted on 9 May 1917 to No. 68 (Australian Squadron, RFC (later No. 2 Squadron, AFC), flying SE 5As. His first victory did not come until March 1918 but he eventually claimed eleven victories.

He was wounded on 5 August and admitted to hospital where he remained until 15 October, and had been Mentioned in Despatches on 1 June.

On rejoining the squadron on 21 November he was promoted to captain and appointed a flight commander. On 16 June 1918 he was awarded a DFC, and the following is an extract (in part) from the citation:

His leadership of patrols has been characterised by great dash and determination. He has displayed skill in manoeuvring and boldness in attacking superior numbers.

In August he was admitted to hospital and repatriated to Australia in September. His appointment was terminated on 23 February 1919.

NOTE: At the Australian War Memorial, there is an SE 5A painted to represent C9539, the aircraft in which Forrest gained all his victories.

GOBLE, Stanley James

Stanley James Goble was born in Croydon, Victoria, on 21 August 1891. He joined the RNAS in 1915 and served with 1 Naval Wing, flying Nieuport Scouts and Sopwith Pups. He claimed his first victory on 21 July 1916, and another on 24 September. He was then posted as a flight commander to No. 8(N) Squadron and brought his score to eight, and was awarded the DSO and DSC before returning to England at the end of the year.

In 1918 Goble was posted to command 5 (N) Squadron (later to be 205 Sqn, RAF), equipped with DH 4s. He flew several bombing missions in the rear seat, and on 16 March he and his pilot were attacked by a force of enemy scouts, two of which he claimed to have shot down with his rear Lewis gun.

While carrying out a bombing attack on 17 June his pilot was wounded in the head and fainted. Goble regained control, released the bombs and glided towards the lines. While crossing these at 6000 feet (1830 m) his pilot recovered and brought the aircraft home to a safe landing.

In 1921 Goble joined the RAAF, and by 1935 had risen to the rank of Air Commodore, and was the Air Member for Personnel. In 1936 as part of an exchange scheme between the RAF and RAAF he was posted to England as AOC No. 2 Group, Bomber Command, and was later to command the Australian element of the Empire Air Training Scheme in the United Kingdom. He was subsequently awarded the CBE and rose to the rank of Air Vice-Marshal. He died in Melbourne on 24 July 1948.

HAMERSLEY, Harold Alan

Harold Alan Hamersley was born in Guildford, Western Australia, on 6 February 1896. He was commissioned in the AIF and in 1915 served at Gallipoli before transferring to the RFC, and in September 1917 he was posted to No. 60 Squadron. On 23 September he was in the famous fight in which the great German Ace Werner Voss was killed, and in the early stage of that engagement Hamersley nearly became the German's forty-ninth victim when his SE 5 was hit and damaged by fire from Voss. He was promoted to captain, and claimed thirteen victories and received an MC before returning to England in May 1918.

In 1929-32 he was again flying with No. 60 Squadron, which by this time was in India, followed by time as a test pilot with Avros. He was promoted to squadron leader in March 1935, and in July was posted to Worthy Down for engineering duties. In 1938 he became the commanding officer of the University of London Air Squadron, and in 1940 commanded RAF Hullavington. He later became president of the Aircrew Selection Board, before retiring from the RAF. He died in December 1967.

HEPBURN, Allan

Allan Hepburn was born in Melbourne on 11 October 1896 and served in the Artists' Rifles in France during 1916 before joining the RFC. He was posted to 24 Squadron in June 1917, flying DH 5s, and was slightly wounded in action on 16 October. However, he continued flying until mid-November, when he was posted to No. 40 Squadron as a flight commander. He was involved in an accident soon after arrival and sent back to England to recuperate. On recovering he joined No. 88 Squadron as a flight commander, flying Bristol Fighters. By the end of 1918, together with his observers, he had claimed sixteen victories and had been awarded a DFC. He returned to Australia after the war, and joined the RAAF in 1921, becoming a wing commander in the 1930s. He died on 21 July 1975.

HOLLIDAY, Fred Parkinson

Fred Parkinson Holliday was born in Australia, but was working in Canada as a mining engineer when World War One began. He flew with No. 48 Squadron during 1917, and was one of the original Bristol F2A pilots. He and his gunner claimed five victories during April, including four in the one day. On 3 June he shot down an Albatros, and later in the month claimed a further three, followed by one more on 3 July. He was awarded a DSO and MC and was promoted to captain and appointed a flight commander. On 27 July he claimed his 17th and final victory and was later promoted to major. He emigrated to Canada in the early 1920s.

HOOPER, Geoffrey Herbert

Geoffrey Herbert Hooper enlisted in the Royal Engineers on 1 November 1915 and transferred to the RFC in August 1916. He joined No. 11 Squadron on 12 April 1917, and by September had been promoted to captain and become a flight commander. He scored his first victory by shooting down an Albatros DIII on 26 June, and accounted for two more Albatros' in August and September. He and his gunner then proceeded to account for seven Fokker DVIII's during September and shot down one more Fokker on 10 November, bringing their total score to eleven just one day before the end of the war. Hooper subsequently received a DFC, gazetted in 1919, and retired from the RAF in 1923.

HOWARD, Richard Watson

Richard Watson Howard was born in Sydney on 9 October 1896, but grew up in Newcastle, where he studied engineering before joining the 7th Field Company Australian Army Engineers on 13 September 1915. He served in France from March to November 1916, before transferring to the AFC on 7 December 1916. On 18 April 1917 he joined No. 68 Squadron RFC (later to become No. 2 Squadron AFC) which was at that time training in Lincolnshire. He immediately began a pilot's course, which he completed in July and was appointed a lieutenant in the AFC. He rejoined the unit and moved with it to France on 21 September, flying DH 5s.

During November Howard claimed a victory over Cambrai where he had been engaged in heavy ground attacks and was twice forced to land. On a third occasion his aircraft was severely damaged by an enemy aircraft and he was awarded a Military Cross on 23 December. On 22 February 1918 he was promoted to captain and appointed a flight commander in what had now become No. 2 Squadron, AFC, re-equipped with SE 5As. During February and March he claimed seven victories, taking his total score to eight.

On 22 March while leading a patrol of five, operating at 15,000 feet (4500 metres) Howard led the formation in a dive to attack two enemy 2-seaters at 10,000 feet (3000 metres) when in turn they were attacked by thirty enemy fighters and Howard was shot down.

He was initially reported missing in action, but was later reported to have died of wounds received in the above engagement on the same date. He was reported by the Germans to be buried in the military cemetery at Cambrai. However, no trace of the grave could be found by the Australian War Graves Commission, and his name was included in the memorial to the missing erected at Villers-Bretonneux.

HOWELL, Cedric Ernest

Cedric Ernest Howell, known as 'Spike', was born in Adelaide on 17 June 1896 and was a draughtsman before joining the AIF on 1 January 1916. He served with the 46th Battalion in France and was promoted to sergeant in July. In November 1916 he transferred to the RFC with the original batch of two hundred Australians recruited from the AIF and selected to undergo a flying course. On completing the course he was appointed to a commission in the RFC on 16 March 1917, and posted to No. 45 Squadron in France in 1917. He spent the first half of 1918 with that unit in Italy, during which time he claimed nineteen victories and received the DSO, MC and DFC.

Howell and other members of the squadron frequently took on great odds against German and Austrian airmen, and on 8 June he led two other members of the squadron against a force of six Austrian scouts, of which he claimed two shot down. Then on 12 July he, together with one other member of the squadron, fought off ten scouts, with Howell claiming five. Howell survived the dogfights over northern Italy, only to drown off Corfu on 9 December 1919 when his aircraft crashed into the sea while attempting to

fly back to Australia during the England-Australia Air Race. His body was subsequently recovered by the Italian Navy and shipped back to Australia.

HUGHES, Geoffrey Forrest

Geoffrey Forrest Hughes was born in Sydney on 12 July 1895. He joined No. 62 Squadron in February 1918, and during one of his early combats, on 10 March he shot down two Albatros DVs claimed two victories, and on the following day he claimed one more shot down and three more enemy machines driven down and forced to land, although the latter were not added to his score. For this single action he and his observer each received the MC. On 13 March he destroyed two Fokker Dri's and on 12 April he shot down two Fokker DVI's, and by the end of May he could claim a total of eleven victories.

After the war he stayed with the RAAF and received the Air Force Cross before going into the civil side of aviation. He died on 13 September 1951.

JOHNSTON, Edgar Charles

Edgar Charles Johnston was born in Perth on 30 April 1896. He served with the AIF from 1915-16, and then transferred to the RFC. He joined No. 24 Squadron late in 1917, claiming one victory, and was then posted to No. 88 Squadron, which at that time was forming in England. He returned to France with the unit as a flight commander and, together with his observers, he claimed a total of twenty victories and was awarded the DFC.

He returned to Australia after the war and became Controller of Civil Aviation from 1933 to 1936. He was Assistant Director General of Department of Civil Aviation from 1939 to 1955, and adviser to Qantas from 1955 to 1967. He celebrated his ninetieth birthday in 1986, and died on 22 May 1988.

JONES, George

George Jones was born in Rushsworth, Victoria, on 18 October 1896 and was a motor mechanic before the war. He had already served for a year in the Light Horse (Militia) before he joined the 9th Light Horse Regiment in June 1915. He served at Gallipoli from October 1915 until the evacuation in December and later in Palestine, before transferring to the AFC on 28 October 1916. He was initially taken on strength as an air mechanic, and served in this capacity until selected for pilot training in October 1917. He completed the course in December, and was posted as a second lieutenant to No. 4 Squadron AFC in France on 16 January 1918.

He gained his first victory in February, and then on 24 March, while carrying out a bombing run on enemy troops, he was wounded in the back and chest and was off operations for several months. After returning to the squadron in July he claimed three more victories. About this time the squadron had changed from Camels to Snipes, and flying one of the new aircraft, he shot down two Fokker DVIIIs on 29 October and one on 4 November, bringing his score to seven.

On 4 November he was promoted to captain and appointed a flight commander. The armistice was declared a week later and he was repatriated to Australia in May 1919, where his appointment was terminated on 8 August 1919. In the meantime the award of a DFC was gazetted on 23 July 1919, and the following is an extract (in part) from the citation:

A most daring and gallant leader in aerial fighting, in which he has destroyed seven enemy aircraft. Captain Jones has always displayed marked ability in all his duties.

After the war he joined the RAAF, and in World War Two held a series of senior training and staff appointments, before becoming the Chief of the Air Staff in 1942. He received a CBE in 1942, a CB in 1943, and was promoted to Air Marshal in 1948. He was knighted following his retirement in 1952, and continued to live in Melbourne until his death in August 1992.

KENNY, Edward Patrick

Edward Patrick Kenny was born in Trafalgar, Victoria, in January 1888 and was an accountant before the war. He joined the 4th Light Horse on 16 July 1915 and embarked for overseas in November 1915. He transferred to the AFC on probation in January 1917 and was attached to a training squadron for flying instruction. He qualified as a pilot on 3 July and was posted to No. 1 Squadron in Egypt flying Bristol Fighters. On 28 April 1918 he and another pilot forced three Albatros scouts to land. On 3 August he attacked two Albatros', forcing one to land, and shot down two others.

In late September Kenny was sent with two other aircraft from the unit to attack an enemy airfield with bombs, and destroyed or damaged several two-seaters on the ground. Later the same day he shot down a DFW. He was subsequently awarded a DFC and the citation, gazetted in May 1919, credited him with one destroyed, two out of control and four forced to land and destroyed.

Kenny was repatriated to Australia in March 1919 and his appointment terminated on 9 June.

KING, Elwyn Roy

Elwyn Roy King was born in Bathurst, New South Wales, on 13 May 1894, and in 1914 was a motor mechanic before enlisting with the 12th Regiment, Australian Light Horse, on 20 July 1915, and moved with the unit to Heliopolis. He transferred to the AFC on 13 January 1917, and was posted to England and taken on strength at No. 68 (Australian) Squadron, RFC (later No. 4 Sqn AFC) as an air mechanic on 18 April. In August he was attached to a training squadron for pilot training, and on qualifying as a pilot on 15 October he was posted to No. 4 Squadron in November.

King had his first victory on 20 May 1918 and in June shot down two aircraft and a balloon. He was promoted to Captain and made a flight commander in September and by the end of that month his score stood at eighteen, and on 2 October destroyed his fourth balloon by dropping bombs on it.

Soon afterwards the squadron Camels were replaced by Sopwith Snipes, and during the last days of the war King added seven more aircraft to his score. This was the highest number of victories obtained with the Snipe by any other pilot, and included three Fokker DVIIIs on 30 October and two more on 4 November with King's final score reaching twenty-six. The award of a DFC was gazetted in December and a DSO on 3 June 1919, with a much delayed MID announced in July.

King returned to Australia in May 1919 and his appointment was terminated on 11 August. After his return to Australia he became involved in engineering, and during the World War Two he rejoined the RAAF, but died suddenly on 29 November 1941 while commanding the station at RAAF Point Cook.

LARKIN, Herbert Joseph

Herbert Joseph Larkin was born in Brisbane on 8 October 1894. He joined the Royal Engineers in 1914 as a sergeant and served in Egypt and Gallipoli, where he was wounded. On recovery he transferred to the RFC, and after pilot training joined No. 5 Squadron flying RE 8s. He was awarded the French Croix de Guerre and in 1918 was promoted to Captain and posted to No. 87 Squadron as a flight commander. He destroyed six Fokker DVIIIs in August and a further three during September. He was credited with a final score of eleven victories and was awarded the DFC. He returned to Australia at the end of the war and became Managing Director of Larkin Aircraft Supply Company in Melbourne during the 1930s. After the failure of this business he returned to England and settled in the Channel Islands, where he died in 1972.

LINGHAM, George Alexander

George Alexander Lingham was born in Melbourne on 30 November 1898. He joined the RFC as a lieutenant in late 1917 and was posted to No. 43 Squadron. He remained with this unit until the end of the war, where he was credited with five victories and received a DFC.

LITTLE, Robert Alexander

Robert Alexander Little was the highest scoring Australian airman in World War One, and his biography is recorded in a previous section, 'Four of a Kind'.

MALLEY, Garnet Francis

Garnet Francis Malley was born in Sydney in November 1892 and was a mechanic before joining 1st Field Artillery Brigade reinforcements on 12 October 1915. He served as a gunner in Egypt and France before transferring to the AFC on 30 April 1917. He completed his training as a pilot in October and was posted to No. 4 Squadron in December. He claimed three victories in March 1918 and on the 26th was promoted to captain and appointed a flight commander.

On 9 April he was wounded but was able to return to duty within a few days. He was wounded a second time on 18 May but was again able to rejoin his unit within a day or so and later in the month he scored two more victories. He scored his final victory in June, bringing his total up to six, and was awarded a Military Cross in July.

In August Malley was posted to England for training duties with No. 5 Training Squadron. He was repatriated to Australia in May 1919, the award of an Air Force Cross was announced on 3 June, and his appointment was terminated on 4 October. He was subsequently appointed to the Reserve of Officers as a Captain, and in June 1925 he became a member of the Citizen Air Force.

MANUEL, Roby Lewis

Roby Lewis Manuel was born in Kerang, Victoria, on 7 October 1895 and was a farmer before he enlisted in the AIF on 5 April 1916 and proceeded to France with the 43rd Battalion. He transferred to the AFC on 3 May 1917 and after qualifying as a pilot in September was posted to France on 6 February 1917 to join No. 2 Squadron. He scored his first victory on 2 April, in June added four more, and in July was promoted to Captain and appointed a flight commander. He was awarded a DFC on 3 August, and on 16 September he shot down one Fokker DVII and claimed a second out of control.

By the end of the war Manuel had a total of twelve victories to his credit and he received a Bar to his DFC on 18 October. He returned to Australia in June 1919 and his appointment was terminated on 29 July 1919. He served in the RAAF during World War Two, and was still flying his own aircraft up until the late 1960s. He died on 18 October 1975.

McCLOUGHRY, Edgar James

Edgar James McCloughry was born in Adelaide on 10 September 1896 and was an engineering student when he joined the AIF on 16 December 1915. He was appointed a second lieutenant in the 14th Field Company Engineers and arrived in Egypt in March 1916 moving on to France with the unit in June. He was wounded in action in November and on recovery in December he transferred to the AFC. He began pilot training in May 1917, and was posted initially to No. 23 Squadron, flying Spads. Following a flying accident on 18 August, he was hospitalised in England, and on his recovery he became an instructor with the 6th Training Squadron in March 1918.

In April McCloughry was promoted to Captain and posted to No. 4 Squadron as a flight commander, flying Camels. On 12 June he shot down a balloon and a Pfalz scout, and on 1 July he was attacked by two Pfalz, which collided with each other during the engagement. One of these crashed, and he shot down the second in flames. By mid-July he had scored a total of nine victories, and in August was awarded a DFC, with Bar, followed in December by a Mention in Despatches and the award of a DSO. In the meantime, in July, he had claimed a DFW and a Fokker DVII. After this engagement, while strafing and bombing a train, he was hit by return fire and wounded. He managed to return to base, and was taken to hospital but was unable to resume flying duties again before the Armistice. His final score was twenty-one.

The double award of the DFC and Bar at the same time was a very unusual event, and the citations for the simultaneous awards are reproduced below:

London Gazette, 21 September 1918 - Capt Edgar James McCLOUGHEY
(Commonwealth of Australia Gazette, 23 February 1919)

D.F.C. 'Early one morning this officer left the ground and, meeting an enemy two-seater ten miles over the lines he engaged and destroyed it. He was immediately attacked by five scouts; these he out manoeuvred, destroying one and driving the remainder down. He is a determined and successful scout leader, who in recent operations has accounted for nine enemy machines, in addition to three others and one balloon, when serving with another squadron.

Bar to DFC. In the short space of one month this officer has destroyed ten enemy aeroplanes and balloons. He has organised and carried out numerous raids on the enemy, frequently at very low altitudes. Altogether he has destroyed fifteen aeroplanes and four balloons. Early one morning he crossed our lines to attack a balloon which he had previously located. As soon as daylight allowed he dived and opened fire on the balloon, which was on the ground, descending to within fifty feet of it. The balloon burst into flames. He then attacked some horse transport, dropping bombs and firing some three hundred rounds at 1500 feet altitude.

On 7 October McCloughry resigned his appointment in the AIF and was demobilised in London. He subsequently joined the RAF and held a number of senior staff appointments during the World War Two, and was promoted to Air Vice-Marshal in 1947. Retiring from the RAF in 1953, he wrote a number of books on aerial strategy, and died on 15 November 1972.

McGINNESS, Paul Joseph

Paul Joseph McGinness, or 'Ginty' as he was known, was born in Warnambool, Victoria, on 14 February 1896 and was farming before joining the 8th Light Horse on 16 September 1914. He served with this unit at Gallipoli as a sergeant and was awarded a DCM on 22 April 1916 'for conspicuous gallantry' and in the words of the citation 'he did good scouting work and showed great powers of leadership during operations'. He transferred to the AFC on 7 August 1917, and after training as a pilot was posted to No. 1 Squadron AFC in Palestine, where his usual observer was Lieutenant Wilmot Hudson Fysh (later Sir Hudson Fysh). They were both awarded

DFCs and McGinness was credited with seven victories. His citation for the DFC referred to him as 'a bold and gallant airman'.

After the war, these two airmen were the founders of Qantas. McGinness died on 15 January 1955.

McKENZIE, Robert William

Robert William McKenzie was born in Adelaide in June 1895. He worked as a chemist until joining No. 2 Field Ambulance, Army Medical Corps on 19 August 1914. He served in the Middle East and in France before transferring to the AFC in December 1916. After a pilot training course he joined No. 68 Squadron RFC (later No. 2 Sqn AFC) in August 1917, flying DH 5s and on 1 December he scored his first victory by shooting down an Albatros scout. In early 1918, after the squadron was re-numbered as No. 2 Squadron AFC, it was re-equipped with SE 5As, and in February he claimed another victory. He was then credited with a further four and on 1 April was awarded the Military Cross, and on the 23 May was promoted to captain and posted to the 8th Training Squadron.

He embarked for return to Australia in March 1919 and his appointment was terminated on 17 October.

MINIFIE, Richard Pearman

Richard Pearman Minifie was born in Melbourne on 2 February 1898. He joined the RNAS as probationary flight lieutenant in June 1915 and was posted to No. 1 Wing later in the year. He remained with this unit until moving to No. 1 (N) Squadron when it was formed in 1917, equipped with Sopwith Triplanes. He claimed several victories during the first half of the year, and between August and October he claimed eleven victories. By this time he was a flight commander and was awarded a DSC on 2 November, and a Bar to the DSC on the 30th. In early 1919, after the unit had been equipped with Camels, he scored a further four victories flying these aircraft.

The commanding officer of the squadron at that time was Major Dallas (q.v.) and when he was posted for a rest, Minifie became acting Squadron Commander. However, on 17 March he became a prisoner of the Germans when he was either shot down, or suffered engine failure, during a fight with a Jastr 47 and was forced to land behind the enemy lines. On 17 April he received a second Bar to his DSC. He eventually returned to Australia and joined the family flour milling business, and in World War Two he became a squadron leader in the Air Training Corps. He died in Melbourne on 31 March 1969.

PALLISER, Arthur John

Arthur John Palliser was born in Launceston, Tasmania, on 2 March 1890 and was a motor mechanic when the war began. He joined the Army Service Corps on 18 September 1914, arriving in France in July 1915 as a member of a motor transport column. He transferred to the AFC on 22 January 1918 and, after training as a pilot, was posted to No. 4 Squadron on 21 August, flying Camels. He claimed a DVII in September and a balloon in October, when the squadron converted to Sopwith Snipes.

Flying the new aircraft he was able to claim two DVIIIs on 28 October, and added three more to his score the following day. He was shot down and killed on 5 November and was buried in Anvaing Communal Cemetery in Belgium.

PENTLAND, Alexander Augustus Norman Dudley

Alexander Augustus Norman Dudley Pentland ('Jerry') was born in Maitland, New South Wales, on 5 August 1894. He joined the 12th Light Horse Regiment on 5 March 1915, and served as a machine gunner on Gallipoli until he was hospitalised in September and evacuated by hospital ship to England in December. He transferred to the RFC on 22 February 1916 and after pilot training in England was posted to France with No. 16 Squadron in June, flying BE 2Cs.

Within a few days of their arrival Pentland and his observer shot down a Fokker. This was his only success with No. 16 Squadron, as he soon moved to No. 29 Squadron. He was in the middle of his training to convert to DH 2s when he broke his leg while playing rugby. On his recovery, he was employed as an instructor until July 1917 when he was posted to No. 19 Squadron, flying Spads, still without any victories except his first and only in June 1916. Shortly after joining the squadron, he took on ten Albatros scouts single-handed and fought them off but his aircraft had been so badly shot about that it was a complete write-off. He also found that four bullets had passed through his flying suit without inflicting any injury.

On 26 September, Pentland was injured when he had to crash-land his aircraft after it had been hit by an artillery shell. By this time he had already claimed ten victories and had been awarded a Military Cross. On recovery he had another period as an instructor before being posted to No. 87 Squadron as a flight commander. He continued at what had become known as his 'lone wolf' tactics, now flying Dolphins, and was always seeking out enemy two-seaters, or leading his patrol into dogfights with German scouts. By early August 1918 he had raised his score to twenty-three and been awarded a DFC. On 25 August he was shot down and wounded in the foot.

He relinquished his RAF commission and joined the RAAF in August 1921 with the rank of flight lieutenant. However, he resigned from the RAAF on 26 February 1923 to fly in the New Guinea goldfields. Then in 1930 he became a pilot with the newly formed Australian National Airways (ANA).

During World War Two he rejoined the RAAF and commanded an air-sea rescue and communication unit in the Pacific with the rank of squadron leader, for which he was awarded the AFC. He retired to Bayview, New South Wales, where he died in 1983. His biography, *Australian Air Ace*, by Charles Schaedel was published in 1979.

PETERS, George Clifton

George Clifton Peters (later Clayton) was born in Adelaide on 6 May 1894 and was a schoolteacher before he joined the 8th Field Coy Engineers on 15 December 1915. He served in the Middle East and France until transferring to the AFC on 5 December 1916. After completing his pilot training in May 1917 he was posted to No. 67 Squadron, RFC (later No. 1 Squadron, AFC) in December, flying Bristol Fighters. On 24 August, in company with another Bristol Fighter, they engaged seven LVGs and Pfalz Scouts, and German sources later confirmed that only one of their machines had returned home. Both he and his observer were awarded the DFC in August. In November he was promoted captain and appointed a flight commander. He was credited with a total of seven victories.

Peters was subsequently awarded the Order of Namada by the King of Hadjar, and embarked for return to Australia in March 1919. His appointment was terminated on 28 May 1919, and he was placed on the Reserve of Officers. He served in this capacity from October 1920 until May 1928. He then joined the militia, where he served actively as Lieutenant Colonel G.C. Peters in the Victoria LofC Area and was awarded the Efficiency Decoration.

He was mobilised on 4 September 1938 and served with the 2nd AIF until October 1942.

PHILLIPPS, Roy Cecil

Roy Cecil Phillipps was born in Sydney on 1 March 1892 but grew up in Western Australia, where he was practising as an accountant in Perth at the outbreak of war. He joined the 28th Battalion, AIF, on 28 April 1915 and served at Gallipoli from September until the evacuation in December. He had been commissioned in October and moved with his unit to France in March 1916. He was wounded in action on 5 August and promoted to captain on the 12th. He was wounded again in November, and again on 6 March 1917. He was invalided back to Australia with a partly paralysed leg, but on recovery he successfully applied for transfer to the AFC.

Phillipps was posted as adjutant of the newly formed No. 68 (Australian) Squadron (later No. 2 Squadron, AFC) and arrived back in England on 30 January 1917. He applied for, and was accepted, for pilot training on 2 May and once qualified was attached to No. 32 Squadron in France on 3 August 1917 for operational experience on the DH 5. Three days later his aircraft was hit by anti-aircraft fire and he was forced to crash-land; he was unharmed, and in October rejoined No. 68 Squadron as a flight commander. On 22 November he forced an enemy scout to land and received the Military Cross on 23 December.

In January 1918 the squadron was renumbered as No. 2 Squadron, AFC, and was re-equipped with SE 5As. Phillipps claimed five victories during March and scored another victory in May and on 14 May he received a Bar to his MC. On 12 June he shot

down two Fokker Triplanes, an LVG two-seater and a Fokker DVII, and on 22 June was awarded a Bar to his MC. He had another victory in July and a further three in August, bringing his score to fifteen. He was awarded a DFC on 3 August and in October was promoted to major and appointed to command No. 6 Training Squadron.

Phillipps returned to Australia in late 1919 and his appointment was terminated on 15 January 1920. He then took up farming in eastern Australia but returned to the RAAF in World War Two as a flying officer in February 1940, and in May 1940 was appointed to command No. 2 Elementary Flying School, at Archerfield. He was killed in a private aircraft accident on 21 May 1941, having reached the rank of wing commander.

RICHARDS, Cecil Roy

Cecil Roy Richards was born in Garvoc, Victoria, on 24 July 1893, and transferred to the RFC in late 1916, having already seen service with the AIF in Gallipoli and France. He was posted to No. 20 Squadron in June 1917, flying FE 2Ds. He made his first claim, shared with his gunner, on 14 June, when they shot down an Albatros DV, and added three more victories to their score in early July.

On 17 July, with another gunner, he claimed two more victories by shooting down two Albatros DVs, and later in the day, shot down two more, with a fifth forced to land. He claimed four more during early August, bringing his score to twelve. On 17 August he was shot down, wounded and taken prisoner. The award of a MC was gazetted on 17 September. Richards died on 28 March 1978 at Glenelg, South Australia.

RICHARDSON, Lancelot Lytton

Lancelot Lytton Richardson was born in Bareeba, New South Wales. He joined the RFC and on 3 June 1916 was posted to No. 25 Squadron, scoring his first victory two weeks later by shooting down a Fokker E on 17 June, and was able to claim a second Fokker E on the 26th. He was wounded in action on 20 July, after having destroyed two more Fokker E's earlier the same day. He returned to the unit where he was promoted to captain and appointed a flight commander in early 1917, but was shot down and killed on 13 April. He had already been credited with seven victories and the award of an MC was gazetted in May.

RIGBY, Harry Alexander

Harry Alexander Rigby was born in Melbourne and was commissioned in the RFC on 22 May 1916. He was posted to No. 40 Squadron on 1 August, where he was to remain for only a month before taking ill. On recovery he was posted to No. 1 Squadron on 2 February 1918, but was again taken ill in May and left the unit on the 17th. During this short time with the unit, however, he had claimed six victories. Two of these were in March, one in April and three in May.

ROBERTSON, Albert Ernest

Albert Ernest Robertson was born in Melbourne on April 1892 and was an electrical engineer before joining an AIF depot Signal Training Company on 5 September 1916

and transferring to the AFC on 17 January 1917. He was taken on strength No. 4 Squadron as an Air Mechanic (Radio) and arrived in England with the squadron on 27 March 1917. He then attended a Wireless Training School as a cadet in July and graduated in December with the rank of second lieutenant.

He rejoined No. 4 Squadron in France on 29 January 1918 and on 20 March was one of a squadron patrol of ten aircraft led by Cobby which intercepted a large enemy patrol of mixed Albatros and Pfalz scouts. In the ensuing engagement five of the enemy were destroyed, one of which was credited to Robertson. On 23 March he destroyed a Fokker triplane and shot two others down out of control, and on the 25th he shot down two triplanes and an Albatros, for a total of seven victories in six days. These were all scored during the March offensive by the Germans when air activity was at its maximum. These conditions were not to be repeated and Robertson did not score again.

He was awarded the Military Cross on 4 June and in July was posted to the Gosport School of Special Flying, followed by a posting to No. 5 Training Squadron. He was returned to Australia and his appointment terminated on 20 July 1919.

SHEPHERD, Alfred Seymour

Alfred Seymour Shepherd was born in Moira, New South Wales, on 13 April 1893 and was a civil engineer before enlisting in the 4th Australian Pioneer Battalion on 8 September 1915 and was appointed a second lieutenant on 1 December. He embarked for the Middle East in March 1916 and was transferred to 46th Battalion in May, moving with the unit to France in June. He transferred to the RFC on 22 October 1916 and was posted to No. 29 Squadron on 25 April 1917, flying Nieuport Scouts. In a little over two months he was able to claim ten victories and was awarded a Military Cross. He was promoted to Captain and appointed a flight commander on 13 July and awarded the DSO on 15th. Five days later he was shot down and killed.

SIMONSON, Eric Landon

Eric Landon Simonson was born in Melbourne on 23 January 1894 and was an engineering student when war broke out. He joined the 8th Battalion, AIF, on 9 August 1914 and was appointed to a commission, with past service in the University Rifles recognised. His unit left Australia for the Middle East in September 1915. The unit was transferred to France in June 1916, and Simonson was promoted to captain in March 1917. He transferred to the AFC on 9 September and completed his pilot training in January 1918, retaining the rank of captain. He was posted to No. 2 Squadron on 18 May and during the last two months of the war he claimed five victories.

Simonson stayed on in England and was granted special leave with pay from July to September 1919 while attending the Boulton Paul Aviation Department. He returned to Australia in November, and his appointment was terminated on 25 February 1920.

SMITH, Francis Ryan

Francis Ryan Smith was born in Brisbane in 1896 and was a clerk before enlisting in the 31st Battalion, AIF, on 9 November 1915. He was promoted to Sergeant in September and embarked on 9 November for service in France. In July 1916 he was promoted to lieutenant and in October was wounded in action. He was repatriated to England, but after discharge from hospital was able to rejoin his unit in January 1917.

In April Smith received the Military Cross which, as set out in the preamble to the citation was: ‘... for conspicuous gallantry in action. He led a raiding party into the enemy’s trenches with great courage and initiative. He set a splendid example to his men.’

He transferred to the AFC on 29 August and after graduating as a pilot was posted to No. 2 Squadron in France in February 1918. He claimed his first victory in May with more victories to follow in July and August. He was slightly wounded in action on 8 July but was able to rejoin his unit on the 13th.

In September Smith claimed two enemy aircraft destroyed and four out of control and on 14 October he claimed three Fokker DVIIIs destroyed, and a fourth out of control, to bring his total to sixteen. On 27 October he received a DFC and was promoted to Captain and appointed flight commander. On 10 November he was shot down by ground fire while strafing but managed to evade capture, coming back through the lines on foot three days after the Armistice.

Smith returned to Australia and his appointment was terminated on 6 May 1919. A full text of the citation for his DFC was later published in the Commonwealth of Australia Gazette dated 23 May 1919 and is set out below:

This officer, combines high individual enterprise and determination with exceptionally able leadership. These qualities were conspicuous on 14 October, when, leading a patrol of five machines, he saw a formation of twelve Fokker biplanes above him. Relying on the cooperation of another higher formation of Bristol machines, he deliberately manoeuvred his formation into a disadvantageous position in order that our higher patrol might be able to attack the enemy while the latter’s attention was concentrated upon destroying his, Lieutenant Smith’s formation. The stratagem was entirely successful, with the result that two enemy machines were destroyed and two others were believed to crash. The Fokkers were then reinforced by eight more machines, and in the ensuing combat Lieutenant Smith shot down one in flames, his patrol destroying two others. We suffered no casualties.

SMITH, Ross Macpherson

Ross Macpherson Smith (known as 'Hadji') was born in Adelaide on 4 December 1892 and was a warehouseman before enlisting in the 3rd Australian Light Horse Regiment on 17 August 1914. He was promoted to Sergeant and embarked for overseas in October, landing at Gallipoli on 5 May 1915. He was promoted to Regimental Sergeant Major in August and was commissioned in the field in September. Later that month he was hospitalised with enteritis and repatriated to England and on recovery returned to the Middle East in March 1916.

In October Smith was attached to the AFC for instruction as an observer, and on 25 January 1917 was graded as a qualified observer and seconded for duty with the 57th Rescue Squadron. In May he was awarded the Military Cross:

(Conferred on Lieutenant ROSS McPHERSON SMITH) 'for conspicuous gallantry and devotion to duty when his pilot descended to the rescue of an officer who had been forced to land. On landing he held the enemy at bay with his revolver, thus enabling his pilot to rescue the officer and to safely fly away his machine.

On 4 May Smith was attached to No. 3 School of Military Aviation Middle East, for pilot training and on qualifying as a pilot in July was posted to No. 67 Squadron. On 1 September he was wounded in the head and admitted to hospital, but was able to rejoin the unit at the end of the month. On 19 October he forced an enemy two-seater to land behind its own lines, and then landed next to it. His observer, Lieutenant A.V. Cann, covered the crew with his rear guns while Smith set fire to the enemy aircraft, and they then flew back home.

On 29 November he was promoted to Captain and appointed a flight commander and in January he received a bar to his Military Cross. The citation sets out the circumstances leading to the award:

For conspicuous gallantry and devotion to duty. He was one of two pilots who carried out a remarkable series of photographs in one flight, completely covering an important area of forty-five square miles. On a later occasion he successfully bombed an important bridgehead from a low altitude, and his work throughout, as well as his photography, has been invaluable, and characterised by the most consistent gallantry.

He was known as a very aggressive pilot and received a DFC in September 1918, by which time his personal score had reached eleven, and a Bar to his DFC was gazetted in February 1919. The citation for the latter award is set out in full below:

During the operations prior to October 1918, he took part in numerous engagements involving flights of 150 to 200 miles, and succeeded in doing extensive damage to the enemy's hangers, railways, and Captain Smith displayed most consistent gallantry with marked ability in all his work, whether bombing by night or day or in personal encounters in the air. Whilst operating with the Sherrffian forces he destroyed one enemy machine and brought down two others out of control in the desert.

In November Smith was detached from No. 1 Squadron for a month for special duty with the RAF in a flight from Egypt to India in connection with the recommended air route from India to Australia for the proposed England Australia air race. A second bar to his DFC was gazetted in February 1919, and the award of an Air Force Cross, 'in recognition of distinguished services rendered during the war', followed in June.

In 1919 he and his brother, Keith, made the famous first flight from England to Australia in a Vickers Vimy, leaving England on 12 November and arriving in Darwin on 10 December. Both brothers were knighted for their epic flight. Ross Smith was killed in a flying accident on 14 April 1922.

Smith's official record of service contains the following closing entries:

Granted leave from 2/10/19 till 23/10/19.

Returned to Australia per Air, as competitor in Great Britain to Australia Flight, 30/10/19.

23/3/20. Arrived at Adelaide.

23/5/20. Appointment terminated in the AIF at Adelaide.

STEPHENS, Eric John

Eric John Stephens was born in Western Australia on 13 September 1895 and was commissioned in the RFC on 13 April 1917. He qualified as a pilot on 30 June and, after a period as an instructor, was posted to No. 41 Squadron on 16 March 1918. His first victory on 28 June was shared with another squadron pilot, but subsequently he began to claim regular victories of his own. By the end of hostilities he had a total score of thirteen and had been promoted to Captain and appointed a flight commander. He received a DFC which was gazetted in June 1919, and later became a Qantas pilot during the 1930s.

TAPLIN, Leonard Thomas Eaton

Leonard Thomas Eaton Taplin was born in Adelaide on 16 December 1895 and worked in Sydney as an electrical engineer until the outbreak of war, when he joined the Army Engineers on 6 December 1915. He served in France with the 5th Field Company, and transferred to the AFC on 30 April 1917. He qualified as a pilot in October and was posted to Egypt where he joined No. 67 Squadron, RFC (later No. 1 Squadron AFC) in Palestine on 10 November.

On 17 January 1918 while on a photographic mission Taplin's camera jammed, and while repairing it he was attacked by an Albatros scout. He managed to operate his gun, but after a single round this also jammed. Disengaging while he cleared the stoppage, he then renewed his attack, forced down the Albatros and continued his run. The award of the DFC was gazetted on 3 June and later that month he was posted to France, and joined No. 4 Squadron, flying Camels. On 17 July he shot down a two-seater, and then, while taking off on 26 July, with a heavy load of bombs, his undercarriage axle snapped. He managed to switch off his engine, and unfasten his safety belt before the aircraft touched down and the bombs exploded, but he was thrown clear and was not injured.

Taplin went on to claim ten victories over the next six weeks, of which four were balloons. On 5 September he was one of a patrol of five aircraft which met a large formation of JG III Fokker DVIIS. Their patrol leader gave the signal to disengage and broke away, but the rest of the patrol did not see this and were soon involved in a heavy dogfight. Taplin later claimed one out of control and a second damaged; but all four Camels were shot down, with only Taplin although wounded surviving. He became a POW for the rest of the war.

He was repatriated to England in December 1918 and remained in hospital until July 1919. He returned to Australia in October and his appointment was terminated in Adelaide on 12 December 1919, medically unfit. His final score was confirmed at twelve.

THOMPSON, Claud Robert James

Claud Robert James Thompson was born in Melbourne on 15 June 1892 and transferred to the RFC from the AIF. He served with No. 19 Squadron, flying Spads, from 4 June to 14 November 1917. He scored his first victory on 19 July by shooting down an Albatros DVII. In October he destroyed three more of the enemy and on 9 November he gained a double victory by shooting down two Albatros DVs. He carried out many more offensive patrols and ground attack missions, but without adding any more victims to his score of six. He was killed in a flying accident on 17 July 1918 while with No. 63 Training Squadron.

TRESCOWTHICK, Norman Charles

Norman Charles Trescowthick was born in Melbourne on 18 July 1895 and was a boot manufacturer before enlisting into the AFC direct on 6 October 1916. He joined the third reinforcement group for No. 2 Squadron as an air mechanic, and arrived in England in March 1917. In July he was attached to No. 29 Training Squadron as a cadet for training as a pilot and on completing the course in November was commissioned as a second lieutenant and posted to No. 4 Squadron in France on 22 February 1918. He was promoted to captain and appointed a flight commander in September, and on 6 October was awarded a DFC. In mid-October the unit was converted to Snipes, and flying one of these he claimed his last victory on 30 October to bring his total to seven.

He was repatriated to Australia in May 1919 and his appointment was terminated on 24 July.

WELLWOOD, James Joseph

James Joseph Wellwood was born in Drouin, Victoria, on 15 October 1892. He was a motor mechanic and at the outbreak of the war had already served two years in the Royal Australian Garrison Artillery, Militia. He was enlisted in the Siege Brigade, AIF, on 1 June 1915 and arrived in France with the unit via England in February 1917.

He transferred to the AFC in March and, after training as a pilot, was commissioned and posted to No. 2 Squadron in France on 16 June 1918. During the next three months he claimed six victories, the last on 4 November, and he was awarded a DFC in October. Wellwood returned to Australia in June 1919 and his appointment was terminated on 15 August.

APPENDIX TWO

THE ACES ~ BIOGRAPHIES

WORLD WAR TWO

AUSTRALIAN FIGHTER ACES ~ WORLD WAR TWO

*NAME	INIT	RANK	DECS	RAF UNIT	AUST UNIT	THEATRE	SCORE
Armstrong	H.T.	SQNLDR	DFC*	129 611 72	452	EUR PAC	12
Arthur	W.S.	GPCAPT	DSO DFC MID*	--	3 75 76 81 71W	ME PAC	10
Atherton	G.C.	WGCDR.	DFC* MID	--	24 75 82 80 78W	ME	5
Barr	A.W.	SQNLDR	MC DFC*	23	3 71W	EUR	12
Bartle	J.P.	SQNLDR	DFC MID	112	450	ME	5
Bell	M.H.	PLTOFF	DFC	19		EUR	5
Bisley	J.H.S.	FLTLT	DFC	126	452	ME	7
Bowes	R.H.	FLTLT	DFC	79		UK FE	6
Boyd	J.L.	PLTOFF	DFM	135 242		ME	5
Boyd	A.H.	SQNLDR			3 75 84 76	ME PAC	5
Brennan	V.P.	FLTLT	DFC DFM	64 249	452 79	UK ME PAC	10
Bretherton	B.A.	FLGOFF.	DFC MID	73 255 267		ME	12
Bungey #	R.W.	WGCDR	DFC	226 145	452	EUR	5
Bunting	B.	WOFF	DFC	93		ME	5
Burney	H.G.	FLGOFF		112		ME	5
Caldwell	C.R	GPCAPT	DSO DFC* PCV	250 112	1W 80W	ME PAC	28.5
Cameron	A.C.	FLTLT	DFM	--	3	ME	5
Chisholm	K.B.	FLTLT	MC DFM PGC	--	452	EUR	6
Clare	A.W.B.	SQNLDR			453 24 5	PAC	5
Clisby #	L.R.	FLGOFF	DFC	1		EUR	16
Coate	E.E.	FLTLT	DFC*	252 227 272		ME	10
Cock #	J.R.	SQNLDR	DFC	87 72	3 453 1W	EUR PAC ME	10
Constantine#	A.N.	WGCDR		141 273 136		EUR FE	6
Cowper	R.B.	SQNLDR	DFC*	108	456	EUR ME	6
Crombie	A.	FLTLT	DSO DFC	25 176 39		EUR ME PAC	11
Cronin	F.M.	FLGOFF	DFC	81	453	EUR ME	5
Cullen #	R.N.	FLTLT	DFC	80 267		ME	16
Cundy	W.R.	FLTLT	DFM DFC	135 260	452	EUR ME	5
Curchin #	J.	FLTLT	DFC	600 609		EUR	9
Curtis	V.F.	FLGOFF			3	ME	5
Foskett	R.G.	SQNLDR	OBE DFC MID*	80 94	--	ME	6.5
Fry	C.A.	FLTLT	DFC DFC*	112		ME	6
Gaze #	F.A.O.	SQNLDR	DFC*	41 44 64 610 616		EUR	12
Gibbes	R.H.B.	WGCDR	DSO DFC*	--	3 450 80W	ME	10
Giddy	P.R.	FLGOFF		--	3	ME	5
Glyde	R.B.	FLGOFF	DFC	87		EUR	5
Goldsmith	A.P.	FLTLT	DFC DFM MID	234 126	452	EUR MEPAC	17
Goold	W.A.	FLTLT	DFC	607		EUR FE	5
Gordon	R.L.	SQNLDR	DFC*	--	24 31	PAC	6
Hammond	R.F.	WOFF	DFM	248		EUR ME	5
Hampshire	K. McD.	GPCAPT	DSO* DFC	456	12 22 23	PAC EUR	7
Hillary #	R.H.	FLTLT		603		EUR	5

*NAME	INIT	RANK	DECS	RAFUNIT	AUSTUNIT	THEATRE	SCORE
Hughes #	P.C.	FLTLT	DFC	164 234 247		EUR	15
Jackson	L.D.	WGCDR	DFC*	--	21 23 75 80 78W	PAC	5
Jackson	J.F.	SQNLDR	DFC MID	--	23 3 75	ME PAC	8
Jeffrey	P.	GPCAPT	DSO DFC MID*	--	3 75 76	ME PAC	5
Kearney	B.J.T.	FLGOFF	DFC	--	30	PAC	9
Leu	R.M.	FLTLT	DFM	112		ME	7
Mailey	W.H.A.	SGT	DFM	--	3	ME	6
Mayers	H.C.	WGCDR	DSO DFC* MID	94 601		EUR ME	11
McBurnie	D.H.	FLTLT	DFC DFM	238	450 451	ME	5
McDonald	K.N.	FLTLT	DFC CG	--	31	PAC	8
McIntosh	L.	FLTLT		122 111		EUR ME	5
Nitschke	R.H.	PLTOFF		250		ME	5
Olive	C.G.C.	WGCDR	DFC	65	456	EUR	6
Parkinson	C.H.	FLTLT	DFC	19 56 603 229		EUR ME	10
Perrin	J.R.	WGCDR	DFC MID	87 54	3 5 24 76	ME PAC	10
Rankin	R.	SQNLDR	DFC	236 227	30	EUR ME	5
Ratten	J.R.	WGCDR	DFC	72	453	EUR	5
Rawlinson	A.C.	GPCAPT	DFC*	--	3 79 73W	ME	10
Rees	S.W.	FLTLT	DFC	600		ME	6
Reid	L.S.	FLTLT	DFC	504 130 185	79	EUR ME PAC	5
Russell #	I.B.N.	FLGOFF	DFC*	245 607 609		EUR	8
Saunders	J.H.W.	FLTLT	DFC		3	ME	6
Scherf	C.C.	SQNLDR	DSO DFC*	418		EUR	14.5
Sheen	D.F.B.	WGCDR	DFC*	212 72		EUR	6
Shipard	M.C.	FLTLT	DFC*	68 89		EUR ME	14
Simes	R.H.	SGT	DFM	--	3	ME	6
Smith	D.H.	WGCDR	DFC SMV	126 41	453	ME EUR	5
Spurgin	A.L.M.	FLTLT	DFC	68 87 89	86	EUR ME	5
Steege	G.H.	GPCAPT	DSO DFC MID	11 260	450 3 73W	ME	8
Storey	W.J.	FLTLT	DFC	135		FE PAC	8
Thorold-Smith	R.E.	SQNLDR	DFC		452	EUR	6
Truscott	K.W	SQNLDR	DFC* MID		452 76	EUR PAC	16
Turnbull	P. StG	SQNLDR	DFC	208	3 75 76	ME	12
Tweedalee	G.R.	PLTOFF	DFM	43 126 155	--	ME	7
Waddy	J.L.	SQNLDR	DFC MID AM	250 4 SAAF	80	ME PAC	15
Whittle #	R.J.	SQNLDR	DFM	250	86	ME PAC	11
Wilson	R.K.	SGT	DFM	--	3	ME	8
Yarra	J.W.	FLTLT	DFM	64 233 185	453	EUR	12

Served with Royal Air Force

* Denotes a Bar to Decoration

The Aces – Biographies

World War Two

ARMSTRONG, Hugo Throssell

Hugo Throssell Armstrong ('Sinker'), was born in Perth, on 19 June 1916 and was a car salesman before joining the RAAF as an aircrew trainee on 25 May 1940. He was a nephew of Captain Hugo Throssell, who had won a Victoria Cross at Gallipoli in 1915. After training in Australia he arrived in the United Kingdom in March 1941 and, after OTU training was posted briefly to No. 257 Squadron on 28 July 1941, before moving to No. 129 Squadron flying Spitfires. It was with that unit that he claimed his first victory on 20 September 1941 shooting down a Messerschmitt Bf 109.

He did not add to his score until March 1942 when he shot down another Messerschmitt Bf 109. On 6 April he was promoted to flight lieutenant and posted to No. 72 Squadron as a flight commander. By May he had increased his score to five, with a mixed bag of Bf 109s and Fw 190s, and was then awarded the DFC on 29 May 1942. His citation read, in part:

He has participated in twenty-nine operational flights over enemy territory, destroying five enemy aircraft, and has damaged two others. Armstrong's courage, initiative judgement and skill as a leader, have contributed largely to the successes achieved by his flight.

On 12 September Armstrong was promoted to squadron leader and posted to command No. 611 Squadron. By this time his score had increased to eight. He added to his score by shooting down a Fw 190 on 2 November and two Bf 109s on 20 January 1943. By early February his score had reached eleven, and he had been awarded a bar to his DFC in January 1943. He seemed destined to become one of the leading aces, but on 5 February while leading a section of Spitfires, he and his two companions were surprised and attacked by a superior force of eight Fw 190s. In the resulting fight, Armstrong was shot down and killed.

ARTHUR, Wilfred Stanley

Wilfred Stanley Arthur ('Wilf'), was born in Sydney on 7 December 1919. He joined the RAAF as an air cadet at Point Cook on 4 September 1939, one day after World War Two began, and graduated as a pilot on 3 March 1940 with the rank of Pilot Officer. After a brief tour in Australia with No. 22 (City of Sydney) Squadron, he was posted on 27 March to No. 3 Squadron, a permanent RAAF unit, and embarked with them to the Middle East, leaving Sydney on 14 July 1940. On arrival the squadron was equipped with Gladiators, but these were shortly replaced with Hurricanes.

On 12 December 1940, he shot down his first aircraft, a Fiat CR 42, but his own aircraft was hit and he was forced to bale out. The following day he was back in the air and shared in the destruction of several

enemy aircraft. However, he did not score again until 14 April, when shot down a Bf 110, while flying one of the new Hurricanes. By November 1941 the unit had again been re-equipped, this time with Tomahawks, and on 22 November he was credited with damaging three of the enemy.

Arthur was promoted to flight lieutenant on 1 October 1941, and appointed as a flight commander, and on 30 November he was awarded an immediate DFC for downing four aircraft in a single action. On this occasion he had already shot down three aircraft when his own aircraft was damaged, and he started to return to base. On the way home he shot down another aircraft, making a total of four in the one sortie, made up of two Ju 87s and two Macchi 200s.

On one other occasion his aircraft was damaged in action with the enemy, and he was forced to land inside the fortress of Tobruk. He somehow managed to borrow a Hurricane and flew home to rejoin his unit and received a Mention in Despatches in January 1942. He was posted back to Australia shortly afterwards, where he arrived in March to join No. 76 Squadron at Townsville on 13 April. On 1 October he was promoted to squadron leader and in January 1943 was appointed to command No. 75 Squadron, which was operating Kittyhawks and located at Milne Bay.

On 14 April the Japanese attacked Milne Bay with a force of one hundred aircraft in a bid for air supremacy. Arthur led his squadron to the attack, but his guns failed to fire. Nevertheless, he twice led his squadron in a determined head-on attack, and then made several attempts to ram one of the attacking bombers in an attempt to force it to fly into the sea. For this action he was awarded the DSO, the citation for which reads (in part):

The extreme gallantry, matchless leadership and devotion to duty displayed by Squadron Leader Arthur was one of the chief factors in the success of the day's air fighting.

Arthur's next move was to No. 71 Wing at Goodenough Island on 14 June to be wing leader, with the rank of wing commander, and two months later at the age of 24 was promoted to group captain. He was the youngest ever to have achieved this rank, and the record stands to the present day. On 11 November he was seriously injured in an aircraft accident whilst his aircraft was on the ground at Kiriwina and was repatriated to Australia.

He fully recovered from his injuries in December 1944 and, after a brief spell as commanding officer of No. 2 OTU at Mildura was posted to command No. 81 Wing at Noemfor and Labuan. In April 1945 he was transferred to command No. 78 Wing at Nadzab, and received a MID twice for his services with that formation. He remained on active duty right to the end of hostilities, and with a final score of ten, was discharged on 14 February 1946.

ATHERTON, Geoffrey Charles

Geoffrey Charles Atherton was born in Launceston on 27 September 1919, and was an accountant before joining the RAAF on 19 July 1940. After graduating as a sergeant pilot in March 1941 he served with Nos. 24 and 25 Squadrons and received his commission as a pilot officer in September. Atherton was posted in early 1942 to the newly formed No. 75 Squadron, equipped with Kittyhawks. He moved with the unit to Port Moresby and took part in the early defence operations there. On 10 April he shot down a Japanese bomber, and eight days later shared in the destruction of a Zeke.

Shortly after this, the squadron was withdrawn to Australia for rest and re-equipment, but it returned to New Guinea in July 1942, in time for the battle of Milne Bay. Atherton, who had remained with the squadron and by now was a flight commander, destroyed another Zeke during that action. On 13 June 1943 he was promoted to squadron leader and appointed to command the unit. He next commanded Nos. 80 and 82 Squadrons, still flying Kittyhawks, later becoming wing leader, and in June 1944 received the DFC.

In January 1945 Atherton was promoted to wing commander and appointed wing leader of No. 78 Wing at Labuan, but was shot down by anti-aircraft fire on 3 February 1945. He landed in the sea, close to Japanese held positions, and was fired on from the shore, but was picked up unharmed by a rescue Catalina. In June 1945 he received a bar to his DFC, the citation for which read in part:

Squadron Leader Atherton has displayed outstanding courage and devotion to duty during his present operational tour with No 78 (Fighter) Wing. During the past six months he has led the formation on one hundred and twenty fighter sorties against heavily defended targets and shipping and, by his ability and determination, has achieved excellent results.

His experience and sound knowledge of air tactics has enabled the Wing to inflict severe losses on the enemy with low cost to themselves. His aggressive leadership has proved an inspiration to all other pilots of the wing.

In June 1945 he was appointed to command No. 8 OTU, followed by several staff appointments, until he was demobilised on 28 June 1946. His final score was five confirmed victories.

BARR, Andrew William

Andrew William Barr ('Nicky'), was born in Wellington, New Zealand, on 10 December 1915, but came to Australia at an early age, and was raised and went to school in Victoria. He became well known as an international rugby player, was a member of the 39th Battalion CMF and an accountant by profession, before joining the RAAF as a cadet in March 1940. He graduated as a pilot officer six months later and was posted to No. 23 Squadron on 20 November. He was posted to No. 3

Squadron on 28 September 1941, already in the Middle East and at the time being re-equipped with Kittyhawks.

Barr shot down his first aircraft, a Messerschmitt Bf 110, on 12 December, and the next day shot down a Ju 88 and a Bf 109. He increased his score to five on New Year's day 1941, by shooting down two Ju87s, and on the 11 January he destroyed a Fiat G50 and a Bf 109. He then noticed a fellow pilot had made a forced landing, and decided to try to land and pick him up. With his wheels half-down he was attacked by two Bf 109s, but shot down one of them and was credited with a 'probable' for the other.

Barr was then outnumbered by newly arrived German fighters and was himself shot down but managed to survive a subsequent crash-landing. He was strafed by the enemy fighters and wounded, but managed to get away and made for the Allied lines. After walking through the desert for five days he reported back to his unit for duty, and brought back much valuable information regarding the disposition of enemy tanks and defences. He was awarded an immediate DFC and the following is an extract (in part) from the citation:

He then observed one of his fellow pilots who had been shot down waving to him from the ground, but when preparing to make a landing in an attempt to rescue him, Barr was attacked by two Messerschmitt 109s.

Although the undercarriage of the aircraft was not fully retracted he immediately manouvered to engage the attackers only to find that his guns had jammed. Quickly rectifying the fault he delivered an accurate burst of fire which caused one of the Messerschmitts to disintegrate in the air.

A further two enemy aircraft joined in the combat and Flying Officer Barr was wounded and forced down. While on the ground he was further wounded by the enemy's fire, but despite this he made his way through the enemy lines and rejoined our forces some three days later.

He was soon back in action and on 1 February shot down a Ju 87, and on 8 March destroyed a Macchi 202, with a probable Macchi 200, and two other 200s damaged, and was promoted to flight lieutenant on 1 April.

In early May Barr assumed temporary command of the unit and on 22 May shot down another Bf 109, but on 25 May his engine over-heated and he was forced to land behind the enemy lines. He had just removed the engine covers when he noticed enemy tanks approaching, but managed to get started and take off, returning to base without his engine cowlings. On 30 May he was engaged by a force of eight Bf 109s, and managed to shoot down one of them before his own aircraft was hit and he was forced into a crash-landing behind the enemy lines. Once again he walked home, but this time in only two days.

He was reported missing twice more, after being shot down, but made it back home on each occasion, before scoring his twelfth and final victory, a Fiat G 50, on 24 June. On the 26 October he was shot down and badly wounded while escorting a force of Bostons on a raid. He took to his parachute and was taken prisoner by the Italians, and spent some five months in hospital, at a prison camp in Italy.

He later attempted to escape, but was recaptured and sent to a punishment camp until 9 September 1943 when he was placed on a train bound for Germany. He escaped from the train and was at large for a considerable time until finally making his way

through enemy lines to friendly forces on 2 March 1944, and was hospitalised suffering from malaria.

Barr had been promoted to squadron leader and awarded a bar to his DFC during his captivity. For his bravery and exploits as a POW he was later awarded a Military Cross. The citation for this award tells it all and is set out in full below:

Squadron Leader Barr was wounded and his aircraft shot down in North Africa on 27 June 1942.

A few hours after being captured and while the Italians were attending to their wounded, he hobbled a quarter of a mile in an unsuccessful attempt to escape. He was transferred to Italy and sent to a hospital at Bergamo. Four and a half months later he escaped and had almost reached Switzerland when he was recaptured and sent to Gavi.

When prisoners were being evacuated from the camp to Germany, Squadron Leader Barr managed to unfasten the door of the waggon and, after organising the escape of other prisoners with him, jumped from the train. He soon met another officer who had injured himself when jumping, and after the latter had received medical attention at San Lorenzo they both travelled on to Monastero.

Eight days later he left his companion and went to Goriana Valli and here, finding himself too weak to cross the mountains, he organised prisoners in the district and, as a result, many of them were able to escape to the Allied lines.

Squadron Leader Barr was again captured by Alpine troops and, after being ill-treated, was handed over to the Germans who imprisoned him with another recaptured escapee in a prison cell. Discovering the key of the door to be on the outside, they managed to escape with the aid of a piece of wire and return to Coriana. Here Squadron Leader Barr acquired a radio transmitter and continued his good work among the prisoners.

Towards the end of February 1944 he obtained guides and brought ten prisoners through to Allied lines.

A Military Cross was awarded to airmen only for gallantry on the ground and was very rare indeed amongst RAAF personnel. Although quite frequently awarded to airmen in the early days of World War One, it had been replaced by the Distinguished Flying Cross for bravery in the air. It is believed that only about five or six Military Crosses were in fact ever granted to Australian airmen in World War Two, and of these two went to members of No. 3 Squadron - Barr and another officer named Cameron.

Barr was repatriated to Australia, arriving back on 11 September 1944, and was posted to No. 2 OTU, Mildura, as Chief Instructor, with the rank of wing commander. Just on a year later he was hospitalised at No. 6 RAAF Hospital, Heidelberg, and his appointment was terminated on 8 October 1945.

After the war Barr became a company manager and director, but on 20 March 1951 joined the active CAF as a pilot and was granted the acting rank of wing commander. He served in this capacity until 15 April 1953 when he relinquished his appointment and was transferred to the general reserve at his own request.

BARTLE, John Philip

John Philip Bartle was born in Coolgardie, Western Australia, on 6 June 1917. He was a stock and station agent and had been a member of the local Light Horse Regiment, CMF, for two years before joining the RAAF on 25 September 1940 as an aircrew trainee. He completed his course on 3 June 1941 and was granted a commission as a pilot officer. He embarked 5 July 1941 for the Middle East and was initially posted to No. 112 Squadron, RAF, flying Tomahawks in the Western Desert. He had his first victory when he destroyed a Messerschmitt Bf 109 on 24 November 1941. He added two more to his score on 5 December by shooting down a Ju 87 and another Bf 109 in the one sortie. The squadron converted to Kittyhawks early in 1942, and he was appointed a flight commander.

On 10 February he led ten aircraft against an enemy formation of twelve Macchi 200s, escorted by some Bf 109s. He shot down one of the Bf 109s, whilst the other pilots shot down all twelve of the Macchis. This brought his score to five within just a few months, but he was never to score again.

Late in 1942 Bartle was posted for a while as commanding officer of No. 1 Air Ambulance Unit, RAAF (Middle East). On 18 February 1943 he was posted to No. 450 Squadron, RAAF, as a flight commander, and on 14 March was promoted to squadron leader and appointed commanding officer of the unit. Only ten days later he was shot down by anti-aircraft fire and was shot at by machine gunners after a successful forced landing. However, he managed to escape when another Kittyhawk gave him covering fire, and he rejoined his squadron uninjured.

He was awarded the DFC on 7 January 1944 and continued to lead the squadron for the rest of the North African campaign and the invasion of Sicily. He returned to Australia in June 1944 and in July was posted to the School of Army Cooperation, Canberra.

Bartle was discharged on 20 July 1945 at his own request to join the British Borneo civil staff unit.

BELL, Maxwell Herron

Maxwell Herron Bell was born in Toowoomba, Queensland, on 12 June 1924. He was working as a tractor driver in Bowenville before enlisting in the RAAF on 20 July 1941 as an airman aircrew. He completed his flying training course in Australia as a sergeant pilot and on 6 March 1942 was posted to the UK, embarking in Sydney on 15 June 1942. He was promoted to flight sergeant on 30 October and posted to No. 19 Squadron, flying Mustangs, on 22 December.

He was promoted to warrant officer on 30 October 1943, and served with No. 19 Squadron continuously until he was reported missing, presumed dead, on 9 September 1944. He had been shot down by flak while attacking enemy railway targets over Holland, although it was later learnt that he had been shot after capture by German troops. A DFC was gazetted on 17 November 1944, and his commission was also announced posthumously shortly afterwards. He was credited with destroying five enemy aircraft, of which three were FW 190s.

BISLEY, John Henry Eric

John Henry Eric Bisley was born at Molong, New South Wales, on 7 May 1920 and was a bank clerk before joining the RAAF as an aircrew trainee on 24 October 1940. He trained in Canada and graduated as a sergeant pilot on 3 April 1941. He was posted to No. 126 Squadron, RAF, at Malta flying Spitfires on 5 September 1941, and was commissioned on 5 January 1942. On 30 March 1942 he was credited with attacking and breaking up a large formation of enemy aircraft single-handed. In the resulting engagement he fought off eight Bf 109s, shot down one Ju 87 and damaged a Ju 88 before he was wounded and his own aircraft damaged, but he managed to carry out a successful crash-landing.

On 5 April he destroyed a Ju 87 and a Ju 88 and again scored a double later in the month by shooting down two Bf 109s, having chased them all the way to Sicily. He was again wounded in the latter engagement, for which he received a DFC. On 23 August he was posted back to Australia, with a total score of seven, and on 11 December 1942 was posted to No. 452 Squadron, in the defence of Darwin.

He continued to fly in the South-West Pacific Area until January 1944, but without a chance to add to his score. He was then posted to No. 8 OTU, and was discharged on 26 September 1945 at his own request.

BOWES, Roderick Russell Herbert

Roderick Russell Herbert Bowes was born in Melbourne on 22 January 1916 and joined the RAAF as an aircrew trainee on 10 November 1940. On graduating as a pilot officer on 1 May 1941 he was posted to the United Kingdom where he joined No. 79 (RAF) Squadron on 28 October 1941. He moved with the unit to India on 21 March 1942 for service in Burma flying Hurricanes, and was promoted to flight lieutenant on 7 May 1942.

He claimed his first victory on 15 December when he shot down a Sally, and scored again on 5 March 1943 when he destroyed an Oscar. On 17 March he shot down another Oscar and on 5 April he shot down a Zeke. In May 1943 he was awarded a DFC and appointed a flight commander. On 21 May he engaged a large formation of Oscars and destroyed at least two before he was shot down and killed.

BOYD, Alan Hill

Alan Hill Boyd was born in Quirindi, New South Wales, on 17 March 1916 and joined the RAAF as an air cadet on 4 September 1939, graduating on 2 March 1940. He embarked for the Middle East on 15 July 1940, where he joined No. 3 Squadron on 14 August. On 13 December he was one of five Gladiators shot down in a dogfight but was able to carry out a successful forced landing. This was followed by a successful run over the next six weeks, when he was able to confirm the destruction of six CR42s and two or three probables. Boyd was promoted to flight lieutenant and was returned to Australia, where he was posted on 18 March 1942 as a flight commander in No. 75 Squadron, flying Kittyhawks. Here he was able to claim at least one victory against the Japanese before being posted to 7 SFTS, Deniliquin, on 25 May 1942.

This was followed by a series of attachments to a variety of training and base units in Townsville and Cairns until 3 December when he was posted to No. 84 Squadron forming part of No. 1 Fighter Wing at Richmond. He moved with the wing to Darwin on 25 January and in March 1943 was posted to command No. 76 Squadron, a position he held until the end of the war. He was credited with six victories, two probables, and three damaged. His appointment was terminated on 17 October 1947 on demobilisation.

BOYD, John Livingstone

John Livingstone Boyd (known as 'Tony') was born in Byrnestown, Queensland, on 20 May 1919 and was a jackaroo before enlisting in the RAAF as an airman pilot for flying training on 4 October. After training in Canada he graduated as a sergeant pilot on 6 June 1941 and was posted to the United Kingdom where he joined No. 135 Squadron RAF on 15 September. In October he was posted to No. 242 Squadron and went to Malta with the squadron when it was moved there in December.

In the transfer of this squadron to North Africa early in 1942 he remained behind in Malta with a posting to No. 185 Squadron. On 15 March 1942, he scored his first victories whilst on loan to No. 126 Squadron. On that date he shot down two Bf 109s, and by the end of March was credited with twodamaging twoJu 88s and probably destroying two others.

On 1 April he destroyed a Ju 88 with a probable Ju 87, and on the 8th destroyed another Ju 88 with a further one probable destroyed and one damaged. On the 14th Boyd was posted back to No. 185 Squadron, and by the end of April he had added yet another probable Ju 88, with three more damaged to his score. After this he changed over from his Hurricane to a Spitfire.

Boyd was awarded an immediate DFM on 1 May and was commissioned on 2 May. On the 8th he shot down a Ju 88, and next day was credited with one probable and one damaged. On 14 May, in a lone engagement against a force of eight Italian Macchi 202s, his Spitfire was hit heavily, and with the pilot probably already dead, was seen to spin down and crash near Takali. At the time of his death, his final score stood at five confirmed, five probables and seven damaged.

BRENNAN, Virgil Paul

Virgil Paul Brennan was born at Warwick, Queensland, on 6 March 1920 and was an articled law clerk before joining the RAAF as an aircrew trainee on 8 November 1940. After receiving his early flying training in Australia, he was posted to Canada for final training, and graduated as a sergeant pilot on 17 April 1941. He was then posted to the United Kingdom where he joined No. 64 Squadron, flying Spitfires and located at Hornchurch.

Later that year Brennan moved with the squadron to Malta, and shortly thereafter was posted to No. 249 Squadron as a flight sergeant, still flying Spitfires. Only two days later, on 17 March 1942 he destroyed a Bf 109, and just over a week later was credited with damaging two Ju 88s over Valetta. Then on 20 April he destroyed another Bf 109. Returning from this engagement which had been just west of Gozo, he met up with and engaged a Ju 88 which had been bombing the island. When last seen this aircraft was descending rapidly through cloud with both engines on fire.

During the next month he destroyed three more Ju 88s and one Ju 87. In addition a further Ju 88 fell out of control and crashed after a burst of cannon fire and yet another Bf 109 fell away with a wing missing. He was commissioned as a pilot officer on 14 May and one week later the award of a DFM was announced. He was credited with one more victory, bringing his official total to ten, before being posted back to England for instructional duties. He was awarded a DFC on 6 October and was promoted to flight lieutenant on 15 November.

He was posted back to Australia in April 1943 where he served for a while with No. 452 (Spitfire) Squadron, and then finally with No. 79 Squadron at Goodenough Island. He was fatally injured in an aircraft accident at Garbutt, Queensland, on 13 June 1943. His final score was ten enemy aircraft destroyed, two probably destroyed and five damaged.

BRETHERTON, Bruce Albert

Bruce Albert Bretherton was born in Melbourne on 26 August 1922 and was a university student before joining the RAAF on 26 April 1941 as an aircrew trainee. He was trained in Rhodesia graduating as a sergeant on 2 February 1942, and transferred to the Middle East on 26 February. After OTU training he joined No. 267 Squadron on 19 August. He remained with that unit until 3 May 1943 when he was posted to No. 73 Squadron in the Western Desert flying Hurricanes in a night-fighter role.

On 10 May 1943 Bretherton shot down a Ju 52 and destroyed a Ju 88 on 26 June, but gained no further victories

before being posted in January 1944 to No. 255 Squadron in Italy flying Beaufighters. He was promoted to flight lieutenant in June 1944 and on 6 July he shot down three Ju 87s in the one sortie, which event was confirmed in the citation to his DFC, which read in part:

During July 1944 he was on patrol over the Ancona area when the enemy launched a dive bombing attack on our positions. Despite continuous anti-aircraft fire, this officer succeeded in intercepting and destroying three Junkers 87s.

On 30 July he destroyed a Ju 88 and over the next two weeks got two more Ju 88s, and his award of a DFC was gazetted on 8 September. Bretherton was returned to Australia in November 1944 and transferred to the reserve on 26 April 1945 to join Australian National Airways. His final score was twelve.

He was latter appointed to the active CAF as a pilot on 12 June 1951 with No. 21 (CAF) Squadron, and granted the rank of squadron leader on 1 April 1954. He was awarded an MBE on 12 June 1958 for service with the Citizen Air Force, and his CAF service was terminated on 30 August 1966.

BUNGEY, Robert Wilton

Robert Wilton Bungey was born at Fullerton, South Australia, on 4 October 1914 and was an insurance clerk before joining the RAAF on 15 July 1936 as an air cadet at Point Cook. He completed the course on 15 July 1937 and was then discharged from the RAAF and seconded to the RAF. In 1939 and 1940 he flew Fairy Battles with 226 Squadron in France before converting to Spitfires in June 1940.

He joined 145 Squadron in August 1940, in time to take part in the later stages of the Battle of Britain, thus becoming one of the select band of 'the few'. He was shot down on 7 November but managed to bale out without harm and return to his duties of flight commander. He left the squadron in March 1941 and in June was promoted to squadron leader and took over command of No. 452 Squadron, the first Australian fighter unit in Europe.

Like many other good leaders Bungey passed over many opportunities for an easy 'kill' so that a new pilot could gain some battle experience and confidence. The records of the time are rather vague, but it is known that he shot down a Bf 109 on 6 November 1941, shortly before he left the squadron. He was awarded the DFC and he is credited with an official score of five.

Bungey was promoted to wing commander on 10 July 1942 and went on to command RAF Stations Shoreham and Hawking. He was placed on the reserve on 2 January 1943, and returned to Australia by sea, arriving in Melbourne on 6 May. He died tragically a month later in Adelaide.

BUNTING, Bobby

Bobby Bunting was born at Melbourne on 18 July 1922 and joined the RAAF as an aircrew trainee on 19 July 1941. He graduated as a sergeant pilot in February 1942 and was posted to the United Kingdom. After further training he joined No. 93 Squadron on 23 August 1943 in the Middle East, flying Spitfires. He was promoted to warrant officer in October 1943 and scored his first victory during the fighting over Italy. He is credited with having destroyed two Fw 190s during the one sortie in February 1944, and followed this up by shooting down two Bf 109s on 24 March also in the one sortie.

Three days later he was wounded during an engagement with a Fw 109, but pressed home his attack and was credited with probably destroying it. In spite of his wound and severe damage to his own aircraft he returned safely to base. On 2 July 1944 he received his commission as a pilot officer, and on 21 July joined No. 203 Squadron after receiving a DFC on 9 June 1944. He had one more victory before the end of his operational service, with a score of five confirmed and one probable.

Bunting was repatriated to Australia in November 1945 and his appointment was terminated on 30 January 1946. He later received a post-war award of an American DFC, gazetted in 1949, for his work covering the landing at Salerno.

BURNEY, Henry George

Henry George Burney was born in Croydon, New South Wales, on 6 December 1915 and was a sharebroker's clerk before joining the RAAF on 19 August 1940, after having already served for six months in an army militia signals unit. He completed his training course on 2 April 1941 and was posted as a sergeant pilot to No. 112 Squadron in the Western Desert. On 22 November 1941 he was one of seven Tomahawks from the wing shot down during a heavy engagement with Bf 109s over the Tobruk area. He was seen by a fellow pilot who landed his Hurricane to pick him up. However, he burst a tyre, and both men were obliged to walk home, returning safely to their unit three days later. Burney was appointed to a commission on 30 March 1942, and was to be subsequently credited with five victories by mid-March 1942. He failed to return from a ground attack sortie on 30 May 1942.

CALDWELL, Clive Robertson

Clive Robertson Caldwell the highest scoring Australian airman in World War Two. A more detailed biography is recorded in the previous section, 'Four of a Kind'.

CAMERON, Allan Cecil

Allan Cecil Cameron was born at Toowoomba, Queensland, on 15 September 1912, and had been the overseer at a sheep station in Queensland before joining the RAAF on 24 May 1940. He graduated on 13 January 1941, and was posted to the Middle East as a sergeant pilot, where he joined No. 3 Squadron flying Tomahawks. He scored his first victory during the Syrian campaign when, on 25 June 1941, he shot down a Vichy French Potez 63. Then on 12 October he shot down a Bf 109 in the Western Desert and on 26th of the same month he destroyed another Bf 109. Two days later, however, he was himself hit and had to crash-land behind the enemy lines.

However, he was rescued from closely approaching enemy troops by his commanding officer, Squadron Leader Peter Jeffrey (q.v.), who landed alongside. Discarding his parachute Jeffrey took off again with Cameron on his lap and made a successful landing back at base. This was a remarkable effort, as 'Tiny' Cameron was by far the biggest man in the squadron and Jeffrey subsequently was awarded the DSO for this and other feats of leadership.

On 30 November Cameron damaged a Fiat G50 and four Ju 87s and on 13 December destroyed a Bf 109 and shared another. On 16 December he was again shot down in enemy territory, but walked back arriving at the squadron three days later, having been reported missing in the meantime. On 11 January 1942 he was shot down again. This time he crash-landed in enemy held territory, was taken prisoner, and sent to Tripoli. However, he escaped on 17 January and began walking eastwards, but was betrayed by local Arabs. He was then sent to a prison camp in Italy but again managed to escape although he was captured one day later. He was finally sent to a camp in Germany where he remained until the end of the war, having been commissioned and promoted in the meantime, and a DFM was gazetted on 6 October 1942.

Cameron was repatriated to Australia in August 1945 and his appointment terminated on 14 March 1946, with the rank of flight lieutenant. He later became the president of the Queensland branch of the RSL.

CHISHOLM, Keith Brace

Keith Brace Chisholm was born in Sydney, New South Wales on 22 December 1918 and was a dental student when he joined the RAAF on 24 June 1940. After training in Australia and Canada he was posted on 5 May 1941 as a sergeant pilot to No. 452 Squadron, the first RAAF fighter unit in Europe. On 9 August 1941 he shared in the destruction of two Bf 109s over the French coast, and on the 16th he shot down two Bf 109Es, on his own account, in the one engagement. He shot down one more Bf 109E on 18 September and on the 20th destroyed a Bf 109F. On the 21st he shot down a further Bf 109F and damaged another on the same day, bringing his personal score to six in almost as many weeks.

On 12 October Chisholm was detailed to provide support for a bomber attack on the Boulogne docks, where he became involved in a series of dogfights and was shot down. He managed to parachute into the Channel, but was picked up by the Germans and became a prisoner of war. While at the POW camp at Lamsdorf, he changed identities with a soldier and he and another officer made several attempts to escape. They finally got away in June 1942 and headed for Poland, but after a series of adventures evading capture, they were finally betrayed in Czechoslovakia, recaptured and returned to Lamsdorf.

Chisholm was placed in solitary confinement as a punishment, but in August managed to break out once more. He attempted to steal a German aircraft as part of his escape plan but was not able to do so because of the tight security at the local airfield. He pressed on east, working as a farm labourer for two months before finally making it to Poland in 1943, some eighteen months after his last escape. After several brushes with the police on the way, and travelling by night he made his way to Warsaw where he spent the next two years with the Polish underground.

In early 1944, disguised as a Flemish lance-corporal in the German army, he travelled from Warsaw to Brussels, and eventually to Paris, where he worked with the French Resistance. He fought with them against the Germans, in the streets of Paris, until the arrival of the Allied Army and was repatriated to England on 30 August 1944. In the meantime, he had been commissioned on 1 May 1942 and promoted to flight lieutenant on 1 May 1944.

On his return he received a much delayed DFM for his exploits as a fighter pilot, and a richly deserved Military Cross for his activities as a POW and resistance fighter. This award of the MC was one of only a very few made to any member of the RAAF during the war, and certainly the first to be received by a pilot. The citation, as well as describing in detail the events outlined above, concluded in the following terms:

Throughout his experience Pilot Officer Chisholm showed the greatest ingenuity and outstanding courage and determination. His dogged persistence and careful planning were of the highest order.

He was later awarded Poland's Gold Cross with Swords and was demobilised on 5 March 1946. He died in the USA in 1991 and his ashes were returned to Australia by his widow and subsequently scattered at a simple but impressive ceremony in the Garden of Remembrance at Rockwood Cemetery, New South Wales, and a memorial plaque was unveiled.

CLARE, Alfred Wattle Benjamin

Alfred Wattle Benjamin Clare was born at West Maitland, New South Wales, on 1 September 1910 and had learnt to fly with the Newcastle Aero Club in 1937. He was a clerk with the Department of Transport, Newcastle, where he had also been a bus driver before enlisting in the RAAF as an airman aircrew on 11 July 1940. He graduated as a sergeant pilot on 27 June 1941 and in August was posted to No. 453 Squadron in Malaya, flying Buffaloes.

On 22 September he claimed a fighter shot down and two others as probables, which were later confirmed from wrecks found on the ground and identified as K 143s. In

January 1942 he claimed two more Japanese aircraft destroyed and was evacuated to Batavia four days before the fall of Malaya, eventually arriving back in Australia on 15 March.

Clare was attached briefly to various units during the next three months, but finally settled at No. 11 EFTS, Benalla, as a flying instructor on 14 September. He was promoted to flight sergeant on 1 August and was commissioned as a pilot officer on 1 October. In June 1943 he was posted to No. 24 Squadron, and on 14 September was posted to No. 5 Squadron as a flight commander.

In April 1944 he was posted to command the unit and granted the acting rank of squadron leader, a post he held until October 1945, and was demobilised on 2 November 1945. He joined the instructional staff of the Newcastle Aero Club, where he became CFI in September 1947. In the early 1950s he was on temporary duty with Gibbes Sepik Airways, flying in New Guinea, but was later forced to retire from all active flying because of ill health. He died on 19 August 1965.

CLISBY, Leslie Redford

Leslie Redford Clisby (Les) was born in McLaren Vale, South Australia, on 26 June 1914 and joined the RAAF as an air cadet at Point Cook on 24 April 1935. On graduating, he transferred to the RAF, and in September 1939 was a member of No. 1 Squadron with the rank of flying officer. The unit moved to France as part of the Advanced Air Striking Force, and he was one of the first pilots to see action. He shot down a Bf 110 on 31 March 1940 followed by a Bf 109 on 1 April and another the next day. Thus began a meteoric career during the German Blitzkrieg which was launched in May.

Clisby quickly built up a reputation as a most aggressive pilot, attacking regardless of the odds and frequently on his own. During a period of five days beginning on 10 May he shot down a total of thirteen enemy aircraft. On 10 May he shot down two Do 17s, and was himself hit by French anti-aircraft fire, followed the next day by three Bf 109s. On the same day he also shot down a He 111 which landed in a field. Clisby landed beside it, and chased one of the crew who was making a run for it. Catching up with the enemy he brought him down with a rugby tackle and handed him over to the French.

On 12 May Clisby shot down a Bf 109 and two Hs 126s, receiving an award of the DFC on the same day, and on 13 May he destroyed a He 111 and a Bf 110. Then on 14 May, again alone, he engaged an overwhelming force of enemy fighters, of which he destroyed two before being shot down in flames and killed, with a final score of sixteen.

COATE, Edward Ernest

Edward Ernest Coate was born on 13 August 1908 at Lakes Entrance, Victoria, and had been a garage proprietor before joining the RAAF on 12 October 1940 as an aircrew trainee. He was commissioned on 29 May 1941, and posted to the Middle East in March 1942 where he served briefly with Nos. 252 and 227 Squadrons RAF, flying long-range Beaufighters. He was then posted to No. 272 Squadron flying Beaufighters, and on 30 September 1942 he shot down a He 111 and destroyed a Ju 87 on the ground and damaged three others. Operating out of Malta he shot down a Savoia SM82 and damaged another on 12 November, followed by a Cant Z.508 transport seaplane on the 23rd. Next day he destroyed a six-engined BV 222 flying boat, and damaged a Do 24.

On 3 December he shared in the destruction of a Ju 88 and on the 9th shot down a Ju 52 and damaged a second Ju 52 and a Ju 88. On the 11th he destroyed two more Ju 52s, and then on 16 January he claimed another Ju 88. This was his last victory and brought his score to nine and a half, with one on the ground. He was awarded the DFC in February, with a Bar to it in April. He was promoted to flight lieutenant on 10 December and was posted from the unit in March 1943 and received a bar to his DFC in April, the citation for which states (in part):

Flight Lieutenant Coate is an extremely efficient and fearless flight commander who invariably executes his tasks with great determination. One day in March 1943 he took part in a successful operation against an enemy force menacing allied positions at Ksar, Rhilane, setting three tanks on fire. Some days later he pressed home an attack on an enemy force near El Hamma. Although his aircraft was severely damaged by anti-aircraft fire he inflicted a loss before being compelled to land in our own lines.

Coate returned to Australia in June and was posted as an instructor to No. 5 OTU and later served at RAAF Headquarters on intelligence duties. His service was terminated at his own request on compassionate grounds on 16 May 1945.

COCK, John Reynolds

John Reynolds Cock was born in Renmark, South Australia, on 3 March 1918, trained as an air cadet at Point Cook before the war and was seconded to the RAF in January 1938. As a member of No. 87 Squadron flying Hurricanes, he moved to France with the Air Component and fought throughout the Blitzkrieg there, shooting down a He 111 in April 1940. Returning to England at the end of May, he became one of the small band of Australians who took an active part in the Battle of Britain.

On 10 July during an engagement over the Channel, his aircraft was hit and caught fire, but he managed to parachute safely into the sea and swim ashore. On 26 July he shot down a He 111 and on 11 August destroyed a Ju 88 and was credited with damaging a Bf 109. On 30 September he again shot down a Ju 88 and damaged a Bf 109. By the end of the year he had destroyed ten enemy aircraft and was awarded the DFC before being posted as an instructor.

Cock joined No. 453 (RAAF) Squadron as a flight commander in June 1942, followed by a short attachment to No. 222 Squadron (RAF). He returned to Australia on 22 February 1943 and after a brief attachment to No. 2 Squadron, was posted to No. 1 Spitfire Wing at Darwin, where he joined No. 54 (RAF) Squadron. In April 1944 he returned to the United Kingdom where he was posted to No. 3 Squadron flying Tempests. After flying a Tempest squadron out to India in April 1945 and remaining with it until December, he was posted to 324 Wing in Italy in February 1946 where he commanded No. 72 Squadron until December. He was released from the RAF in 1948 and returned to Australia where he died on 28 August 1988.

CONSTANTINE, Alexander Noel

Alexander Noel Constantine was born in Moama, New South Wales, on 13 December 1914 and in 1938 joined the RAF as a regular officer. At the outbreak of the war, he was serving with No. 141 Squadron flying Defiants, and remained with that unit until April 1943, when he was posted to Ceylon to command No. 273 Squadron. However, in June he was posted to Burma to command No. 136 Squadron, and on 12 January 1944 scored his first victory. Here he continued to fly Hurricanes, until converting to Spitfires at the end of the year. He scored his first victory on 15 January 1944, destroying a Mitsubishi Hamp, and damaging another. Then on 20 January when leading his squadron, he intercepted a formation of more than fifty Japanese aircraft, and placing his fighters with the sun behind, dived to the attack. He shot down a Nakajima Oscar, one of five destroyed by the squadron, and probably destroyed three more and damaging another.

He was promoted to wing commander shortly after this engagement, and continued to command the squadron throughout the year. On 15 February he shot down another Hamp, subsequently destroying one of the first Nakajima Tojos seen in Burma,

and probably destroyed or damaged four others. His final official score was six. He was subsequently posted to the staff at Headquarters in Delhi. Constantine remained with the RAF after the war, and later became involved in civil aviation in Australia. He was killed in an aircraft accident on 29 July 1947.

COWPER, Robert Barson

Robert Barson Cowper was born in Broken Hill, New South Wales, on 24 June 1922 and was a junior draftsman before joining the RAAF on 10 December 1940 and training in Australia and Canada. He completed his course on 4 May 1941, was commissioned in July, and was posted to United Kingdom where he joined No. 153 Squadron as a night fighter, flying Defiants, before they were replaced by Beaufighters in 1942. Cowper was posted to the Middle East in January 1943 and served briefly with No. 89 Squadron before joining No. 108 Squadron on 15 March.

Still flying Beaufighters, he was involved mainly in ground attack and train-busting sorties over Tunisia. On one such occasion he was forced to land behind enemy lines, but managed to get back safely to the allied lines. On 11 July while flying over Sicily, he destroyed a Ju 88, but was so close that his own aircraft was badly damaged by exploding debris, and he and his observer were forced to bale out, both landing in the sea. Both were picked up and returned to their squadron three days later, where they resumed operational flying. On 21 July he destroyed a Ju 52, and received his DFC a month later.

After a brief rest at the end of his tour he was promoted to squadron leader and posted as a flight commander to No. 456 Squadron, flying Mosquitoes. Flying over the Normandy beaches in support of the invasion of France on 10 June 1944 he shot down a Do 217 and a He 177. Five days later he shot down a Ju 88 and a He 177 on 5 July, bringing his score to six. He had also shot down a V-1, and was awarded a bar to his DFC early in February 1945, and was discharged on 19 November 1945.

CROMBIE, Charles Arbuthnot

Charles Arbuthnot Crombie ('Chas') was born in Brisbane on 16 March 1915 and was a jackeroo before joining the RAAF on 24 May 1940 as an aircrew trainee. After elementary flying training in Australia he completed his aircrew training in Canada. He was commissioned on 17 January 1941 and sailed for the United Kingdom a week later where he converted to Blenheims and on 6 May 1941 was posted to No. 25 Squadron, which was equipped with Beaufighters. At this time he also completed a Hurricane conversion course and trained as a night fighter pilot, after which he was posted to No. 39 Squadron in Egypt, flying Hurricanes on day fighter missions.

He shot down his first aircraft on 19 June 1942, when he destroyed a He 111 and in July shot down another He 111 and a Ju 88. After these initial successes he was posted to Malta on 20 September where he carried out a number of intruder operations over southern Sicily. During September he destroyed two more of the enemy and in October destroyed another He 111 and a Ju 88. In November he shot down two more Ju 88s with another Ju 88 as a probable, and in December added a Ju 52 to his score.

On 10 January 1943 Crombie was posted to India, where he joined No. 176 Squadron and began scoring as early as 19 January. Intercepting four Mitsubishi Sally bombers, he shot down two in quick succession, but as he was getting into position to claim another victim, return fire from one of the remaining enemy set one of his engines alight. Ordering his navigator to bale out, and with one engine blazing furiously, he returned to the attack and inflicted severe damage to one of the remaining Japanese aircraft. His own aircraft now barely controllable, Crombie took to his parachute, just as the petrol tanks exploded; miraculously he survived. As a result of his skill and dedication in this encounter he received an immediate award of the DSO exactly one month later, and a DFC followed in May. By this time his score had reached a final count of eleven and four probables.

With service in the United Kingdom, Egypt, India and Burma behind him, Crombie returned to Australia on 27 September 1943 and was posted to No. 5 OTU, instructing on Beaufighters and Mosquitoes. On 1 September 1944 he was promoted to squadron leader and became Chief Flying Instructor.

He was serving at RAAF Williamtown when on 26 August 1945, on finals in his Beaufighter, crashed close to the base and died as a result of his injuries. He was buried in the Sandgate War Cemetery near Newcastle.

CRONIN, Lawrence Francis Marshall

Lawrence Francis Marshall Cronin was born in Camberwell, Victoria, on 17 July 1918 and was a clerk, and a member of the 39th Battalion CMF for two years, before enlisting in the RAAF on 27 April 1941. He trained in Canada and graduated as a sergeant pilot on 16 January 1942. He was posted to No. 453 Spitfire Squadron on 18 August 1942, and in November was posted to No. 81 Squadron, RAF, moving with the unit to the Middle East and later to Malta and Italy. It was over Sicily that he made his first claim on 3 January 1943 by damaging a Ju 88, and in March damaged two Bf 109s. Then on 25 July he destroyed two Bf 109s in the one day, and on 14 September destroyed a FW 190.

In November Cronin moved with the unit to Burma for operations against the Japanese. On 6 March he shot down a Mitsubishi Dinah but was then shot down himself. However, he managed to survive and was able to get back to his unit. A week later, he was again in action when a section of Spitfires from No. 81 Squadron intercepted a force of thirty enemy aircraft, of which they managed to destroy four, among which an Oscar was credited to Cronin.

By this time, Cronin had reached the rank of warrant officer, and following on this engagement, he received his commission as a pilot officer on 27 May 1943. He was awarded a DFC on 25 April 1944, the citation for which stated in part: 'He has destroyed at least three enemy aircraft - successes which are an excellent tribute to his skill and gallantry in combat'.

He was promoted to flying officer on 27 November 1943 and embarked for Australia on 27 May 1944, with a final score of five. His appointment was terminated at his own request on 22 March 1945.

CULLEN, Richard Nigel

Richard Nigel Cullen was born in Newcastle on 5 June 1917 but lived in London. He was an adventurous type, who raced Norton motorcycles at Brooklands before the war, later joining the International Brigade in Spain. He had already seen action when World War Two began, and in fact had been wounded and repatriated to the United Kingdom, and was actually in London at the time. He immediately joined the RAF and was posted as a ferry pilot with No. 267 Squadron in the Middle East. After much effort, he was able to get a transfer to No. 80 Squadron, where he was taught to fly fighters by the great ace 'Pat' Pattle. On 9 October 1940, flying alone over the desert in a Gladiator, he attacked five Breda 65s, probably destroying one.

The following month Cullen moved to Greece with the unit, still flying Gladiators. On 30 December he shot down a Savoia S-81 and on 28 January he destroyed a Cant Z1007. On 9 February he added a Fiat CR42 to his score and next day claimed a Savoia S-79 and on the 20th a Fiat G50 and a CR 42. On the 23rd he forced a Cant Z506B float plane down and, when it tried to escape, destroyed it.

He quickly converted to Hurricanes and on 28 February acquitted himself with great distinction, while simultaneously establishing a squadron record. He was with a composite force of No. 80 Squadron Hurricanes and No. 112 Squadron Gladiators, which bought themselves into a fight with a large force of Italian bombers and escorting fighters. In the free-for-all that followed Cullen shot down five of his opponents in an admirable display of skill. Having now been officially credited with the destruction of eleven hostile aircraft and two probables, a well merited immediate DFC was gazetted to this officer on 14 March 1941.

On 3 March Cullen again enjoyed success by destroying four more enemy aircraft and one probable in a single engagement. The next day, while on a routine patrol, he was shot down and killed, at which time his personal count stood at sixteen with two probables and one damaged. A proud record for a man who had not yet reached his twenty-fourth birthday.

CUNDY, William Ronald

William Ronald Cundy was born in Maitland, New South Wales, on 22 February 1922 and had been a clerk before joining the RAAF on 14 October 1940. He trained in Canada and completed his training on 20 May 1941. He was posted as a sergeant pilot to the United Kingdom where he joined No. 135 Squadron, RAF on 15 September 1941. In May 1942 he was posted to No. 260 Squadron in the Western Desert, flying Kittyhawks. He claimed his first victim over El Alamein on 26 October when he shot down a Messerschmitt Bf 109. On the 31st he claimed another and shared a third. He destroyed a Ju 88 on 4 November and on the 11th shot down a Fi 156 Storch.

Following on from these successes, he received a DFM and was commissioned on 1 May 1942 and appointed a flight commander almost simultaneously.

Cundy later received a Mentioned in Despatches, and in February 1943 he was awarded a DFC. In October 1943 he returned to Australia and was promoted to flight lieutenant on 30 May 1944 and appointed a flight commander in No. 452 (Spitfire) Squadron forming part of No. 1 Fighter Wing in Darwin. He subsequently took a very active part in strikes against Japanese ground targets, but due to lack of opportunity was unable to increase his score of five. He was demobilised on 13 October 1945.

CURCHIN, John

John Curchin was born in Hawthorn, Victoria, on 20 January 1918. He was living in London when the war began and immediately joined the Royal Air Force. His initial service was with No. 600 Squadron, but in 1940 he moved to No. 609 Squadron where most of the rest of his service was spent.

On 8 August 1940, the opening day of the Battle of Britain, he opened the round by destroying a Bf 110, and on the 25th a Bf 109. He claimed another Bf 109 and probably a Do 17 on 7 September, and on the 17th he received full credit for another Do 17. He claimed another Bf 109 on the 25th and next day shot down a He 111 and shared a second. Another He 111 fell to his guns on the 26th and in October he was awarded a DFC.

In 1941 Curchin became a flight commander and on 8 May destroyed a Bf 109 and shared a second. On 9 June he was killed in action, by which time he had been credited with eight enemy aircraft destroyed plus four shared.

CURTIS, Victor Farley

Victor Farley Curtis was born at Preston, Victoria, on 11 November 1918 and was a car salesman before enlisting in the RAAF as an aircrew trainee on 27 May 1940. He graduated as a sergeant pilot on 17 December 1940, and was commissioned as a pilot officer on 16 June 1941. He was posted to No. 3 Squadron in the Western Desert on 30 September 1941, and promoted to flying officer on 16 December 1941. He was credited with three victories and two shared, before returning to Australia in October 1942 where he was posted to No. 2 OTU as a Kittyhawk instructor. He was killed in an aircraft accident at Mildura, Victoria, on 6 January 1943.

FOSKETT, Russell George

Russell George Foscett was born in Sydney on 7 May 1917 and was a clerk before he joined the RAAF on 18 September 1940. He received his advanced training in South Africa, completing his course on 25 April 1941, graduating as a sergeant pilot. On 14 July he joined No. 80 Squadron in the Western Desert flying Hurricanes. On 24 November he scored his first victory by shooting down a Bf 110, and a second Bf 110 on 16 January 1942. He was commissioned on 15 March 1942, and on 20 April shared in the destruction of a Bf 109, and received full credit for destroying another on 10 July. He was promoted to flight lieutenant on 18 July 1942 and appointed a flight commander, and frequently led the squadron on sorties.

Foscett was leading the squadron on one of these sweeps in November when they encountered a squadron of Ju 87 dive bombers escorted by fighters. By the end of the engagement, eight Stukas had been shot down, eight probably destroyed, with several others damaged. Two of those destroyed had been shot down by Foscett, who was himself forced down, but landed safely and was able to make it back to the squadron the same evening and was back on patrol the next day. For this action he received a DFC on 4 December.

His first tour also expired about this time, and he was sent back to the United Kingdom for a rest in March 1943. By October he was operational again with a posting to No. 94 Squadron in the Mediterranean. On 25 May he was promoted to squadron leader and appointed to command the squadron.

He received a Mentioned in Despatches on 8 June 1944 in recognition of his brilliant leadership of the squadron. It was about this time that he converted to Spitfires, following which, on 6 June, he shot down a Ju 52 transport, which turned out to be his last victory. On 31 October 1944, he had engine failure over the Greek Islands and was forced to bale out over the sea and was reported missing. His death on this date was later confirmed, and his body recovered by the navy and he was buried at sea. He died without knowing that he had been recommended for an OBE which was gazetted on 1 January 1945. His final score was 6.5 destroyed, with two probables and four damaged.

FRY, Charles Horace

Charles Horace Fry was born in Newcastle on 29 October 1916 and joined the RAAF as an air cadet at Point Cook on 15 July 1936. He graduated on 28 June 1937 and was appointed to a commission in the RAF. By 1939 he was a flight commander in No. 112 Squadron in Egypt, and in September of that year he was selected to fly trials on the first Hurricanes to arrive in the Middle East. Number 112 Squadron was still equipped with Gladiators, and it was on this type that Fry first saw action when the unit moved to Greece in late 1940 after Italy entered the war.

On 28 February 1941, in one of his first engagements, Fry destroyed a Fiat G 50 and a Fiat CR 42. On 4 March he probably destroyed a G 50 and on the 9th destroyed another. Two days later he attacked two more G 50s and damaged one claiming the other as a probable, and on the 14th he shot down a Fiat Br 20. The squadron took part in the withdrawal to Crete in April, when Fry also learnt that one of his probables had been confirmed as having been destroyed. He received a DFC on 2 August 1941.

Fry's total had reached five, when on 15 May 1942, and now on Hurricanes, he destroyed a Messerschmit Bf 110 but was in turn shot down and became a prisoner of war in Germany. He received a DFC on 22 August and was also awarded the Greek DFC by the King of the Hellenes for his activities as a fighter pilot in the defence of that nation. His final score was six destroyed, two probably destroyed, and one damaged.

He was repatriated to Australia in September 1945 and his appointment terminated on 27 February 1946. He was transferred to the RAAF with retention of rank and seniority with effect 27 August 1947.

GAZE, Frederick Anthony Owen

Frederick Anthony Owen Gaze was another Australian pilot in the RAF which he joined as a pilot officer in early 1941, and was posted No. 610 (County of Chester) Squadron. He scored his first success on 6 June when he shot down a Bf 109 over the United Kingdom, shared another, and on the 17th probably destroyed another. Taking part in numerous engagements with the squadron he received the first of his three DFCs on 5 August 1941, the citation stating in part that he had saved his squadron commander from being shot down and had destroyed his two attackers. He was posted to No. 616 (South Yorkshire) Squadron as a flight commander in July 1942 and continued to serve with this unit during the remainder of the year. On 13 July he probably destroyed a Fw 190, and damaged a second, and then over Dieppe on 19 August he claimed a Do 217.

Gaze was then posted to No. 64 Squadron, damaging a Fw 190 on 11 October 1942, before returning to No. 616 Squadron in November. In February 1943 he received a Bar to his DFC and subsequently saw service with several other units, gaining a Mentioned In Despatches for his services on 14 January 1944. After a brief rest from operations, he was once more with No. 616 and in early 1945 he commanded a flight of Spitfires from that squadron over Europe with great success. On 14 February 1945 he became one of the earliest Allied pilots to shoot down the new Me 262, the first operational jet fighter, and was awarded a second Bar to his DFC. (Note: One example of this type now rests in the Aviation Hall at the Australian War Memorial.)

The squadron was then disbanded and he was posted to No. 41 Squadron. On 11 April he shot down a Ju 52 and next day shared in the destruction of an Ar 23 jet bomber. On the 28th he shared a Fw 190, and on the 30th destroyed another of these to bring his score to 12.5. He was promoted to squadron leader, and in May 1945 was posted as a flight commander to the now re-formed No. 616 Squadron, flying Meteors for the last few days of the war.

GIBBES, Robert Henry Maxwell

Robert Henry Maxwell Gibbes (known as 'Bobby') was born in Young, New South Wales, on 6 May 1916 and was a salesman in Sydney before enlisting in the RAAF as an air cadet at Point Cook on 6 May 1940. After several postings in Australia he was posted to the Middle East as a pilot officer to join No. 450 Squadron briefly in March 1941, and was soon in action flying Kittyhawks on strafing missions over Syria. In May he was transferred to No. 3 Squadron, equipped with Tomahawks, and shot down his first enemy aircraft on 11 July. Then, on 20 November he shared

a Bf 110 with three other pilots, and on the 22nd probably destroyed a Bf 109. On the 25th he shot down two Fiat G 50s and damaged three more, and was able to claim another G 50 on the 30th. During December he damaged two Bf 109s and two Ju 87s, and on 13 January 1942 damaged another Bf 109. On 22 January he destroyed a Ju 87 and damaged two G 50s.

In February 1942 Gibbes was promoted to squadron leader and appointed to command No. 3 Squadron, which had by then converted to Kittyhawks. He led the unit in offensive sweeps over the desert, taking part in the defence of Tobruk, and on 7 May he shot down a Bf 109 and two days later damaged a Bf 110. He claimed another Bf 109 on the 22nd and on the 26th probably destroyed another. He was then shot down by the gunner of a Ju 88 and was forced to bale out from his burning Kittyhawk at 4000 feet. On the way out he struck the tailplane, and part of his parachute also became entangled in the aerial wire of the damaged fighter. Miraculously he escaped with only a broken ankle, but was unable to fly again until late June.

Awarded a DFC on 28 July, he continued to score and demonstrated his calibre one day, landing to rescue a squadron pilot shot down by ground fire. Under attack from Bf 109s all the time, he collected the downed pilot and set about making a rapid exit. During the take-off run a tyre burst, and it was only due to his skill that a calamity was avoided. A somewhat interesting arrival was made back at base.

Early in January 1943 he received a DSO and on the 14th was again shot down, this time landing behind the enemy lines. He evaded capture and made his way back to the squadron on foot. On the 22nd he claimed his final victory, a Macchi 202, bringing his total score to 10.25, with five probably destroyed and nine damaged. He continued to lead the squadron until mid-April when he was posted back to Australia, and a bar was added to his DFC on 3 June 1943.

Gibbes was appointed to command No. 2 OTU in July and promoted to wing commander. In August he was appointed wing leader of No. 80 (Spitfire) Wing in the South-West Pacific and was then appointed to command the wing on 7 March 1945, but was unable to further his score before the end of hostilities.

Leaving the RAAF after the war, 'Bobby' Gibbes became a stock and station agent in Coonamble, New South Wales, and in 1946 was president of the Coonamble Aero Club on its formation. He later founded Gibbes Sepik Airways in New Guinea and joined the RAAF Active Reserve with the rank of squadron leader.

GIDDY, Peter Radcliffe

Peter Radcliffe Giddy was born in Toorak, Victoria, on 14 March 1919 and entered the RAAF as an air cadet on 5 February 1940, graduating as a pilot officer on 28 June 1940. He joined No. 3 Squadron on 29 December 1941 flying Kittyhawks, and on 22 January 1942 destroyed a Macchi 200, and damaged a Bf 109. He followed this up with the destruction of two more Macchi 200s and damage to another Bf 109 on a later sortie. He had his Kittyhawk emblazoned with the legend 'The Secret Weapon'. Giddy and another pilot accounted for two Macchi 200's in a fierce battle on 14 February 1942.

On 8 March he had his last battle, when he claimed yet another Macchi and a Ju 87, bringing his total to five. Shortly after this action, he was shot down and reported missing in action on 22 February 1942.

GLYDE, Richard Lindsay

Richard Lindsay Glyde was born in Perth on 29 June 1914 and was already in the RAF when the war began. He had joined the RAF in June 1937 on a Short Service Commission. In March 1935 he was posted to No. 1 Ambulance and Communication Unit as a staff pilot where he stayed until October, when he was posted to No. 87 Squadron. As a member of that unit he flew operationally over France in 1939-40, and in the fighting there, shot down four enemy aircraft on 19 May 1940, including a Bf 109 and an Hs 126. He received the DFC on 4 June, the citation reading:

This officer showed great dash and offensive spirit and has accounted for four enemy aircraft.

During July Glyde destroyed a Bf 110 and by 13 August he had added three more, bringing his score to eight, when he was shot down and killed while attacking a He 111 and his Hurricane crashed into the sea.

GOLDSMITH, Adrian Philip

Adrian Philip Goldsmith (known as Tim) was born in Waverley, Sydney, on 25 April 1921 and was a public servant before enlisting in the RAAF on 16 September 1940. He became a high-scoring fighter pilot who was second only to Caldwell in terms of air victories, although remained relatively unknown.

He completed his pilot training in Australia and graduated as a sergeant pilot on 6 August 1941. He was posted to the United Kingdom and, after converting to Spitfires, was posted to No. 234 Squadron on 23 September 1941. He was posted to Malta in February 1942, where he joined No. 126 Squadron, then equipped with Hurricanes, but soon to change over to Spitfires.

Goldsmith's first victory came on 21 April 1942 when he shot down a Messerschmitt Bf 109, and damaged a second. During the first few days of May he shot down one enemy bomber and three fighters. He was commissioned on 15 May and received a Distinguished Flying Medal on the 20th. Then, on 15 June he again shot down three enemy aircraft, this time in the one engagement, an action for which he received an immediate award of the DFC. He is believed to have been the first RAAF member to be awarded the dual distinctions of both DFC and DFM. (It is worthy of note that 101 DFM's were awarded to airmen, two with Bars, and 1880 DFC's to officers, 118 with Bars during World War Two.)

Goldsmith was posted to the United Kingdom in July, and on his departure from Malta he received the Malta Cross, a semi-official emblem awarded by the Maltese Government to operational aircrew and worn on the panel of the left breast tunic pocket. During his period of service on Malta, he was officially credited with the destruction of twelve enemy aircraft. After a spell in United Kingdom as an instructor at No. 53 OTU and a further period with No. 234 Squadron as an operational pilot, he left for Australia on 19 November 1942.

After a short leave he was posted on 11 December 1942 to No. 452 (Spitfire) Squadron at Batchelor, in the Northern Territory, which formed part of No. 1 Fighter Wing, commanded by Group Captain Caldwell. His first victory in his new posting was off Darwin on 15 March 1943 when he shot down a Japanese Betty bomber, followed minutes later by a Hamp fighter with one Hamp damaged.

While occupied with shooting down a Betty on 2 May, Goldsmith was himself shot down by a Zero, and parachuted into the sea, but was rescued a short time later. He was appointed a flight commander with the rank of flight lieutenant on 22 August 1943, and to temporary command from 9 September to 27 October 1943. He claimed another victory in September, bringing his total score to sixteen, plus two probables and seven damaged.

In April 1944 he was posted as an instructor at No. 2 OTU, Mildura and was promoted to squadron leader on 1 February 1945. However, his health began to fail, and he was finally discharged as medically unfit for further service on 31 May 1945. He died on 25 March 1962 at Wahrenonga, New South Wales, just short of his fortieth birthday, and his ashes were scattered by the RAAF over the Timor Sea at his express wish on 12 February 1963.

GOOLD, Wilfred Arthur

Wilfred Arthur Goold was born in Hamilton, Newcastle, on 2 February 1919. He was a director in his family business, and had also served with the 2nd Cavalry Ambulance (CMF) for two years before enlisting in the RAAF on 9 December 1940. He graduated as a sergeant pilot on 30 May 1941 and was posted to the United Kingdom where he joined No. 607 (County of Durham) Squadron on 17 December, flying Hurricanes. Following the fall of Singapore, he moved with No. 607 to India, arriving at Bombay on 21 May 1942, and was commissioned on the 27th.

Towards the end of 1943 the unit became part of 170 Wing and was equipped with Spitfire Mk V, a type on which Goold was to serve with great success. On 20 January 1944 he gained a probable and one damaged, and on 21 February was credited with another damaged - all Oscar fighters. On 14 May he had his

first confirmed victory. After coming into a close line astern position he opened fire on an Oscar, which burst into flames almost at once, and the Japanese pilot took to his parachute.

A week later Goold was leading a squadron formation when they encountered a scattered force of forty Japanese fighters. Deploying his Spitfires, he attacked at once, destroying one and damaging two more enemy aircraft. By the end of 1944 he had shot down a further three, one probably destroyed, and damaged another two - all fighters. A DFC was gazetted on 15 September 1944.

He remained with the unit until he was repatriated to Australia on 15 June 1945, and was discharged on 14 September. His official score was five destroyed and one probably destroyed, with five damaged.

GORDON, Reginald Lloyd

Reginald Lloyd Gordon was born in Sydney on 6 July 1917 and was a clerk before he joined the RAAF as an air cadet on 6 January 1939. He graduated as a pilot officer on 20 October 1939, and after a course at Central Flying School in June 1940 he was posted as a flying instructor to No. 1 SFTS. In May 1942 he was posted to No. 24 Squadron and on 1 April 1943 was promoted to squadron leader and posted to command No. 31 Squadron, flying Beaufighters from the Darwin area.

On 10 August 1943 he damaged a Pete float plane. On 18 September during an attack on ground targets he was slightly wounded by anti-aircraft fire but continued the attack and completely destroyed a revetted machine gun post. On 10 October he shot down four of the enemy in rather spectacular circumstances, for which he was awarded an immediate DFC. The events of that day are best described in the following extract from the citation for the award:

On 10 October 1943, when leading a formation of six aircraft in an attack on Tanimbar Islands he personally shot down two of the three enemy aircraft destroyed by the formation. On arriving at the target, the flight was intercepted by an enemy twin-engined fighter which he promptly destroyed in combat.

When the formation was about to return to its base, it was attacked by a second twin-engined fighter which damaged the port engine, starboard aileron and hydraulic system of Squadron Leader Gordon's aircraft. It then passed on to attack the remainder of the flight. Opening up both engines to the maximum, Squadron Leader Gordon attacked and destroyed the enemy fighter from a distance of 350 yards.

On the return journey his damaged engine seized and the greater part of the journey was made on one engine in an aircraft whose aileron controls were practically useless. Finally with petrol tanks empty, he made a successful crash landing on an auxiliary aerodrome.

Squadron Leader Gordon displayed outstanding skill, courage and determination and his magnificent effort is worthy of the highest praise.

On 16 December while on a strafing run against shipping, he broke up an attack by four Nick fighters, shooting one down and damaging another. During the remainder of

his tour he destroyed at least two more enemy aircraft, bringing his score to six, and was awarded a bar to his DFC for his courage and leadership.

On 27 February 1944 he was on a test flight with his Beaufighter, when first the port engine, and then the starboard engine failed. He landed in timber on the side of a hill with his undercarriage retracted, and died of injuries received.

HAMMOND, Ronald Frank

Ronald Frank Hammond was born in Melbourne on 2 August 1914 and was an insurance inspector. He had served in the 8th Battalion, CMF, at Ballarat for three years before joining the RAAF on 18 September 1940. After training in Canada he was posted as a sergeant pilot to the United Kingdom, where he joined No. 248 Squadron of Coastal Command as a Beaufighter pilot. He had become a pilot officer by the time the unit moved to Malta in mid-1942. On 11 August he shot down a Savoia SM 79, and damaged a second. On 15 August he destroyed another Italian bomber and probably a Ju 88, while on the 21st claimed a Ju 88, and another Italian bomber, before returning with No. 248 to the United Kingdom in September 1942.

On 25 September he damaged a Ju 88 and on 13 October he destroyed an unidentified seaplane and shared a Ju 88 with several other pilots. Then on 22 November he attacked six Ju 88s which were attacking a Whitley and damaged one of them. He was promoted to warrant officer, but on 1 December 1942 he, and two other pilots, failed to return from a sortie, apparently having been shot down by enemy fighters. By this time he had been credited with five and a half enemy aircraft destroyed with one probable and three damaged, and had been recommended for a DFM which was gazetted on 9 February 1943, two months after his death.

HAMPSHIRE, Keith Macdermott

Keith Macdermott Hampshire was born in Port Macquarie, New South Wales, on 10 September 1914 but was living in Perth when he joined the RAAF as an air cadet at Point Cook on 18 January 1937. He graduated on 16 December 1937 and was posted to No. 2 Squadron where he remained until 17 March 1939 when he was posted to Cranwell, United Kingdom, to undergo a course as a specialist signals officer. On 1 January 1940 he was posted to No. 12 Squadron, flying Hudsons in Darwin, and on 9 March 1942 was posted to No. 23 Squadron at Port Moresby also flying Hudsons. He was promoted to wing commander in October and on 7 December was appointed to command No. 22 Squadron, recently equipped with Bostons.

On 14 December Hampshire led a formation of Bostons on a mission to locate and attack an attempted enemy landing in the vicinity of Buna. Bad weather forced the formation to separate, but Hampshire, flying alone, located five Japanese destroyers unloading troops and equipment. In the face of intense anti-aircraft fire he immediately attacked a destroyer and dropped two 500lb bombs, securing near misses.

However, as stores and equipment were the primary targets, he then directed his attention to these until all his bombs and ammunition were exhausted, causing havoc amidst the landing operations. Also, as a result of having located the actual landing point, a squadron of heavy bombers was able to attack shortly afterwards. He was awarded the

DFC and continued to fly bombing and strafing raids over a variety of targets in New Guinea and Papua.

On 4 February 1943 he was again leading a formation in an attack on enemy aircraft grounded at Lae airstrip. Once again extremely bad weather was encountered, but Hampshire was able to hold the formation together and lead them to the target. Before the actual target could be identified, eight passes had to be made over the target area, with the formation constantly subjected to intense anti-aircraft fire. Hampshire drove home the attack with great determination and led his formation successfully back to base.

He was awarded a DSO on 27 August 1943, and while the citation covers details of the above and other sorties, it also includes two further examples of his outstanding determination, courage and leadership qualities. The relevant extracts are set out below:

On the 5th March, 1943, Wing Commander Hampshire led a formation which was detailed to bomb and strafe Lae strip at first light. Whilst leading the formation into line for the run over the target, intense anti-aircraft fire was encountered which struck his aircraft and wounded him in the leg. Despite the wound and consequent loss of blood, he drove home the attack with great determination and led his formation back to base. He was later removed to hospital where an operation was performed to remove shrapnel from his leg. On 16th March, although not recovered from his wound and with his leg heavily bandaged, he insisted on leading a further formation over Salamaua.

Heavy anti-aircraft opposition was anticipated and as the run over the target took the formation directly over four strong anti-aircraft posts, Wing Commander Hampshire assigned to himself the task of attacking those posts by bombing and strafing in order to reduce the opposition against the remainder of the formation and so ensure more accurate bombing. As a result this strike was the most successful carried out by the squadron and tremendous damage was done to enemy installations.

Hampshire also took part in the Battle of the Bismarck Sea late in March 1943 and scored two direct hits on a Japanese destroyer.

In July 1943 he was posted to the United Kingdom to take command of No. 456 night-fighter squadron, flying Mosquitoes. Hampshire rapidly made a name for himself as a night fighter pilot, and his first victim was a Ju 88 destroyed on 17 March 1944 just after he had returned from a long and arduous patrol. Alerted that enemy bombers were approaching, he had his Mosquito refuelled, scrambled hurriedly and shot the marauder down almost over his own airfield - all within ten minutes. He shot down another Ju 88 on 25 March 1944, destroyed two more on the 28th, and another on 24 April. On the 29th he probably destroyed a Do 217, and was awarded a bar to his DFC on 12 May.

He claimed a Ju 88 on 23 May, a He 177 on 7 June and another Ju 88 on 13 June, bringing his total score to seven. He was then promoted to group captain on 1 July 1944 and posted to Transport Command.

The award of a bar to his DSO was announced on 9 February 1945, the citation for which noted that he:

... has led the squadron on very many sorties during which thirty-two enemy aircraft have been destroyed. Group Captain Hampshire had inflicted much loss on the enemy, including the destruction of seven aircraft.

This officer became one of only four aircrew to receive a Bar to the DSO during World War Two, (the others were Eaton, Martin and Shannon) and one of the very few to achieve fame both as a bomber pilot and fighter pilot. His appointment was terminated on 19 April 1946.

NOTE: A portrait of Hampshire, by William Dargie, is on display in the Australian War Memorial, Canberra.

HILLARY, Richard Hope

Richard Hope Hillary was born in Melbourne on 20 April 1919 but came to England at the age of three with his father, who was a government official taking up his post at Australia House in London. He attended Oxford University where he was a rowing 'Blue' and Secretary of the Boat Club, President of the Rugby Club, and a member of the University Air Squadron, where he learnt to fly.

Hillary was called up in October 1939 and, after completing his training, attended No. 1 School of Army Cooperation in June 1940. A move to fighters with the onset of the Battle of Britain sent him to No. 5 OTU and then to No. 603 Squadron. He scored his first victory on 29 August 1940 when he shot down a Bf 109E, but was himself shot down and crash landed, surviving unhurt. He had already brought his score to five when he was shot down on 3 September. He baled out of his blazing Spitfire with severe facial burns and landed in the sea.

After some time in the water he was picked up and then began a long period of hospitalisation, and was one of the first of Sir Archibald McIndoe's plastic surgery 'Guinea Pigs' at East Grinstead. During his recovery he wrote his famous book, 'The Last Enemy' which was to become a wartime classic. Anxious to return to flying he pushed himself to the limit. Able only to handle night fighters in operational conditions, he attended No. 54 OTU to convert to these, but flying in a Blenheim in poor weather after dark on 8 January 1943, his aircraft crashed whilst circling a beacon and he and his navigator were killed. It is likely that a build-up of ice on the wings was the cause. His final score was five destroyed, two probables and one damaged.

HUGHES, Paterson Clarence

Paterson Clarence Hughes was born in Cooma, New South Wales, on 19 September 1917 and joined the RAAF as an air cadet on 20 January 1936. On graduating from Point Cook in December he was seconded to the RAF and after initially serving with Nos. 164 and 247 Squadrons, was posted to No. 234 Squadron in November 1939 as a flight commander.

Hughes became one of the few Australians who actually took part in the Battle of Britain, during which he was credited with fifteen victories. On 18 August 1940 he was awarded a DFC following a phenomenal run of scoring. Beginning on 8 July 1940 he shared a Ju 88 with another pilot, shared two more Ju 88s on 27 and 28 July, and then scored his first direct victory on 14 August by shooting down a Bf 110, and shared in the destruction of yet another Ju 88 on the same day.

This was followed on 4 September by the destruction of three Bf 110s, and on the next day he shot down two Bf 109s, and on the 6th claimed another. This amazing run of successes came to an end on the 7th when he destroyed a Dornier Do 17, which he had attacked from an extremely close range. The enemy aircraft exploded as soon as he opened fire, and because of his close proximity caused such severe damage to his own Spitfire that he lost control and was killed in the resulting crash. There can be no doubt that but for his untimely death, he would undoubtedly have achieved a continuing degree of success. His final score was fifteen destroyed and three shared.

He had thus become the third highest scorer in the Battle of Britain, a position he shared with four other pilots who had also scored the same total. The top score was by a Czech pilot who achieved a total of seventeen, with second place going to a British pilot who reached a total of sixteen. Hughes was without doubt the highest-scoring Australian in the Battle of Britain.

NOTE: A total of twenty-one Australians were engaged directly in the Battle of Britain, of whom fourteen were killed. As well as Hughes, there were eight other Australians who achieved ace status.

JACKSON, John Francis

John Francis Jackson was born in Brisbane on 23 February 1908. Popularly known as 'Old John', he was the elder of two well-known fighter pilot brothers who served together in the RAAF during World War Two. He had joined the RAAF Reserve in August 1936 and was called up for full time duty on 2 October 1939 and posted to No. 23 Squadron. He was posted to No. 3 Squadron in the Middle East on 20 November 1940, flying Gladiators at first but converting to Hurricanes when the unit moved to Libya. He began to score in a spectacular fashion on 18 February 1941 by shooting down three Ju 87's in a single action. On 3 April he probably destroyed another Ju 87 and only two days later was able to

claim yet one more Ju 87. His guns then jammed, but he was able to force another to a crash landing without firing a shot.

The squadron was then withdrawn and converted to Tomahawks before moving to Syria, where Jackson destroyed two more aircraft before the unit returned to the Western Desert. On 22 November he damaged a Bf 109 and on the 25th probably destroyed a Bf 110, and on 8 January he shot down a Macchi 200 and damaged three others. He was Mentioned In Despatches on 1 January 1942.

Jackson's DFC was gazetted on 7 April 1942, by which time he had returned to Australia and was already in Port Moresby where he had taken command of the newly formed No. 75 (Kittyhawk) Squadron in March and been promoted to squadron leader. On 4 April, after strafing an enemy airfield, he was hit by ground fire and forced to crash on a coral reef. His brother, Les Jackson (q.v.), who was serving in the same squadron, dropped a life jacket to him and he managed to get back safely to the mainland. On 10 April he was attacked by three Zeros when his guns jammed and he was shot down and ditched in the sea. He was uninjured, except for losing the tip of his right index finger. He was able to swim ashore and found his way back through the jungle, arriving back at base on the 23rd.

On 28 April Jackson was shot down and killed while attacking a mixed force of Japanese bombers and fighters, but is believed to have shot down a Zero before his own aircraft was hit. His memory was commemorated by the naming of an airstrip after him at the time, and the Jackson strip as it was then known, now survives as the main airport for Port Moresby. His final score was eight destroyed, plus two probables and four damaged.

JACKSON, Leslie Douglas

Leslie Douglas Jackson (Les) was born in Brisbane on 24 February 1917, the younger brother of fellow ace John Jackson (q.v.), was a garage proprietor before joining the RAAF Reserve on 13 July 1937 and was called up for full time duty on 16 November 1939. After completing a flying course at Point Cook as an air cadet on 17 February 1940 he was posted briefly to No. 23 Squadron before being posted to No. 21 Squadron in Singapore in July 1941. He returned to Australia in November 1941 and on 29 April 1942 was posted to No. 75 Squadron at Port Moresby, commanded by his brother, where he became a flight commander.

Les Jackson was in action almost immediately, when the squadron Kittyhawks attacked Lae airfield in a most effective sortie. A number of Japanese bombers had only just been flown in for use against allied ground forces, but at the end of a low level run by the Kittyhawks over the field, most of them had been destroyed. The first claim by Jackson was made on 24 March when he shot down a Zero over Moresby, following this up with three more, all in April. When his brother was killed in that month, he succeeded him as commander of the squadron.

The unit then returned to Australia to rest and reform, and in August he led the squadron back to New Guinea, but this time to Milne Bay, in time to take part in the battle which turned back the Japanese invasion. On 27 August, Jackson destroyed his fifth Zero in rather interesting circumstances. The crew of a Marauder had shot down an attacking Zero which then managed to make a dead stick landing in the sea, but close inshore.

Seeing what had occurred, two other Japanese Zeros dived down and started shooting the downed fighter and its pilot, obviously set on stopping the aircraft from falling into Australian hands. The attacking Zeros were so intent on their task that they failed to notice two Kittyhawks coming up astern, flown by Jackson and another pilot, and they were in turn shot down. Jackson was awarded a DFC on 16 July 1943.

Squadron Leader Jackson later commanded No. 80 Squadron, and then in 1943 he became wing leader of No. 78 Wing composed of Nos. 75, 78 and 80 RAAF Squadrons, all flying Kittyhawks. He led this until the end of 1944 before becoming Chief Flying Instructor at No. 8 OTU in December 1944, and the award of a Bar to his DFC was announced early in 1945. In June he was promoted to wing commander and posted to command the Advanced Headquarters in Madang. He was discharged on 8 February 1946.

JEFFREY, Peter

Peter Jeffrey was born in Tenterfield, New South Wales, on 6 July 1913. He had been a jackeroo, but was currently a first year engineering student living in Sydney when he joined the Citizen Air Force as an air cadet in December 1934. He qualified for his wings and was commissioned in July 1935. In May 1938 he applied for, and was granted a Short Service Commission in the permanent air force and was posted to No. 1 SFTS Point Cook as a flying instructor.

In January 1939 Jeffrey was posted to the United Kingdom for a specialist signals officer course, which he completed in November. He had been promoted to flight lieutenant in September, and on his return to Australia in January 1940 he was posted to RAAF Station, Richmond for specialist duties. In June 1940 he reverted to flying duties and was posted to No. 3 Squadron moving with the unit to the Middle East in July. By the end of the year he was already a flight commander and on 1 June 1941 he was promoted to squadron leader and appointed to command the squadron.

Jeffrey had his first victory on 30 March when he shot down a Bf 110 and then on 15 April 1941 he followed four Ju 52s until they arrived over their base, and as they prepared to land, he very quickly destroyed one of them, causing havoc among the rest. One of these landed down wind, colliding with another which had landed cross wind. Jeffrey then made a low-level strafing run across the airfield and set fire to all three of the remaining transports.

In May the squadron had been equipped with Tomahawks, and Jeffrey was awarded a DFC. On patrol over Syria on 13 June he met up with eight Ju 88's in Italian markings, and destroyed one, while other pilots despatched two others. Two days later he shot down a Martin 167 bomber of the Vichy French forces, and destroyed a Ju 88 before returning to the Western Desert at the end of the Syrian campaign and on the 25th he claimed a Me Bf 110 and damaged another. In November he was granted the acting rank of wing commander and became wing leader of No. 234 Wing, RAF.

Jeffrey was later shot down himself, but returned unharmed, and then on the 30th he carried out a daring rescue of another pilot (q.v. Cameron). He was awarded the DSO in November 1941, having already been Mentioned in Despatches in June.

He returned to Australia at the end of December, reverting to squadron leader, and was appointed to command RAAF Station, Bankstown during the formation of the

first US P40 group in Australia. In March 1942 he was posted to command No. 75 Squadron during the formation and move of the unit to Port Moresby. On the 19th, however, he handed over command to Squadron Leader J.F. Jackson, and then went on to form and command No. 76 Squadron which, together with No. 75 Squadron, was to move to New Guinea, where the two squadrons took part in the defence of Moresby and the defeat of the Japanese at Milne Bay.

Jeffrey was then posted to command No. 2 OTU on its formation in April 1942 and was promoted to wing commander in June. In August 1943 he took over from Wing Commander Caldwell as leader of No. 1 (Spitfire) Wing at Darwin and was promoted to temporary group captain in December. He flew continuously with this wing until September 1944 when he was again posted to command No. 2 OTU, remaining there for the rest of the war. He was demobilised on 6 January 1946 and transferred to the RAAF Reserve. His final score was five destroyed with one shared and one damaged.

In August Jeffrey applied for a permanent commission in the RAAF but was refused. He reapplied in 1951 and was granted a commission in the General Duties Branch with the substantive rank of wing commander. He later became the Deputy Director of Operations at Air Force Headquarters and was subsequently posted to the Weapons Research Establishment at Salisbury, South Australia. He resigned on 14 May 1956.

KEARNEY, James Timothy

James Timothy Kearney was born in Melbourne on 18 November 1916 and joined the RAAF on 10 April 1940. He was awarded the flying badge and graduated as sergeant pilot on 14 November. From January 1941 he had various postings as a flying instructor and staff pilot. Then on 14 August 1943 he was posted to No. 30 (Beaufighter) Squadron, which moved to New Guinea in October 1943, under the command of Wing Commander B.R. 'Blackjack' Walker. Over the next two years No. 30 Squadron became well known for its aggressive and successful operations in long-range strikes against Japanese shipping and ground targets. It was also used for long-range bomber and convoy support duties.

During this period Kearney became the leading Beaufighter ace in the South-West Pacific, gaining nine victories and damaging nine Japanese aircraft. He was commissioned on 13 January 1943 and promoted to flight lieutenant on 13 July 1943, and in October was awarded the DFC. The following is an extract taken directly from the citation for this award:

On 31 May a flight of three Beaufighters led by Flying Officer Kearney in an attack on Langeor was intercepted by three enemy fighters and engaged by four more enemy fighters on their return. During an engagement lasting for half an hour Flying Officer Kearney was successful in shooting down one enemy fighter and destroying a further two aircraft by strafing.

Kearney returned from New Guinea on 8 September 1944 and after several postings as an instructor at OTU. His appointment was terminated on 8 January 1946.

LEU, Rudolf Morris

Rudolf Morris Leu was a Canadian, born in Nelson, British Columbia, on 1 February 1913. When he was a baby, his parents travelled to South Africa, where they lived for three years before moving to Madagascar for the next four years. From there he was sent

to school in England until he was 17, and after attending an agricultural college for two years, he joined some friends in Australia. He was a jackeroo at Beaudesert, Queensland at the outbreak of the war, and immediately volunteered to join the RAAF. He was called up on 28 March 1940 and received his pilot training in Australia, graduating as a sergeant pilot on 14 February 1941. Leu was then posted to the Middle East, where he joined No. 112 Squadron, RAF, in late 1941, flying Tomahawks. On 20 November he shared in the destruction of a Bf 110, and then the next day he shot down a Fiat CR 42, as well as sharing in the destruction of two others. On 30 November he scored again by shooting down a Fiat G 50 and on 5 December destroyed a Macchi 200, and probably destroyed a Bf 109. He was posted to No. 450 Squadron on 24 December 1941.

By this time Leu was flying Kittyhawks, and his score began to increase rapidly. He was shot down on 12 October and reported missing, but reported safe and returned to his unit on 14 October. On 25 January 1942 he destroyed a Bf 109 and on 14 February shot down two more Italian Macchi 200's in the one engagement. He was commissioned on 3 March, and awarded a DFM on 17 March. On 24 June he was shot down and became a Prisoner of War, with a total score of seven.

He had been wounded in the arms face and legs, and spent four months in hospital after which he was sent to an Italian POW camp. He managed to escape but was captured six weeks later by the Germans, and spent the remainder of the war as a POW. He was returned to the United Kingdom, where he embarked for Australia on 17 September 1945, disembarking in Sydney on 19 October.

His appointment was terminated on 10 December 1945.

McBURNIE, Donald Hindle

Donald Hindle McBurnie was born in Lakemba, New South Wales, on 6 April 1920. He was a clerk, and a sergeant in the 65th Battalion CMF, before joining the RAAF on 27 May 1940, and was posted to Rhodesia for his flying course. He gained his wings as a sergeant pilot and was posted to the Middle East where he joined No. 229 Squadron RAF in October 1941, flying Hurricanes. In January 1942 he was posted to No. 450 Squadron RAAF flying Kittyhawks. By now a flight sergeant, he scored his first combat victory on 8 March when he shot down a Macchi 200. Two more victories followed, and then on 4 July he shot down a Bf 110, but only after he was wounded in the leg and shoulder, and his aircraft badly shot up. However, he was able to rejoin the squadron after a brief spell in hospital.

McBurnie received a DFM on 18 July, was commissioned later in the month. In September his first tour ended, and for the next twelve months he was posted as a staff pilot to a series of Aircraft Repair Units until September 1943 when he began his second tour with a posting to No. 451 Squadron, flying Hurricanes. In April 1944 he moved with the unit from Egypt to Corsica, where he saw action over Italy and southern France.

His final posting was to command No. 238 Squadron, RAF in August 1944, and on 14 November he was awarded the DFC for his 'skill and determination' while leading No. 238 Squadron. Just before this award he had led the squadron against a number of ground targets in the face of intensive ground fire, and over a period of three weeks they had destroyed somewhere close to three hundred enemy vehicles. The citation to his DFC also gave credit to McBurnie for the destruction of five enemy aircraft.

He returned to Australia and on 24 November was transferred to the reserve at his own request to join Australian National Airways. His final score was five destroyed and one damaged.

McDONALD, Kenneth Neal

Kenneth Neal McDonald was born in Hawthorn, Victoria, on 20 June 1918 and was a clerk before he joined the RAAF on 21 July 1940 and graduated as a sergeant pilot on 11 March 1941. He was commissioned on 10 September 1941 and posted to No. 31 (Beaufighter) Squadron on 14 August 1942. He is credited with destroying eight enemy aircraft and was awarded the DFC while flying sorties against Timor and other islands to the north of Australia. He returned to Australia in June 1943 and was posted to Central Flying School. He was promoted to flight lieutenant in September and his appointment terminated on 16 November 1945.

Little more is known about this officer, except that he received a Commendation for Gallantry on 4 April 1945, the citation for which is set out in detail below:

On 16 March 1944, a Beaufort aircraft was involved in a crash landing resulting from almost total engine failure shortly after take-off.

As captain and pilot of the aircraft Flight Lieutenant McDonald displayed exceptional skill and coolness in carrying out a forced landing under the most difficult and hazardous circumstances.

The aircraft commenced to burn fiercely upon coming to rest. Immediately upon vacating the aircraft, Flight Lieutenant McDonald checked his crew and discovered the absence of one of the members. He promptly re-entered the blazing aircraft and strenuously endeavoured to release the airman who was trapped in the rear of the fuselage.

He persisted in his endeavours to extricate the trapped airman until forced to retire by the fierceness of the flames, sustaining second degree burns, abrasions and severe shock.

Flight Lieutenant McDonald displayed bravery above the call of normal duty in his persistent endeavours to effect a rescue under extremely dangerous conditions.

McINTOSH, Lawrence

Lawrence McIntosh was born in Manly, New South Wales, on 7 January 1919. He was a school teacher and had been a member of the Sydney University Regiment for two months before enlisting in the RAAF on 3 February 1941 as an aircrew trainee. He completed his training in Canada, and graduated as a pilot officer on 25 September 1941. He embarked for the United Kingdom on 3 October 1941 and was posted to No. 3 Glider School on 21 July 1942, followed by a posting to No. 55 OTU on 24 November. He joined No. 122 Squadron on 9 February 1943 and on 23 April was posted to No. 324 Wing in North Africa, joining No. 111 Squadron on 26 May. He was promoted to flight lieutenant on 25 September and appointed a flight commander. He was awarded the DFC in March 1944, and the events leading up to this award are best told in the terms of the accompanying citation:

Flight Lieutenant McIntosh has proved an excellent flight commander and a tenacious fighter.

He is a splendid leader and by his keenness and skill has contributed materially to successes achieved by his squadron.

In February 1944 while leading a section of two aircraft over Anzio this officer's aircraft was attacked by sixteen Messerschmitt 109's. In the ensuing engagement he destroyed one of the enemy bringing his total victories to four aircraft destroyed.

Promoted to squadron leader on 1 January 1945, McIntosh returned to Australia on 24 March 1945 and was posted to No. 8 OTU at Parkes on 7 July. His appointment was terminated on 21 September 1945, with a total credit of five enemy aircraft destroyed.

MAILEY, Walter Hamilton Arthur

Walter Hamilton Arthur Mailey was born in Sydney on 14 April 1915 and was a journalist before he joined the RAAF on 11 April 1940. After training in Rhodesia he graduated as a sergeant pilot and was posted to No. 3 Squadron in July 1941, and immediately converted to Tomahawks. On 30 November he shot down two Macchi 200s and damaged a Ju 87. Then on 9 December he shot down two Bf 109s and damaged a second. He then converted to Kittyhawks and on 26 January, his aircraft was damaged during an engagement to such an extent that he found it necessary to carry out a forced landing. He was picked up and flown back to base by Flying Officer (later Wing Commander) 'Lou' Spence, who was later killed while

commanding No. 77 Squadron in Korea.

On 14 February Mailey scored a double victory for the third time when he shot down two Bf 109s and damaged a Me 200 in the one engagement. In the next two months he added three more victories to his score, plus one damaged. He destroyed one more and on 17 March 1942 was awarded the DFM, having completed forty-four operational sorties, for a total score of nine.

Mailey was then sent back to Rhodesia as an instructor and was repatriated to Australia on medical grounds on 5 March 1943. He was subsequently posted to No. 113 Fighter Sector Headquarters in New Guinea on 11 November, and then to No. 5 Fighter Control Unit at Darwin in July 1944, where he ended the war as a flight lieutenant.

His total score was six destroyed and five damaged.

MAYERS, Howard Clive

Howard Clive Mayers was born in Sydney on 9 January 1910, but was already resident in London as the managing director of a large firm when the war broke out. He resigned immediately and joined the RAF in 1939. He received a commission and was posted to No. 601 (County of London) Squadron Auxiliary Air Force. Mayers flew Hurricanes during both the Battles of France and Britain, scoring his first victory on 8 August 1940 with the destruction of a Bf 109. Then on the 13th he shot down one Ju 88 and probably a second, before he was shot down into the sea and wounded.

He was rescued by a motor torpedo boat and after treatment for wounds was soon back on duty. On 16 August he destroyed two Ju 88s and probably a third. He claimed a Do 17 on the 31st and on 4 September shot down another Do 17. On 25 September he destroyed a Bf 110 and probably destroyed a Ju 88. He was awarded the DFC and became a fight commander.

He was posted to the Middle East in 1941 to command No. 94 Squadron, where he flew both Hurricanes and Kittyhawks. In December 1941 he rescued a downed British pilot from behind enemy lines, and flew him back to base, and for this exploit he received a Bar to his DFC. Early in 1942 he was promoted to the acting rank of wing commander, by which time he had scored eleven confirmed victories, and was Mentioned in Despatches on 1 January 1942. Shortly afterwards he became wing leader of No. 239 Wing, leading them on operations over the Mediterranean.

On 12 May Mayers led ten Kittyhawks of 250 Squadron and four Beaufighters from No. 252 Squadron in an attack on sixteen Ju 52s, personally destroying one of the enemy. On 7 July he shot down a Bf 109, and was credited with two other victories while leading the wing. On 20 July his aircraft was hit and he was forced to land behind enemy lines where searching aircraft found his Kittyhawk with the cockpit open, but no sign of him. It is believed that he was taken prisoner, but died when a ship carrying POWs was sunk in the Mediterranean. He was never seen or heard of again. The award of a DSO was announced a few days after he was shot down. His final score was eleven with three probably destroyed.

NITSCHKE, Richard Hastings

Richard Hastings Nitschke was born in Adelaide on 18 July 1915 and worked as a jackeroo before joining the RAAF as an aircrew trainee on 20 July 1940. He completed his training in Australia on 13 January 1941 and was posted to the Middle East, where he joined No. 250 Squadron on 21 June 1941 as a sergeant pilot, flying Kittyhawks. His first success came on 20 November, when he shot down two Ju 87s but his own aircraft was hit and damaged and he was forced to crash-land. He was commissioned on 9 December 1941, by which time he was able to claim five enemy aircraft destroyed. On the 21 December he was posted as missing on operations over Benghazi and presumed killed.

OLIVE, Charles Gordon Chaloner

Charles Gordon Chaloner Olive was born in Brisbane on 3 July 1916, joined the RAAF as an air cadet in 1935 and was transferred to the RAF in February 1937. When war was declared he was already a flight lieutenant and took part in the operations over Dunkirk in May 1940 as a member of No. 65 Squadron, and later during the Battle of Britain.

On 26 May 1940, over Dunkirk, he was credited with destroying a Bf 109 and the next day was credited with damaging a Do 17. On 20 July he destroyed a Bf 109, and on 12 August probably destroyed another. In the next few days he claimed two more Bf 109s, and on the 14th he claimed a probable and on the 26th destroyed a Bf 110. He received a DFC in September 1940, the citation for which officially confirmed the destruction of five enemy aircraft and five probably destroyed.

Promoted to wing commander, Olive was posted in June 1941 to command and form No. 456 Squadron, RAAF, which was the first unit ever to be trained for night-fighting. It was initially equipped with Defiants, which were later replaced by the new Beaufighters. In March 1942 he returned to Australia and was posted to Air Defence Headquarters in Sydney as a wing commander and then to Morotai Headquarters in 1945.

After the war, he was transferred to the RAAF Reserve, and became the State Commandant of the Air Training Corps in Queensland, an appointment he continued to hold for a number of years.

Olive was one of only twenty-one Australians who took part in the Battle of Britain, of whom fourteen were killed. He was one of nine Australians who achieved ace status during the battle.

PARKINSON, Colin Henry

Colin Henry Parkinson was born in Sydney on 29 December 1916 and was a business manager before joining the RAAF on 19 June 1940. After elementary training at No. 5 EFTS at Narromine, he completed the remainder of his training in Canada, and embarked for the United Kingdom in August 1941 as a sergeant pilot. After a few weeks at an OTU, he was posted on 21 October 1941 to No. 56 Squadron, followed by a short tour with No. 19 Squadron, before being posted to Malta.

He was one of the original eight Spitfire pilots to take off from the aircraft carrier HMS *Eagle* as it approached the island. By any standards this was no mean feat for land-based pilots without previous experience taking-off from a carrier, but this soon became the standard way to deliver aircraft to Malta.

At Malta he was posted to No. 603 Squadron on 9 June 1942 and on the 23rd he gained his first victory by shooting down a Macchi 201. The squadron was disbanded the following month, and Parkinson was posted to No. 229 Squadron on 3 August. On the 27th he shot down a Bf 109 and destroyed a Ju 52 on the ground. He was commissioned on 25 September and added steadily to his score. On 4 September he shot down a Ju 88 and a Bf 109, and on 11 October probably destroyed a Ju 88 and shot down a Bf 109.

On 12 October he became a flight commander, and on 17 October he had just shot down a Bf 109, when he noticed a fellow pilot had baled out and landed in the sea. Three Bf 109s attacked the downed airman, but although he was low in petrol, Parkinson fought them off, and then orbited the spot until a rescue launch arrived. By 25 October his score was ten destroyed, with two probables and three damaged, plus one destroyed on the ground. He was awarded the DFC on 3 November 1942.

In July 1943, Parkinson was posted back to Australia, for instructional duties at No. 2 OTU, before becoming an initial member of the Aircraft Performance Unit which formed at Laverton in December. He was then appointed as the officer commanding the Special Duties Flight, which became known as the Chemical Research Unit in 1944. His appointment was terminated on 28 June 1945.

PERRIN, John Rowley

John Rowley Perrin, known as 'Jock', was born in Melbourne on 9 October 1916 and was a gunner in 15th Field Brigade, RAA(M), when he joined the RAAF in July 1938 as an air cadet at Point Cook. He graduated a year later and in July 1939 was posted to No. 3 Squadron and on the 15 July 1940 moved with the unit to the Middle East. On 19 February 1941, while leading a patrol, he encountered nine Ju 87's attacking British ground forces. He and another squadron pilot dived at the Stukas, only to be attacked themselves by a large number of German fighters which had been covering the Stukas as top cover.

Acting quickly, Perrin shot down a Ju 87 and a Bf 110 before coming under fire himself. As he turned to face the attackers his Hurricane took a several hits, including a number in the petrol tank. At the same time he was wounded in one eye and half blinded

with oil and blood, but fought on until he had used all his ammunition, and then managed to carry out a crash-landing in the desert.

The German fighters then attacked him with machine gun fire, sending up a large cloud of dust, but as it cleared he was seen to be running for the shelter of a tree. This was also attacked, but he found other cover and was able to avoid further attention. He was taken aboard a hospital ship in Tobruk Harbour, which was sunk by Ju 87s, but he also survived this.

Back on operations in April, Perrin destroyed three Ju 87s in the one engagement, and the squadron was then withdrawn from operations to convert to Tomahawks. Back in action on 13 June he was on patrol with Squadron Leader Jeffrey when they intercepted eight Ju 88s in Italian markings, one of which was claimed by Perrin. He was awarded a DFC on 1 August 1941, and received a Mentioned in Despatches on 24 September.

Perrin was posted back to Australia as a squadron leader and commanded Nos. 5 and 24 Squadrons before taking over command of No. 76 Squadron at Milne Bay in May 1943. After further service with that unit at Goodenough and Kiriwina Islands, he became Deputy Director of Operations at RAAF Headquarters in May 1944, followed by a posting to RAAF Overseas Headquarters as SASO in September, returning to Australia in December 1945. His final score was ten enemy aircraft destroyed.

Perrin remained with the RAAF after the war and was granted a permanent commission in November 1946, becoming commanding officer of No. 81 (F) Wing at Williamstown on 6 March 1947, and taking command of No. 78 Wing on 23 May 1949. In April 1951 he was posted to the Command and Staff School in the United States and was subsequently appointed to command Headquarters North Western Area in January 1956. This was followed by a posting to Department of Air in April 1957 and promotion to group captain in July 1958. Perrin was then posted to New Delhi as the Senior Military Adviser in August 1959. On his return to Australia he was posted as Director of Organisation in February 1962 followed by a posting to New Zealand as the Australian Defence Adviser in December 1964 until his retirement from the RAAF in December 1966.

RANKIN, Ronald

Ronald Rankin was born in Braidwood, New South Wales, on 3 November 1914 and was a school-teacher before joining the RAAF in on 7 June 1940. He had also been an Australian International Rugby Union player for the previous four years. Completing his initial training in Australia he embarked for Canada on 27 November 1940 and was granted a commission on 10 April 1941. He arrived in the United Kingdom in June where he received further training before being posted to No. 236 Squadron RAF on 21 February 1942.

In June 1942 he was posted to No. 227 Squadron in the Mediterranean, flying Beaufighters. He had his first victory on 9 September when he shot down a Bf 109 and then probably destroyed a Ju 87 on the 13th, and damaged two others. On 10 November he destroyed two Ju 52s on the ground, and on the 16th shot down a He 115 seaplane, and also destroyed another aircraft on the ground. On the 28th he shot down a Savoia SM 79 and was awarded a DFC on 11 December, before returning to the United Kingdom in January 1943 as a specialised instructor on rocket firing from Beaufighters. In May he took part in what was the first

strike by rocket firing Beaufighters in a Coastal Command attack against an enemy convoy off the Dutch coast.

Rankin returned to Australia in October 1943, where he was promoted to squadron leader, and posted in April 1944 to No. 30 Squadron based at Kiriwina, again flying Beaufighters. He was awarded a Bar to his DFC in October 1944, and the Belgian Croix de Guerre on 1 February, which was 'conferred on acting Squadron Leader Rankin in recognition of valuable service rendered in connection with the war'.

He was discharged on 20 December 1945 with a final score of five destroyed and two shared destroyed with one probable and one destroyed on the ground.

RATTEN, John Richard

John Richard Ratten, was born in Sheffield, Tasmania, on 13 November 1912 and was a mining engineer before the war. He joined the RAAF on 2 July 1940, being one of the first to enlist under the EATS. He graduated on 24 July 1941, and arrived in the United Kingdom just as the Battle of Britain was drawing to a close, and was posted to No. 72 Squadron, RAF, at Biggin Hill on the 29 February 1942. He was credited with damaging a FW 190 on 17 May 1942 and by the end of the month he had his first victory with the destruction of a FW 190. In April he damaged another FW 190 and on 4 August he was posted to No. 453 Squadron, RAAF, where he was made a flight commander, and in 1943 became commanding officer. He attended a Fighter Leaders Course in January, following which he was appointed Wing Leader of Hornchurch Wing, flying Spitfires, and promoted to wing commander in May.

On 11 May Ratten shot down a FW 190 and three days later he led his wing against a patrol of FW 190s and damaged one of the enemy, although one of his cannons jammed. He then came under attack from two of the FW 190s but they soon broke off to rejoin their own patrol, which by now had turned for home. Ratten started in pursuit, soon caught up with a straggler and closing to one hundred yards (90 metres) gave it a burst from his one cannon and all machine guns. As smoke began pouring from the FW 190, he closed to sixty yards and fired some further short bursts at the enemy which burst into flames and plunged to the ground.

Ratten received a DFC on 15 June and gained his final victory on 4 July by destroying yet another FW 190. This brought his score to five aircraft destroyed, with one probably destroyed and one damaged. In July he was appointed to command RAF Station Peterhead, a post he held until 1944. His final posting was to No. 11 Personal Dispatch and Receipt Centre. He was still serving there when he was hospitalised at RAF Hospital, Uxbridge, on 5 September 1944 and admitted to King Edward VIII Sanatorium on 8 February 1945 where he died on the 27th.

RAWLINSON, Alan Charles

Alan Charles Rawlinson was born in Fremantle on 31 July 1918 and was a research chemist before joining the RAAF as an air cadet in July 1938. On graduating a year later, he was posted to No. 3 Squadron on 7 July 1939 and moved with the unit to the Middle East, under the command of Squadron Leader, later Air Vice-Marshal, I.D. McLachlan, CBE, DFC. Flying a Gladiator, Rawlinson participated in the squadron's first combat of the war on 19 November 1940. He was on patrol with three others when they sighted a force of thirteen Italian Fiat 42s. Although heavily outnumbered the Australians attacked and shot down six of the Italians, one of which was claimed by Rawlinson, for the loss of one of their own who was shot down and killed.

During December Rawlinson flew Gauntlets, but converted to Hurricanes in early 1941. On 26 February, while on patrol over Australian forces, he was shot down, but managed to carry out a controlled crash-landing in the middle of a mine field, and was rescued from this rather dangerous situation by nearby AIF troops. He was unharmed, and on 3 April destroyed two Ju 87s. Shortly after this the squadron withdrew to re-equip with Tomahawks. This conversion had just been completed when, on 28 June, the squadron intercepted six Martin 167 light bombers of the Vichy French forces. All six were shot down, three of which were destroyed by Rawlinson.

Having by now completed one hundred and twenty-one operational sorties for a total flying time of two hundred and five hours Rawlinson was posted to No. 71 OTU for a short time as an instructor. He was awarded a DFC on 10 October 1941 and promoted to squadron leader. He was recalled to No. 3 Squadron in November as commanding officer. He was leading twenty-two Tomahawks over the desert on 22 November when they were engaged by twenty-five Messerschmitt Bf 109 fighters. The ensuing fight roamed over the sky for the next sixty-five minutes and was one of the longest air battles up to that time. Both sides scored equally, with Rawlinson shooting down one Bf 109 in flames, probably destroying one and damaging another. At the end of the battle No. 3 Squadron had lost five of its own aircraft. On the 30th he destroyed a Macchi and a Bar was added to his DFC on 28 December.

In December Rawlinson was appointed to command the Air Fighting and Firing School, but after only a short time there he returned to Australia in March 1942 and was posted as Chief Flying Instructor at No. 1 OTU. In September he was posted to Air Force Headquarters for duty with DCAS and in April 1943 was posted to command No. 79 (Spitfire) Squadron and in May he led the squadron to Goodenough Island. He was promoted to wing commander and took over command of No. 73 Wing in November 1943.

He attended the RAAF Staff College in 1944 after which he commanded the Parachute Training Unit, before being posted as Director of Air Staff Policy at Air Force Headquarters in April 1945. On 21 May he took over command of No. 78 Wing, and was promoted to group captain on 14 July 1945. His appointment was terminated on 19 December 1946.

His final score was ten destroyed and one probably destroyed.

REES, Stewart William

Stewart William Rees was born in Cunderdin, Western Australia, on 30 September 1923 and was a student before joining the RAAF on 7 December 1941. He was posted to the United Kingdom, and after attending several OTU courses was posted in February 1944 to No. 600 Squadron in Italy, flying night missions on Beaufighters. Together with his radar operator, he claimed his first victory on 14 May by shooting down a Ju 88, and on 2 June destroyed a Fiat CR 42. Then on 5 September he destroyed two Ju 87s in the one sortie, and again scored a double victory on 22 December by destroying two Ju 88s and damaging another.

Rees received a DFC on 23 February 1945, with a final score of six destroyed and one damaged.

REID, Leonard Stanley

Leonard Stanley Reid was born in Clifton Hill, Victoria, on 21 September 1916. He was a clerk, and had served three years in the 52nd and 37th Battalions (CMF), before joining the RAAF on 13 May 1940. He graduated as a sergeant pilot and after an initial period with Nos. 504 and 130 Squadrons in the United Kingdom, he was posted to No. 185 Squadron in Malta in May 1942. He was appointed to a commission on 6 July and claimed his first victory on the 17th with the destruction of a Bf 109, and damaged a second following this up on the 24th by shooting down a Ju 88. On 27 August he destroyed another Ju 88.

On 11 October Reid destroyed a Bf 109, and the next day damaged a Ju 88. On the 14th he destroyed a Bf 109 and damaged another and also damaged a Ju 88. On the 16th he probably destroyed a Ju 88 and on the 18th destroyed two more enemy aircraft and probably damaged another. He was awarded a DFC on 4 December 1942, and with a score on Malta of four destroyed with two probables and five damaged, he was posted back to the United Kingdom in 1943. While at Malta he had on two occasions led eight aircraft from carriers flying reinforcements to the island.

Back in the United Kingdom Reid served again with No. 130 Squadron, before returning to Australia in May 1943 as an instructor at No. 2 OTU Mildura. In May 1944 he was posted to command No. 79 Squadron at Moratai. His appointment was terminated on 19 August 1946. He was appointed to a commission in the Active CAF on 1 October 1948 and posted to No. 21 Squadron where he did a Vampire conversion course. He was transferred to the general reserve on 29 March 1954.

RUSSELL, Ian Bedford Nesbitt

Ian Bedford Nesbitt Russell was born in Melbourne on 22 May 1911 and was a member of the Royal Air Force before the war. In November 1939 joined No. 609 Squadron, Royal Auxiliary Air Force, as a pilot officer. In the early days of the fighting over France he was flying with Nos. 245 and 607 Squadrons and is credited with destroying eight enemy aircraft over Dunkirk.

In May he shot down two more, bringing his total to ten. He returned to No. 609 Squadron on 31 May but was killed the following day. The award of a DFC was gazetted on 14 July 1940.

SAUNDERS, John Henry William

John Henry William Saunders, an Englishman by birth having been born in Richmond, Surrey, on 29 July 1920, of an English father and an Australian mother, the family later migrated to Cottesloe, Western Australia. Saunders was already a member of the RAAF when the war began, having joined as an air cadet on 1 January 1939. On graduating in October his initial posting was to No. 23 Squadron, and in January 1941 he was posted to the Middle East to join No. 3 Squadron, flying Hurricanes. On 15 February he claimed his first victory with the destruction of a Ju 88 and three days later he shot down two Ju 87s. On 8 June he destroyed a Vichy French Martin 187, and achieved his fifth victory on the 14th when he shot down a Ju 88 with Italian markings.

Saunders scored again on 25 June, when he destroyed a Potez, but was not destined to score any further victims. He was a flight lieutenant by this time and flying Tomahawks, when he became the victim of a planned aerial ambush. On 22 October he engaged with a Ju 88, and was in turn attacked by a large number of Bf 109s lying in wait. He was slightly wounded, but his aircraft was so damaged that he was forced to making an emergency landing. His aircraft immediately came under a heavy strafing attack during which he lost his life. His final score was six destroyed and one damaged.

SCHERF, Charles Curnow

Charles Curnow Scherf was born in Emmaville, New South Wales, on 17 May 1917 and was a grazier before joining up. He had been a member of the 12th Light Horse (CMF) for five years, before joining the RAAF on 30 December 1940. At the end of his course, he trained as a flying instructor, and was moved through a series of elementary flying schools, before being posted to the United Kingdom in November 1942. Here he attended an OTU course and on 19 October 1941 was posted to No. 418 Squadron RCAF, a unit with which he spent the whole of his operational service.

He was soon flying Mosquitos on intruder operations over France and Germany, and on 27 January 1944 he began to score by destroying a Fw 100, and on 19 February forced an unidentified enemy aircraft down without firing a shot. Two days later he was able to claim two Ju 88s in the one engagement. On the following day, he was flying in company with another squadron pilot, when they chanced upon a five-engined He 111Z, towing two gliders. They each selected and shot down a glider, then shared the destruction of the larger aircraft between them. Later the same day, in a very low run over a German airfield, he destroyed two transports on the ground.

Scherf was awarded a DFC on 4 April 1944 and shortly after this his tour expired and he was posted to ADGB Headquarters as an intruder controller. He soon became restless and went on leave on 5 April to visit his old squadron. He arranged a trip under what was known as the 'Old Chums Act' and Scherf was soon flying again over France. On the 2 May, he damaged two He 115s on the water, destroyed a Do 217 and a Ju 52 on the ground, shot down a Ju 86, finally destroying two He 111s on the ground, before returning to base. A Bar to his DFC was announced on 12 May.

Other leaves, and similar arrangements followed, and one of these, on 16 May resulted in the award of a DSO. The citation records that in May 1944 Scherf had:

On two occasions led a section of Mosquito aircraft on daylight sorties over well defended areas far into Germany. During these two flights a number of enemy aircraft were destroyed of which he shot down six, and he also destroyed three on the ground. His successes are a splendid tribute to his great skill, enterprise and fearlessness. Squadron Leader Scherf has set an example of the highest order.

On that day in May, he had taken off, accompanied by another squadron pilot, on what was to prove to be his last operational sortie, heading for North Germany and the Baltic. Sighting a lone He 111 some distance away over the sea, they gave chase. The German had also obviously sighted the two Mosquitoes coming up astern and was now heading for home at full throttle. Scherf was in the lead and caught up first and fired a short burst, after which the German burst into flames and fell into the sea. Moments later he destroyed a Fw 190 and damaged a Do 18 flying boat on the water.

Scherf was then able to attack a He 177 from below and destroy it, his next victim was an Ar 196 float plane. Finally he destroyed a He 111 on the ground, but his own aircraft took a direct hit from the ground defences, resulting in severe damage to his tailplane, and some damage to a drop tank. Ignoring the damage he closed on a Ju 86 and destroyed it as well. He had by now destroyed five of the enemy in fifteen minutes, with four of these having fallen to his guns in five minutes alone.

By this time he was heading for home and flying low over the sea when a German convoy opened fire on him. When he reached the coast, still at very low level, a flock of gulls rose suddenly in front of him, nearly finishing off what the Germans had failed to do. There were twenty-seven holes in the wings, and a blood stained windscreen, obscuring forward vision. It says much for the stamina of both the pilot and aircraft that he was able to make it back to base.

He returned to Australia in September 1944 where he was posted to No. 5 OTU at Williamstown for instructional duties. He left the service in April 1945 to return to his earlier career of a grazier on the family property, at Emmaville. He was to die tragically only four years later in a car accident on 13 July 1949. His final score was 14.5 destroyed in the air, with nine destroyed on the ground, and seven damaged.

SHEEN, Desmond Frederick Burt

Desmond Frederick Burt Sheen was born in Sydney on 2 October 1917 and was a clerk in the Commonwealth Public Service before he joined the RAAF as an air cadet on 20 January 1936. After completing his training at Point Cook he was seconded to the RAF in January 1936, and was one of the earliest to see action. He was serving with No. 72 Squadron flying Spitfires in the United Kingdom in November 1939 when the Luftwaffe attacked a British convoy near Hull. On 21 October he was credited with the probable destruction of a He 115 float-plane and in November shared another. On 7 December he shared two He 111s with several others, and in April 1940 was posted to No. 212 Squadron, part of the Photographic Development Unit, flying from Heston. He then began flying unarmed in specially modified Spitfires on photo-reconnaissance missions over enemy territory. He was awarded a DFC on 7 May 1940.

Sheen returned to No. 72 Squadron in August as a flight commander, flying conventional Spitfires, just in time to take part in the Battle of Britain. On 15 August he shot down a Ju 88 and a Bf 110, and on the 17th damaged a Bf 109. By the end of August he was operating out of Biggin Hill, which had become the centre of the British air defences, and was credited with three victories at that time. In early September, Sheen was twice forced to bale out in as many days. On one occasion, he was wounded and initially trapped in his cockpit, managing to bale out when only 800 feet (240 metres) above the ground and the air speed indicator had reached 800 mph (1290 km/h).

Promoted to squadron leader, Sheen took over command of the squadron in March 1941 and in October received a Bar to his DFC. On promotion to wing commander in November 1942, he became station commander at Manston. In 1943 he commanded the RAF stations at Skaeabrae and Drem in Scotland, and his last wartime appointment was as commander of No. 148 Airfield, 2nd TAF, from the time of the allied landing in France in 1944 through to 1945.

He remained in the RAF as a career officer, and was later promoted to group captain, moving to a senior staff appointment at Headquarters Transport Command. He retired from the RAF in July 1971, after which he returned to Australia. His official score was six, with nine probably destroyed and two damaged.

SHIPARD, Mervyn Charles

Mervyn Charles Shipard was born in Albury, New South Wales, on 24 July 1917 and was a clerk in Henty, New South Wales, before joining the RAAF on 19 March 1940. After completing his training in Canada he was posted to the United Kingdom in April 1941 as a pilot officer. After attending a night fighting course at OTU he joined No. 68 Squadron in March 1942, and was teamed up with Sergeant Douglas Oxby, who was to be his navigator/radar operator throughout his tour. Oxby was a member of the RAF who was to gain fame of his own later as the radar-operator who assisted in more 'kills' than any other radar-operator, and finished up as a flight lieutenant, with a DSO and DFM and Bar. They had their first victory on 1 November 1941 when Shipard shot down a He 111. They were then posted to No. 89 Squadron in the Middle East, where they fought as a team through the Western Desert, Malta and Sicily.

They had their first victories at Malta, destroying Ju 88s on 7, 19 and 22 July, also flying intruder sorties in the Western Desert and over Sicily. On 12 December Shipard destroyed two He 111s and on 7 January damaged two more. Next night he destroyed a He 111 and a Ju 88, and on the 16th destroyed two more Ju 88's. Shipard destroyed a Ju 88 on 7 July 1942, and claimed three more of the enemy before moving to the desert. Flying Beaufighters throughout, Shipard continued his nocturnal missions over the Desert, where he claimed the remainder of his victories. Two of these were He 111s, both shot down in the one sortie on the night of 12 December 1942.

Shipard received a DFC in February 1943 for his achievements on Malta, and just one week later the award of a Bar to his DFC was announced, after which he did not claim any further victories. He was posted to No. 54 OTU in the United Kingdom and in January 1944 returned to Australia, where he joined No. 2 OTU. He transferred to the reserve on 9 January 1945 and joining Australian National Airways.

His final score was fourteen destroyed, with two probably destroyed and two damaged. He became one of the leading night fighters, as eleven of his fourteen victories were gained at night.

SIMES, Ronald Henry

Ronald Henry Simes was born in Tenterfield, New South Wales, on 28 October 1919 and was a grocer, and a member of the 12th Light Horse Regiment CMF. He joined the RAAF on 16 April 1940 as a member of one of the earliest intakes, when elementary flying training was still being carried out at civil aero clubs. He joined No. 3 Squadron in the Middle East as a sergeant pilot in May 1941. Converting to Tomahawks he had his first victory on 20 November when he shot down a Bf 110. Then in December he was credited with damaging three enemy aircraft, before being shot down himself in hostile territory, where he became involved in a tank battle. He managed to make his way through the allied lines that same night and returned safely to his squadron.

In January 1942 he was taking part in a squadron patrol when they encountered a force of sixty enemy fighters. Ignoring the numerical superiority of the enemy, No. 3 Squadron attacked and Simes shot down three of the enemy in this engagement. After converting to Kittyhawks he destroyed a Fiat GR 42 and two Macchi 200s on 8 January, bringing his score to six. The following day he was killed in action. The DFM for which he had already been recommended was gazetted on 7 April. In addition to the six he had shot down, he was also officially credited with damaging three others.

SMITH, Donald Hamilton

Donald Hamilton Smith was born at Encounter Bay, South Australia, on 18 August 1915 and was a farmer in the nearby Victor Harbour district before joining the RAAF on 17 August 1940. He completed his flying course on 8 November 1941 with a commission and embarked for the United Kingdom on 27 May 1941. He spent a short time at an OTU before being posted to No. 126 Squadron on Malta, arriving on 3 January 1942.

During this brief period, he acquitted himself well as a Spitfire pilot, shooting down three aircraft, the third, a Ju 88 on 8 July. He shared in the destruction of an Italian Br 20 bomber on 6 July, and on the 8th he took off with three other squadron pilots to intercept twenty Ju 88s and their escorting fighters. Peeling off at 15,000 feet (4580 metres) he dived through the protecting screen of Bf 109s and shot down one of the bombers, before the fighters turned on him.

His aircraft was hit eight times, his radio shot to pieces, control wires damaged and he was wounded in the ankle, where an artery had been severed causing a severe loss of blood. He now began fighting a personal battle to remain conscious. Closing the auxiliary elevator trim, he decided to fight on as long as possible. Carrying out a tight turn into the path of another Bf 190, he opened fire at close range only to find that his guns had jammed.

As he was now out of the fight, he turned for home at low level over the sea, controlling directional stability with his one good leg. He managed to retain consciousness, bringing his damaged aircraft back to base for a flapless landing. It was

only when he had switched off his engine that he ceased fighting, and as he dragged himself out of the cockpit he fell unconscious to the ground.

After recovering, Smith left Malta with 3.5 victories to his credit and on 23 May 1943 was posted to the United Kingdom where he joined No. 41 Squadron and added another victory to his total score. In May 1944 he took over command of No. 453 Squadron just before the Normandy landings, and it was here that he gained his final successes. On 9 July he led the squadron against a force of over forty FW 109s and Bf 109s with the squadron destroying four, of which he claimed a Bf 109, and damage to a Fw 190. On 26 August he probably destroyed a Bf 109, and on 19 September was awarded the DFC. He was promoted to wing commander and returned to Australia to command No. 1 Personnel and Dispatch and Receipt Unit in October 1945. His appointment was terminated on 4 December 1945.

Smith also received the Soviet Medal for Valour for his service on Malta which had been gazetted on 11 April 1944. This was an unusual decoration for Australians, and the accompanying citation stated: 'The King has granted unrestricted permission for this award conferred by the President of the Supreme Council of Soviet Socialist Republic in recognition of the valuable service rendered in connection with the war.' Smith was the only Australian fighter pilot to receive this rare award, and one of the interesting features of this award was that Russian recipients received a pension of ten roubles per month, plus free travel on tramways. His total score was 5.5 destroyed, one probable and two damaged.

SPURGIN, Arthur Leslie Mervyn

Arthur Leslie Mervyn Spurgin was born in Brisbane on 4 November 1915 and was a tobacconist before joining the RAAF on 27 March 1941. He carried out his elementary flying in Australia before completing his training in Canada as a sergeant pilot. He arrived in the United Kingdom on 7 February 1941 and on 6 May was posted to No. 68 Squadron where he flew as a night fighter pilot. He was commissioned on 25 July 1941, and on 4 December was posted to the Middle East where he continued on night fighter operations flying Beaufighters with No. 89 Squadron. He obtained his first victory over Algiers on the night of 27 November 1942 when he destroyed two Me 111s, and further successes quickly followed. On 4 December he shot down one He 111 and on 11 December a Ju 88 and on the 22nd one Piaggio P 108, thus achieving ace status by shooting down all five in one month.

Spurgin returned to the United Kingdom in August 1943 and was posted to No. 87 Squadron flying Hurricanes and later in the same year converted to Spitfires, but all without adding to his score. His DFC was gazetted on 12 February 1943 and he returned to Australia in April 1944. After attending No. 5 OTU at Williamtown he was posted to No. 86 Squadron in the Northern Territory and his appointment was terminated on 10 November 1944. His final confirmed score was five destroyed.

STEEGE, Gordon Henry

Gordon Henry Steege was born in Sydney on 31 October 1917 and in July 1937 joined the RAAF as an air cadet and graduated in June 1938. He was posted to the Middle East for duty with No. 3 Squadron in May 1940, flying Gladiators, and scored his first victory on 10 December by shooting down a CR 42. On that date he was flying a Gladiator with a squadron patrol when they intercepted a number of CR 42s as they began a strafing run against some Allied forces. The patrol engaged at once, with one of the enemy being quickly disposed of by Steege.

On 13 December he shared with others the destruction of two CR 42s and one Savoia SM 79. He converted to Hurricanes and on 18 February 1941 destroyed three Junkers 87s. On 8 April his DFC was gazetted, and he had been credited with seven victories, including on the 3rd a Messerschmitt Bf 110, and damage to three others. He continued to serve in the Middle East, taking over temporary command of No. 260 Squadron and in May 1941 he was appointed to the command of No. 450 Squadron. He received a Mentioned in Despatches on 24 September 1941.

He returned to Australia as a squadron leader in 1942, was promoted to wing commander, and appointed wing leader of No. 73 Fighter Wing flying Kittyhawks, based at Kiriwina Island. He continued to lead the wing until June 1944 when he took over command of No. 81 Wing, and was awarded a DSO 'for outstanding leadership in aerial combat in New Guinea'.

He was promoted to group captain in January 1945 and appointed Senior Air Staff Officer (SASO) at Headquarters Eastern Area. He resigned from the RAAF in December 1946, with a final score of eight destroyed, two probables, and two damaged. In January 1947 he joined the New Guinea Administration as a Patrol Officer on Normanby Island.

When the Korean War began in 1947 Steege rejoined the RAAF and was appointed to command RAAF Station Schofields in September 1950. Then in 1951 after a jet conversion course at Williamtown he was posted to Korea on 8 March as commanding officer of No. 77 Squadron, flying Meteors. At the end of the Korean War he remained with the RAAF, holding several senior appointments at the Department of Air and Headquarters Training Command.

Steege was appointed Officer Commanding RAAF Canberra in May 1957 and in December 1958 was appointed Senior Planner at the SEATO Military Planning Office, Bangkok. In December 1961 he was posted back to Department of Air where he occupied several senior planning appointments, including that of Director of Plans. In November 1964 he was posted to command RAAF Amberley, followed by a posting to command RAAF Butterworth Malaysia, in May 1967. This was followed in May 1970 by an appointment as SASO at Headquarters Operational Command, before he retired from the RAAF on 31 October 1970.

STOREY, William John

William John Storey was born in Sale, Victoria, on 15 November 1915 and was a school-teacher before enlisting in the RAAF on 14 September 1940. He completed his elementary training in Australia before embarking for Canada, completing his training there on 29 May 1941 and being granted a commission before being posted to United Kingdom. After an OTU course, he joined No. 135 Squadron on 19 September and later moved with the unit to Burma, arriving on 18 January 1942.

He was in action almost at once, sharing in the destruction of a Nakajima Ki 27 Nate fighter on the 29th. Then on 6 February he was leading six Hurricanes when they were intercepted at 21,000 feet (6400 metres) by thirty Japanese aircraft. Storey excelled himself by shooting down two of the enemy within minutes of each other, and then came up dead astern of a third in a winning position, only to find he was out of ammunition and was forced to break off and return to base.

Shortly after this engagement Storey was promoted directly from the rank of pilot officer to flight commander. His powers of leadership in combat had become so obvious that he was chosen ahead of more senior pilots. On 23 February he shot down another Ki Nate, and by March he had destroyed another Nate and three Oscars. On 1 March he led a formation attack on ten Oscars, of which he destroyed one. Later in the day he shot down two more, bringing his score to eight, and on 20 April he was awarded a DFC.

On completing his operational tour in December 1943 Storey was posted to India for instructional duties, after which he was posted back to Australia in February 1944. He was promoted to squadron leader and appointed to command the Central Gunnery School at Cressy, where he remained until the end of the war.

His appointment was terminated on 28 September 1945. His final score was eight destroyed and two probably destroyed.

THOROLD-SMITH, Raymond Edward

Raymond Edward Thorold-Smith (known as 'Throttle'), was born in Manly, New South Wales, on 30 June 1913. A medical student, he had one year with the Sydney University Regiment and was already a private in the 2nd AIF, before joining the RAAF on 21 April 1941. At the end of his course in Australia he was posted to the United Kingdom where he joined No. 452 Squadron on 21 April 1941. He was on patrol with the squadron over the French coast at 20,000 feet (6000 metres) when they were engaged by thirty Messerschmitt Bf 109s. A series of individual dog fights broke out, and five of the Germans were destroyed, with Thorold-Smith sharing in the destruction of one. The Squadron lost three Spitfires in this engagement.

In another offensive sweep over France on 27 August, the squadron Spitfires were again intercepted by a heavy force of Bf 109s, and on this occasion Thorold-Smith shot down two enemy fighters. He claimed another on the 18 September and destroyed another Bf 109 and damaged another on 13 October. On 19 November the Spitfires and

109s met again, and some twenty of the Germans were engaged, one of which was damaged by Thorold-Smith at the outset. He was just closing in for the kill, when checking over his shoulder, he caught a glimpse of one of the new Focke Wolf 190 fighters, moving in on him from the port quarter.

He quickly went into an almost vertical climb, with full throttle and boost, at the top of which he half-rolled out and was now in a position to attack. The sudden manoeuvre took the pilot of the Fw 190 by surprise and he lost sight of the Spitfire which was now closing in. As he closed the gap, firing in short bursts, large pieces began flying off the Fw 190, and it went into a vertical dive trailing heavy black smoke until it crashed into the sea.

From July until November he had taken part in fifty fighter sweeps, was already a flight lieutenant, and on 2 December received a DFC. On 17 March 1942 he was appointed to command No. 452 and later led the squadron home to Australia for action against the Japanese where they arrived in August 1942. The squadron moved to Darwin as part of No. 1 Fighter Wing and at this stage, Thorold-Smith was one of the very few pilots in the wing who had seen operational service. On 14 March 1943, in what was only his second engagement with the new enemy, he was shot down and killed in action.

The Spitfire Mk II-V on display at the Australian War Memorial was once flown by him, as well as by 'Bluey' Truscott and Bob Bungey. His final score was six destroyed and one damaged.

TRUSCOTT, Keith William

Keith William Truscott, (better known as 'Bluey'), was born in Melbourne on 17 May 1916. Before joining the RAAF as a trainee aircrew Truscott had become a well-known Australian Rules player in Melbourne, known to his fans as 'Bluey' because of his shock of red hair. He was therefore quite a public figure when he joined the RAAF on 21 July 1940, and turning his back on the limelight, started training with his usual enthusiasm and application. Despite his efforts however, he was on the verge of failing his initial flying course on Tiger Moths, and was only pulled through by the determination and perseverance of his instructor who fortunately was able to sense his potential.

Truscott was commissioned at the end of further training in Canada, and was posted to an OTU in United Kingdom in March 1941, before becoming a foundation member of No. 452 Squadron, RAAF, on 5 May 1941. On 9 August he shot down a Bf 109E, and claimed another Bf 109 on the 16th, with one probably destroyed on the 19th. On 18 September he destroyed a Bf 109F, probably destroyed a Bf 109E, and went on to shoot down two Bf 109Fs, damaging a third on the 21st. He damaged two more on 12 October, and the next day destroyed two Bf 109Fs. Truscott claimed one more on the 21st and two more on the 23rd, and was then shot down in the Channel, but was picked up safely by an air-sea rescue boat.

In just under three months he had destroyed eleven enemy aircraft, probably destroyed two, and damaged three, all of which had been Bf 109 fighters. He received the immediate award of a DFC and was appointed a flight commander. On 6 November he shot down another Bf 109E, and two days later he destroyed two more Bf 109Fs. On 25 January 1942 he was appointed to command the unit and promoted to acting squadron leader. He continued to take part in many sorties and sweeps over the Channel and Occupied France before being posted back to Australia on 26 March. A Bar to his DFC

was announced on the 27th and the citation for this award confirmed that since May 1941 he had destroyed eleven of the enemy, probably destroyed three and damaged six.

Truscott was posted to No. 76 Squadron which was rearming at Bankstown after having been actively engaged in the earlier defence of Papua New Guinea. Truscott had retained his acting rank of squadron leader, and joined the unit as a supernumerary squadron leader when it returned to New Guinea, based at Milne Bay. He took over command of the unit on 5 June 1942 but, because of the imminent Japanese landing, and with no certainty that the airfield could be held, he was ordered to evacuate the squadron aircraft to Port Moresby. He took off with the squadron and saw them safely on their way, and then returned to Milne Bay to take charge of the ground staff. He remained there throughout the gruelling campaign.

The airstrip remained in Australian hands, and the Kittyhawks of No. 76 returned to carry on the fight. On 7 September Truscott led the squadron in the face of heavy anti-aircraft fire in an attack on the approaching Japanese task force, and continued to attack the Japanese forces throughout their landing and the ensuing battle right up to the time of their eventual defeat.

With Truscott still in command, the unit returned to Australia in October and was stationed at Darwin as part of the northern air defences. In January 1943 he intercepted three Japanese bombers as they approached the town and shot down one of them, bringing his score to sixteen. The following month, the squadron moved to Western Australia where there was not so much operational activity. For his work with No. 76 against the Japanese, he received a Mentioned in Despatches on 26 March.

Truscott was on a training exercise on 28 March over Exmouth Gulf when he sighted a lone Catalina and began a low-level simulated attack on the flying boat. He misjudged his height over the glass-calm sea and was killed instantly when his fighter plunged into the water. His body was recovered and he was buried in the Karrakatta Cemetery, Perth.

A Spitfire once flown by him is on display in the Australian War Memorial, where other memorabilia of his are also on display.

TURNBULL, Peter StGeorge Bruce

Peter StGeorge Bruce Turnbull was born in Armidale, New South Wales, on 9 February 1917 and was an electrician in Glen Innes before he joined the RAAF as an air cadet in 1938. On 23 October 1939 he was posted to No. 3 Squadron in the Middle East. At first he flew Gauntlets and Gladiators before converting to Hurricanes and Tomahawks. On 3 April 1941 while flying a Hurricane he shot down a Messerschmitt Bf 110, and followed this up by destroying three more of the same type all on the one day.

Shortly after this, the squadron moved to Palestine to convert to Tomahawks, and while flying one of these Turnbull shot down a Vichy French Martin 167 bomber on 15 June. He scored again on 28 June when the squadron intercepted six Martin bombers. All six were destroyed, with Turnbull able to claim two, bringing his confirmed victories to seven. On 10 July he shot down two Dewoitine fighters, and on 10 October received a well-merited DFC. By this time he had completed one hundred and sixteen operational sorties in two hundred flying hours, and was posted back to Australia.

Here he joined No. 75 Squadron in March 1942 and converted to Kittyhawks. When the squadron moved to Port Moresby later in the month, Turnbull went with it as a flight commander. He soon added to his victories by shooting down a Mitsubishi A6M Zero. In May the unit returned home for rest and refit and, now a squadron leader, Turnbull was appointed Commanding Officer of No. 76 Squadron. He returned to the New Guinea area with his new command, this time at Milne Bay.

When the Japanese launched their attack in August, Turnbull and his pilots flew almost without pause, strafing enemy vessels and positions in support of the Australian ground forces. Leading by example, Turnbull drove himself hard and with little rest. On 27 August he was diving to attack Japanese ground forces when his aircraft flipped on to its back at two hundred feet and struck the ground, killing him instantly. He was officially credited with ten victories, although his personal tally stood at twelve at the time of his death.

TWEEDALE, Gordon Russell

Gordon Russell Tweeddale was born in Brisbane on 18 April 1915 and joined the RAAF on 15 March 1940. He was posted to the United Kingdom and joined No. 43 Squadron in January 1942 as a sergeant pilot, flying Hurricanes. In April he was posted to No. 126 Squadron on Malta, and on 14 April had his first brush with the enemy when he damaged a Bf 109, but was in turn shot down, receiving a minor wound to his heel. He was able to resume flying almost at once, and was heavily engaged between 20 and 24 April when the island came under daily bomber attacks. During this short period he destroyed three Ju 88s and one Ju 87.

Tweeddale then converted to Spitfires and was transferred to No. 155 Squadron, where he brought his score to five on 7 May by destroying a Bf 109. He was commissioned on the 8th and on the very same day shot down a Bf 109 and a Ju 88. On the 9th, Tweeddale took off to intercept an incoming raid from which he failed to return and some days later was reported as killed in action. He had been recommended for a Distinguished Flying Medal, and this was announced on 29 December. His final score was seven destroyed and one damaged.

WADDY, John Lloyd

John Lloyd Waddy was born in Sydney on 10 December 1916 and joined the RAAF on 18 September 1940. After initial training in Australia, he completed his training in Rhodesia and was commissioned off-course in June 1941. He was posted to the Middle East and joined No. 250 Squadron, RAF, in October, flying Tomahawks. He probably destroyed a Bf 109 on 1 December and after converting to Kittyhawks, he shot down a Macchi 200 on 24 January 1942. On 12 May he shot down two Ju 52s and two Bf 110s, and on the 22nd destroyed a Bf 210. In July he was posted to No. 4 SAAF Squadron and promoted to flying officer. On 26 September he destroyed a Bf 109, bringing his score to 12.5, and was awarded the DFC in October.

Waddy returned to Australia in February 1943 as a flight lieutenant, and in April was posted to No. 2 OTU and granted the acting rank of squadron leader on 11 June 1943. In July he attended a Unit Commanders' course at the RAAF Staff School, and in September was appointed to command No. 80 Squadron, operating from Morotai and Borneo. He was promoted to temporary squadron leader on 1 January 1945 and Mentioned in Despatches.

His appointment was terminated in September 1945, and in April was appointed to a commission in the RAAF Reserve. On 22 September 1950 he was appointed the first Citizen Air Force Member of the Air Board with the acting rank of group captain. He retired from this post in October 1954. For his services to the CAF in war and peace he received the OBE in January 1955. His official score was fifteen destroyed, with two probables and six damaged.

WHITTLE, Robert James

Robert James Whittle was born in Brisbane on 10 July 1914 and practised as a pharmaceutical chemist before enlisting in the RAAF in April 1940. After training in Australia he embarked for the Middle East in February 1941. He served with No. 250 Squadron, RAF, as a sergeant pilot from May to December and saw active service in Libya and the Western Desert. He shared in the destruction of a Bf 110 on 30 June, and on 30 October shot down a Bf 109f. On 5 December he destroyed three Ju 87s and a Bf 109.

On one occasion Whittle was shot down behind enemy lines and walked back thirty miles (48 kilometres) during the night, rejoining his squadron for duty the next day. He was awarded a DFC and was commissioned on 9 December and posted to No. 73 OTU as an instructor before returning to Australia in December 1942. In March 1943 he was posted to No. 86 Squadron on its formation as a flight commander and took part in operations from Horne Island and Merauke in Dutch New Guinea.

In December 1943 Whittle became commanding officer of the squadron, and on 23 January 1944 he destroyed a Zero and shared in the destruction of a Betty, bringing his score to seven. He was then promoted to squadron leader and appointed to command the squadron, which he led until the end of the year. On his return to the mainland in June 1944 he was posted for instructional duties at No. 8 OTU, Parkes, later becoming officer commanding. His appointment was terminated on 4 December 1945.

WILSON, Rex Kerslake

Rex Kerslake Wilson was born in Adelaide, South Australia, on 11 September 1919 and was a bank clerk before joining the RAAF on 11 April 1940. Completing his training in December 1940, he was posted as a sergeant pilot to No. 3 Squadron in the Middle East on 24 March 1941, as it was re-equipping with Tomahawks. His first victory was against the Vichy French when he shot down a Martin 167 on 28 June 1941. On 25 November he shot down a Bf 109, a Storch, and damaged two Bf 109s. On 30 November damaged a Ju 887, a

Bf 109 and a Macchi Me 202. On 1 December destroyed a Ju 88. He was shot down and killed on 9 December 1941.

The immediate award of a DFM was announced on 11 January 1942, and the citation for this award is quoted (in part) below:

(he) participated in a sortie over Sidi/Rezeen where his formation was attacked by a large force of enemy fighters. In the ensuing combat Wilson destroyed a Messerschmitt 110 and damaged another. He then engaged and shot down two enemy army cooperation aircraft. He has completed numerous operational sorties and has destroyed eight hostile aircraft.

In addition to the eight confirmed above as destroyed, the records show that he also had to his credit six enemy aircraft damaged.

YARRA, John William

John William Yarra known as 'Slim', was born at Stanthorpe, Queensland, on 24 August 1921. He was living at Grafton, New South Wales, when he joined the RAAF as an aircrew trainee on 14 October 1940. He completed his training in Canada on 27 July 1941 as a sergeant pilot and arrived in the United Kingdom in August 1941. He was posted to No. 233 Squadron, flying Hurricanes, later transferring to No. 64 Squadron in November. Early in 1942 he was one of the small group who flew Spitfires into Malta from the aircraft carrier HMS *Eagle*. On arrival at Malta on 7 April, Yarra joined No. 185 Squadron flying Hurricanes and Spitfires.

On 12 May he had his first victory when he shot down a Bf 109, and then three days later destroyed two Macchi Me 202s, and damaged one other.

On 18 May he was flying cover for a rescue launch when he was attacked by twelve Bf 109s. He shot down one and probably destroyed another. As he turned for another attack he found he was out of ammunition, but continued to press home his attack in a supreme bluff. Yarra continued to make a number of feint attacks and bluff his way out, keeping the fighters at bay for another forty-five minutes.

For this truly remarkable feat of bravery and endurance he was awarded a DFM on 16 June. By the end of the month had been commissioned. This continued to be a busy month for Yarra and on the 1st he destroyed a Bf 109 and on the 7th damaged two Reggiani 200s. He destroyed a Bf 109 on the 10th, which was the same day that his DFM came through. Two days later he shot down two Bf 109s and damaged a Ju 88.

On 6 July Yarra destroyed a Ju 88, probably destroyed a Bf 109 and damaged another. The next day he shot down two Re 2001s. His final victory occurred on 11 July when he destroyed another Bf 109. He was then returned to the United Kingdom for a rest period, after which he joined No. 453 Squadron, RAAF, as a flight commander on 10 September. Leading his flight in a sweep over the Channel on 10 December they observed four small vessels in convoy with a flak ship. Yarra ordered the flight to attack the small ships, while he and another pilot dived for a direct attack on the flak ship in an attempt to divert the anti aircraft fire away from the main force of Spitfires. The great mass of fire from the flak vessel concentrated on Yarra and his companion, as with guns blazing, the two swooped down through a veritable wall of fire from the barrage of gun-

fire, pressing home their attack until the last moment, when the enemy's fire eventually found its mark. Both pilots were shot down and killed instantly.

Yarra was credited officially with the destruction of twelve enemy aircraft.

Appendix Three

Roland Garros – A Biography

Not very much is recorded of the early life of Garros, despite the publicity which accompanied his initial rise to fame as the first of the aces. However, one of the very few summaries of these early years has been recorded by Arch Whitehouse in his book *Decisive Air Battles of the First World War*, from which the following extracts have been taken.¹

Roland Garros was born at Saint-Denis on the island of Reunion in the Indian Ocean in October 1888. His father was a well-known lawyer who had been able to provide a luxurious home and a classical education for his son. Roland Garros was adept at almost everything. He had clever hands and could draw, paint, and play musical instruments, as well as manipulate most mechanical devices of that day. His parents decided early that Roland should be a professional musician, and before he became of age, he was sent to Paris to develop his piano technique.

But the City of Light had other attractions. It was in Paris that he saw his first airplane and became entranced with aeronautics. He arranged an interview with the famous Alberto Santos-Dumont, who in 1909 was better known than either of the Wright brothers. This Brazilian coffee millionaire had thrilled Parisians with airship displays as early as 1898, and by 1906 was flitting about Europe in an airplane.

‘So you want to be an aeronaut?’ the dapper Santos-Dumont queried. ‘And who doesn’t, these days?’

‘But I can afford to pay for my lessons.’ Garros explained, intending to convert the funds for his musical education into more exciting channels.

‘Money is not important. Let me see your hands.’

Garros held out his long delicate fingers, and Santos-Dumont took them, turned them over and studied them carefully. They were almost replicas of his own.

‘You are lucky. I take it you are a musician. With such hands you will make a splendid airman. I will take you.’

Santos-Dumont had little idea of how right he was. Within a year the quiet, unassuming music student had become one of the most skilled airmen in the world.... It was fantastic what this delicate-fingered man could do with those early contraptions of bamboo, linen, piano wire, and bicycle wheels.

¹ Whitehouse, Art, *Decisive Air Battles of the First World War*, Duell, Sloan and Pearce, New York, 1963.

In October 1910 Garros went to America with a French aviation team and competed in the memorable Statue of Liberty race ... (but) had to be content with third place. In 1911 he won the \$100,000 Paris-to-Rome race, was first in the Paris-to-Madrid feature, and led the field in the Grand Prix d'Anjou event that same year.

He continued to take part in air races and to give exhibition flights in Europe and the United States. In 1913 he became the first man to fly across the Mediterranean Sea.

The 453 mile trip from southern France to Tunisia took a little under eight hours, and he was fast becoming one of the most skilled airmen in the world.

In 1914 he went to Germany to give exhibitions with a Morane monoplane, with the object of pointing out its value in military operations for observation and bombardment, including some spectacular displays of aerobatics.

Then suddenly the Germans declared war and invaded France. Garros realised at once that as a French citizen he faced arrest as an enemy alien, and could become a prisoner in Germany. Also that the Germans could confiscate his aircraft, and might even use it against his own country.

Garros acted quickly, and went back at once to his hotel, where he packed his bags. He hurried to the field where his aircraft was in a shed, and quickly dragged the machine out. After checking the engine and fuel supply, and stowing his bags aboard, he swung the propeller, climbed aboard, and took off for the nearest border, which happened to be Switzerland.

Back in France he immediately volunteered for military service. He was sent to Saint-Cyr where he was issued with a uniform, and given a quick course in drill. He was sent on some simple cross-country flights, and given a short brief on what little was known of aviation tactics at the time. He was then ordered to report to Escadrille Number 25, where he was joined by several other exhibition flyers.

During the next few weeks the squadron was actively engaged in the French efforts to stop Germany's rapid advance towards Paris. They finally succeeded in halting the German advance along the Marne, and were able to turn the advance into a German defeat. In October, it was learnt that the German High Command had established headquarters at Thielt, and recalling his earlier theories of using the aeroplane as a weapon of offence, Garros suggested the German headquarters be attacked with bombs.

Whist engaged in the attempts to bomb Thielt, one of the French pilots had engine trouble, was forced to land, and was taken prisoner. The pilot was a very close friend of Garros, who conceived the almost impossible idea of a rescue flight to rescue him from the enemy compound.

It was while contemplating this wild possibility that Garros concluded that he could do nothing in an unarmed airplane — he might as well cross over in a

country-fair balloon. Flying deep into the German area was one thing, but to land there, rescue his pal, and fight his way out through a swarm of enemy aircraft that would be sent up to intercept him was something else.

He also believed that to send aircraft up for simple observation reports was wasteful, when captive balloons could obtain the same results. These could be sent up in silence at night, and would hardly be detected. His theory was that many reports brought back by observers seated in aircraft were mainly inaccurate and unreliable and lacked essential detail.

Garros believed that he could do nothing with an unarmed aircraft that a balloon could not do better. He believed that for an aircraft to be truly effective, it had to be able to strike effectively with some form of weapon. Having conceived this very simple concept, he came to certain concepts to develop his idea.

The first was that it had to be able to fire in the direction it was flying, and that it had to be small and fast, and very manoeuvrable. This meant that most probably it should be a single seater, and that the gun should be mounted so that it could fire directly forward.

If it were mounted anywhere on the fuselage or wings, simple stoppages could not be rectified or ammunition pans could not be changed. The gun would therefore have to be within reach of the pilot at all times, and this meant it would have to be mounted on the fuselage within reach of the pilot.

This in turn then meant that it would need to be placed behind, but within, the arc of the propeller and some means would have to be found for it to fire through this arc without striking any of the blades. It was certain that some of the rounds would strike one or more of the rapidly rotating blades, causing it to shatter with disastrous results.

He then conceived the idea that some form of protection should be provided for the blades of the propeller, and got to work on the possibility of providing it. After many experiments with the assistance of the squadron armourers, he developed the idea of providing some form of deflector plates to the blades.

These were designed to deflect the bullets away from the aircraft and pilot. Test after test, firing the guns into the butts at the firing range, followed at various engine speeds, to find the best shaped deflectors, and their ideal position. Finally he was satisfied that they had achieved a design where those few shots that did strike the propeller were consistently and harmlessly deflected.

It took until 1 April 1915 for Garros to be sufficiently satisfied to test the device against the enemy. Flying a Morane-Saulnier monoplane, he scored his first victory against an Albatros. Then on the 11th he shot down two Aviatik two-seaters. Later in the same day he shot down an LVG two-seater. The enemy aircrew were deceived by the nose-on approach of the Morane Bullet.

Garros and his Morane caused considerable caution among German pilots and observers. Those who survived the action reported that: 'He seemed to be firing between the blades of his propeller, but that is impossible'.

Then on 19 April engine trouble forced Garros down behind the German lines. Pilots on both sides were under instructions to burn their aircraft if they came down in enemy territory. It was particularly important that the Morane he was flying be destroyed because of the secret shields fitted to the propeller. However, the Morane would not burn, and nothing Garros could do would set it on fire, and he was taken prisoner.

However, his aircraft received far more attention than he did. His aircraft was taken to Berlin where Anthony Fokker was working, and he was asked to work out

something similar for the German aircraft. Fokker realised at once that he should attempt more than copy the French idea, and within a few days came up with the interrupter gear. Within a month the new device was shooting down French and British aircraft.

Fokker thought there must be a mathematical solution to the problem. It should be possible to figure out a way to fire the gun only when there was no propeller blade in the way.

What Fokker did was to work out a mechanism that would prevent the gun from firing when the propeller was in the way. The trigger was released during the time a blade passed in front of the gun. By the time weapon fired, the propeller blade was no longer in front of the gun.

Within forty-eight hours Fokker's interrupter device had been made to work on the ground. Next he successfully used it in one of his new Fokker M5k monoplanes. In less than a month, aircraft equipped with the new device were shooting French and British planes out of the sky.

The day of the friendly wave from an enemy pilot was gone forever. Now a shooting war was being fought in the air as well as on the ground

Bibliography

OFFICIAL HISTORIES

Coulthard-Clark, Chris, *The RAAF in Vietnam, Australian Air Involvement in the Vietnam War 1962-1975*, Allen & Unwin, and the Australian War Memorial, 1995.

Coulthard-Clark, C. D., *The Third Brother, The Royal Australian Air Force 1921-39*, Allen & Unwin, Sydney, 1991.

Cutlack, F. M., *The Official History of Australia in the War of 1914-1918, Vol VIII, The Australian Flying Corps*, University of Queensland Press, Queensland, 1984.

Ministry of Defence, *War with Japan*, Volume I and Volume II, Background to the War, Her Majesty's Stationery Office, London, 1995.

Jones, H. A., *Official History of the War, The War in the Air, Being the Story of the part played in the Great War by the Royal Air Force*, 6 Volumes, Clarendon Press, Oxford, 1931.

Lee, Air Chief Marshal Sir David, *'Eastward' A History of the Royal Air Force in the Far East 1945-1976*, Her Majesty's Stationery Office, London, 1984.

Richards, Denis and Hilary St C. Saunders, *The Fight Avails, Royal Air Force 1939-45*, Vol. 2, Her Majesty's Stationery Office, London, 1975.

O'Neill, Robert, *Australia in the Korean War 1950-53*, Volumes I and II, AWM, Canberra, 1985.

Stephens, Alan, *Going Solo, The Royal Australian Air Force 1946-1971*, Australian Government Publishing Service, Canberra, 1995.

BIOGRAPHIES and GENERAL PUBLICATIONS

Allen, Wing Commander H.R., DFC, *Fighter Station Supreme, RAF Tangmere*. Panther Grenada Publishing, London, 1985.

Apostolo, Georgio, *War Birds: Military Aircraft of the First World War in colour*, Macdonald and Jane's (Macdonald & Co.) (Publishers) Ltd, London, 1974.

Austin, Alan, and Anthony Dicks, *Great Fighting Planes, World War I to the Present Day*, Guild Publishing, London, 1995.

Bacon, Admiral Sir Reginald H.S., KCB, KCVO, DSO, *Dover Patrol 1915-1917*, Volume II, Hutchinson & Co., London, 1932.

Balfe, J. D., *War Without Glory, Australians in the air war with Japan 1941-45*, The McMillan Company of Australia Pty Ltd., Melbourne, 1984.

Baker, Clive and Greg Knight, *Milne Bay 1942*, Baker-Knight Publications, Loftus, New South Wales, 1991.

Ball, Desmond, (ed.), *Air Power, Global Developments and Australian Perspectives*, Pergamon-Brassey's Defence Publications, Sydney, 1988.

Baring, Maurice, *Flying Corps Headquarters 1914-1918*, Buchan & Enright, London, 1985.

Bennett, John, *Highest Tradition, The History of No. 2 Squadron, RAAF*, Australian Government Publishing Service, 1995.

Bennett, John, *The Imperial Gift*, British Aeroplanes which formed the RAAF in 1921, Banner Books, Maryborough, Qld., 1996.

Bickers, Richard Townshend, *The Battle of Britain, The greatest battle in the history of air warfare*, Guild Publishing, London, 1990.

Bickers, Richard Townshend, *The First Great Air War*, Hodder & Stoughton, London, 1988.

Blythe, Flight Lieutenant A.W., *Australian Fighter Aces*, (Series of articles in *Mirage*, monthly newspaper published by RAAF Williamtown, 1967.

Bowen, Ezra, *Knights of the Air*, Time-Life Books, Virginia, 1980.

Bowyer, Chaz, *Airmen of World War I*, Men of the British and Empire air forces in old photographs, Arms and Armour Press, London, 1975.

Bowyer, Chaz, *Men of the Desert Air Force*, William Kimber, London, 1984.

Bowyer, Chaz, *The Air VC s*, William Kimber, London, 1978.

Bowyer, Chaz., *RAF Operations, 1918-38*, William Kimber, London, 1988.

Bowyer, Chaz, *History of the RAF*, Hamlyn, London. 1977.

Boyle, Andrew, *Trenchard, Man of Vision*, Collins, London, 1962.

Brierley, Sir Norman, *Australian Aviator*, Rigby Limited, Adelaide, 1971.

Brook, Squadron Leader W. H., RAAFAR, *Demon to Vampire, The Story of No. 21 (City of Melbourne) Squadron*, Demon/Vamp Publications, Melbourne, 1986.

Brown, David, and others, (ed.), *The Guinness Book of Air Warfare*, London, 1976.

Brownell, Air Commodore R.J. CBE, MC, MM, *From Khaki to Blue*, Military Society of Australia, Canberra, 1995.

Campbell, Christopher, *Aces and Aircraft of World War I*, Treasure Press, London, 1981.

Carroll, Brian, *Australian Aviators: An Illustrated History*, Cassell, Australia, 1980.

Chinnery, Phil, *Air War in Vietnam*, Bison Books, London, 1987.

Chinnery, Philip D., *Life on the Line: Stories of Vietnam Combat*, Blandford Press, London, 1988.

Clark, Alan, *Aces High, The War in the Air over the Western Front, 1914-18*, Putnam, New York, 1973.

Cluley, Richard J., *Unit Badges of the Royal Australian Air Force*, Richard J. Cluley, Adelaide.

Cobby, A.H., DSO, DFC & Bars, *High Adventure*, Kookaburra Technical Publications, Melbourne, 1981.

Cole, Christopher, & E. F. Cheesman, *The Air Defence of Britain, 1914-18*, Putnam, London, 1984.

Cooper, Bryan and John Batchelor, *Fighter, A History of Fighter Aircraft*, Macdonald, London, 1973.

Coulthard-Clark, Chris, *Edge of Centre: The eventful life of Group Captain Gerald Packer*, RAAF Museum, Point Cook, 1992.

Cunningham, Robert E., *Aces High*, (ed.), Wanda P. Penix, General Dynamics Corporation, Fort Worth, Texas, 1977.

Davis, Larry, *Air War Over Korea, A Pictorial Record*, Squadron/Signal Publications, Texas, US, 1982.

Dean, Sir Maurice, KCB, KCMG, *The Royal Air Force and Two World Wars*, Cassell, London, 1978.

Deighton, Len, *Fighter, the True Story of the Battle of Britain*, Book Club Association, London, 1971.

Department of Air, *The Golden Years, Royal Australian Air Force 1921-1971*, Australian Government Publishing Service, Canberra, 1971.

Eather, Steve, *Flying Squadrons of the Australian Defence Force*, Aerospace Publications Pty Ltd, Canberra, 1991.

Faber, Harold (ed), *Luftwaffe, An Analysis by former Luftwaffe Generals*, Sidgwick & Jackson, London, 1979.

Feldt, Cmdr Eric A., RAN, *The Coast Watchers*, Bantam Books, OUP, New York, 1979.

Firkins, Peter, *Heroes Have Wings, The Stories of Australian Airmen in the Great Air Battles of World War Two*, Hesperian Press, Victoria Park, WA, 1993.

Firkins, Peter, *The Golden Eagles*, St George Books, Perth, 1980.

Fitzsimons, Bernard, Ed., *War Planes & Air Battles of World War I*, Ure Smith, Sydney, 1973.

Franks, Norman L.R., Frank Bailey & Russell Guest, *Above the Lines, A Complete Record of the Fighter Aces of the German Air Service, Naval Air Service and Flanders Marine Corps 1914-1918*, Grub Street, London, 1993.

Franks, Norman L.R., Russell Guest & Gregory Alegi, *Above War Fronts, A Complete Record of the British Two-Seater Bomber Pilot and Observer Aces, The British Two-Seater Fighter Observer Aces, and the Belgian, Italian, Austro-Hungarian and Russian Fighter Aces 1914-1918*, Grub Street, London, 1997.

Franks, Norman, *Aircraft Vs Aircraft*, Bantam Press, London, 1986.

Franks, Norman. L.R., & Frank W. Bailey, *Over the Front, A Complete Record of the Fighter Aces and Units of the United States and French Air Services, 1914-1918*, Grub Street, London, 1992.

Fredette, Major Raymond H., *The First Battle of Britain 1917-1918*, Cassell, London, 1966. (Proof copy only).

Frost, Frank, *Australia's War in Vietnam*, Allen & Unwin, Sydney, 1987.

Futrell, Robert F., *The United States Air Force in Korea, 1950-1953*, Duell, Sloan and Pearce, New York, 1961.

Gillett, Ross, *Australia's Military Aircraft*, Aerospace Publications, Sydney, 1987.

Gollin, Alfred, *The Impact of Air Power on the British People and their Government 1909-14*, Macmillan, London, 1989.

Grant, Mark, *Australian Air Power, 1914-1945*, Photographs of all aircraft types in service with AFC & RAAF & Naval Aviation, Vol. I, Topmill Pty Ltd, Sydney.

Green, William, *Famous Fighters of the Second World War*, Macdonald and Janes, London, 1975.

Gribble, Leonard R., *Heroes of the Fighting RAF*, George G. Harrap & Co Ltd, London, 1941.

Gunston, Bill and John Batchelor, *Fighters 1914-1939*, Phoebus Publishing Co Ltd., London, 1978.

Gunston, Bill, *Classic Aircraft Fighters*, Profiles of Major Combat Aircraft in Aviation History, Hamlyn, London, 1978.

Gurney, Gene, *Flying Aces of World War I*, Scholastic Book Services, New York, 1965.

Gurney, Col. Gene USAF (Ret), *Vietnam, the War in the Air, A Pictorial History of the U.S. Air Forces, in the Vietnam War, Army, Navy, and Marines*, Sidgwick & Jackson, London, 1985.

Gwynn-Jones, Terry, *Heroic Australian Air Stories*, Rigby Publishers Ltd, Sydney 1981.

Hall, E.R. (Ben), *Glory in Chaos. In the Vanguard Against Japan, the RAAF in the Far East in 1940-42*, E.R. Ben Hall, Armadale, Vic, 1989.

Hall, Timothy, *New Guinea 1942-44*, Methuen Australia Pty Ltd., Sydney, 1981.

Halley, James J., *The Role of the Fighter in Air Warfare*, Barrie & Jenkins, London, 1979.

Halley, James J., *The Squadrons of the Royal Air Force & Commonwealth 1918-1988*, Air Britain, Historians Ltd, Kent, 1988.

Hata, Ikuhiko and Yasuho Izawa, (Translated by Don Cyril Gorham), *Japanese Naval Aces and Fighter Units in World War II*, Airlift Publishing Ltd., England, 1990.

Hewitt, Air Vice-Marshal J.E., CBE, RAAF (Retd), *Adversity in Success*, Langate Publishing, South Yarra, Vic, 1980.

Hough, Richard, and Denis Richards, *The Battle of Britain, The Jubilee History*, Coronet Books, London, 1990.

Isaacs, Wing Commander Keith, AFC, CRAeS, RAAF, *Military Aircraft of Australia, 1909-1918*, Australian War Memorial, Canberra, 1989.

Jackson, Robert, *Aces Twilight: The War in the Air 191*, Sphere Books Limited, London, 1988.

Jackson, Robert, *The Forgotten Aces, The Story of the Unsung Heroes of World War II*, Sphere Books Limited, London, 1989.

Jackson. Robert, *Air War Over Korea*, Ian Allen Ltd., London, 1973.

Jay, William, *The Aviators*, Shakespeare Head Press, Sydney, Reprinted 1971.

Jefford, Wing Commander C.G., MBE, RAF, *RAF Squadrons, A Comprehensive Record of the Movement and Equipment of all RAF Squadrons and their Antecedents since 1912*, Airline Publications, England, 1987.

Johnson, Air Vice-Marshal J.E. 'Johnnie', CB, CBE, DSO and two Bars, DFC and Bar, *The Story of Air Fighting*, Hutchinson, London, 1985.

Johnson, Air Vice-Marshal, J.E. 'Johnnie', CB, CBE, DSO, DFC, and Wing Commander P.B. 'Laddie' Lucas, CBE, DSO, DFC, *Glorious Summer, The Story of the Battle of Britain*, Stanley Paul, London, 1990.

Johnson, J.E. 'Johnnie' & P.B. 'Laddie' Lucas, *Courage in the Skies, Great Air Battles from tlhe Somme to Desert Storm*, Stanley Paul, London, 1992.

Jones, Air Marshal Sir George, *From Private to Air Marshal, An Autobiography*, Greenhouse Publications, Richmond, Vic, 1988.

Jourbert de la Ferte, Air Chief Marshal Sir Philip, KCB, CMG, DSO, *The Third Service*, Thames and Hudson, London, 1935.

Joy, William, *The Aviators*, Golden Press, Sydney, 1983.

Kelly, Terence, *The Battle for Palembang*, Robert Hall, London, 1985.

Kennett, Lee, *The First Air War 1914-1915*, The Free Press, New York, 1991.

Kershaw, Andrew (ed.), *Fighters of World War One*, Phoebus Publishing Co Ltd, London, 1976.

Liddle, Peter, *The Airman's War 1914-18*, Blandford Press, New York, 1987.

Macmillan, Captain Norman, MC, AFC, *The Royal Air Force in the World War, Volume I, 1919-1940*, George G. Harrap & Co. Ltd., London, 1942.

Mason, Francisk, *Battle Over Britain, A History of the German air attacks on Great Britain, 1917-18, and of the development of Britain's air defences between the wars*, McWhirter Twins Ltd., London, 1969.

McAulay, Lex, *Against All Odds, RAAF Pilots in the Battle for Malta 1942*, Hutchinson, Sydney, 1989.

McAuley, Lex, *Six Aces, Australian Fighter Pilots, 1939-45*, Banner Books, Brunswick, Vic, 1991.

McCarthy, John, *A Last Call of Empire, Australian aircrew, Britain and the Empire Air Training Scheme*, Australian War Memorial, Canberra, 1980.

McCarthy, John, *Australia and Imperial Defence 1918-39. A Study in Air and Sea Power*, University of Queensland Press, St Lucia, Queensland, 1976.

McKee, Alexander, *The Friendless Sky, The Story of Air Combat in World War I*, Souvenir Press, London, 1962.

McWhirter, Norris & Ross, (eds.), *The Guinness Book of Records*, 13th Edition, Guinness Superlatives Ltd., London, 1966.

Middleton, Drew, *Air War Vietnam*, Arms and Armour Press, London, 1978.

Monday, David, (ed.), *The International Encyclopedia of Aviation*, Hamlyn, London, 1977.

Morris, Joseph, *The German Air Raids on Great Britain 1914-18*, Sampson Low Marston & Co., Ltd., London.

Neumann, Major Georg Paul, (Late of the German Air Force), *The German Air Force in the Great War*, Translated by J.E. Gordon, Hodder & Stoughton Limited, London, 1920.

Newton, Dennis, 'A Few of 'The Few'', *Australians and the Battle of Britain*, Australian War Memorial, Canberra, 1990.

Norman, Aaron, *The Great Air War*, McMillan Company, New York, 1968.

O'Brien, Frank J., *The Hungry Tigers, The Fighter Pilot's Role in Modern Warfare*, Aero Tab Books, Blue Ridge, PA, 1986.

O'Brien, Terence, *Out of the Blue, a Pilot with the Chindits*, Collins, London, 1984.

Odgers, George, *Mission Vietnam, Royal Australian Air Force Operations, 1964-1972*, Australian Government Publishing Service, Canberra, 1974.

Odgers, George, *Pictorial History of the Royal Australian Air Force*, Ure Smith, Sydney, 1965.

Odgers, George, *The Royal Australian Air Force, An Illustrated History*, Child & Henry, Brookvale, NSW, 1984.

Orde, Captain Cuthbert, *Pilots of Fighter Command, Sixty-four Portraits*, George G. Harrop & Company Ltd., London, 1942.

Parkinson, Roger, *Summer 1940, The Battle of Britain*, David McKay Company Inc, New York, 1977.

Parnell, N.M. & C.A. Lynch, *Australian Air Force since 1911*, A.H. & A.W. Reed, Sydney, 1971.

Parnell, Neville, and Trevor Boughton, *Fly Past, A Record of Aviation in Australia*, Australian Government Publishing Service, Canberra, 1988.

Penrose Harald, *British Aviation, The Great War and Armistice 1915-1919*, Putman, London, 1988.

Pentland, Geoffrey, *RAAF Camouflage & Markings 1939-45*, Vol. 1, Kookaburra Technical Publications, Melbourne, 1982.

Pentland, Geoffrey and Malone, Peter, *Aircraft of the RAAF 1921-71*, Kookaburra Technical Publications, Melbourne, 1971.

Philpott, Bryan, *Famous Fighter Aces*, Patrick Stephens Ltd, Northamptonshire, UK, 1989.

Philpott, Bryan, *History of the German Air Force*, Bison Books, London, 1986.

Pimlott, John, *Strategy & Tactics of Air Warfare*, Marshall Cavendish, London, 1979.

Plenty, Herbert C., *Fighterplane Alley*, Len Publishing, Canberra, 1984.

Price, Alfred, *The Luftwaffe 1933-45*, Volumes I-IV, Arms and Armour Press, London, 1981.

Probert, Air Commodore Henry, *High Commanders of the Royal Air Force*, Her Majesty's Stationery Office, London, 1991.

Richards, Denis, *Portal of Hungerford, The Life of Marshal of the Royal Air Force, Vicount Portal of Hungerford*, Heinemann, London, 1977.

Richards, E. J., *Australian Airmen, Being the History of the 4th Squadron Australian Flying Corps*, Bruce & Co, Melbourne, n.d.

Robertson, Bruce, (ed.), *Air Aces of the 1914-18 War*, Harleyford Publications Ltd, Herts, UK, 1964.

Roskill, Captain S.W., DSC, RN, MA, *The Naval Air Service*, Volume I, 1908-1918, printed for the Navy Records Society, 1969.

Sakada, Henry, *Winged Samurai. Saburo Sakai and the Zero Fighter Pilots*, Museum Press, Mesa, Arizona, 1955.

Sakai, Saburo, (with Martin Cardin and Fred Saito), *Samurai*, William Kinber, Lonbon, 1959.

Schaedel, Charles, *Men & Machines of the Australian Flying Corps 1914-19*, Kookaburra Technical Publications, Dandenong, Vic, 1972.

Shores, Christopher, *Air Aces*, Bison Books, Greenwich, USA, 1983.

Shores, Christopher, and Clive Williams, *Aces High, A Tribute to the Most Notable Fighter Pilots of the British and Commonwealth Forces in WWII*, Grub Street, London, 1994.

Shores, Christopher, *Duel for the Sky, Ten Crucial Air Battles of World War II Vividly Recreated*, Guild Publishing, London, 1985.

Shores, Christopher, Norman Franks & Russell Guest, *Above the Trenches, A Complete Record of the Fighter Aces and Units of the British Empire Forces 1915-1920*, Grub Street, London, 1990.

Shores, Christopher, Norman Franks and Russell Guest, *Above the Trenches, (Supplement)*, Grub Street, London, 1996.

Sims, Edward B., *Fighter Tactics and Strategy 1914-1970*, Aero Publishing Inc, Falbrook, CA, 1980.

Southwall, Ivan, *Bluey Truscott*, Australian Large Print Pty Ltd., Melbourne, 1988.

Spick, Mike, *The Ace Factor, Air Combat and the Role of Situational Awareness*, Air Life, England, 1988,

Stephens, Alan, (ed.), *The War in the Air 1914-1994*, Air Power Studies Centre, Canberra, 1994.

Stephens, Alan, *Power Plus Attitude*, Australian Government Publishing Service, Canberra, 1992.

Sutherland, L.W., MC, DCM, (Written in collaboration with Norman Ellison), *Aces and Kings, The Story of No. 1 Squadron, AFC*, Angus & Robertson, Sydney, 1935.

Taylor, Michael J.H., (comp. and ed.), *Jane's Encyclopedia of Aviation, The History of Flight from hot air balloons to the SST*, Studio Editions, London, Reprint, 1991.

Tedder, The Lord, GCB, *Air Power in War*, Hodder & Stoughton, London, 1947.

Terraine, John, *The Right of the Line, The Royal Air Force in the European War, 1939*, Sceptre, Texas, USA, 1985.

Ulanoff, Stanley, Brig. General, M. (ed.), *Fighter Pilot, Aerial combat aces from 1914 to the present day*, Prentice Hall Press, New York, Revised Edition, 1986.

Wackett, Lawrence James, *Aircraft Pioneer*, Angus and Robertson, Sydney, 1972.

White, T. W., *Guests of the Unspeakable, The Odyssey of an Australian Airman, Being a Record of Captivity and Escape in Turkey*, Little Hills Press, Sydney, Reprint 1990.

Whitehouse, Arch, *Decisive Air Battles of the First World War*, Duell, Sloan and Pearce, New York, 1963.

Whitehouse, Arch, *The Zeppelin Fighters*, Doubleday & Company, Inc, New York, 1966.

Williams, Air Marshal Sir Richard, *These are Facts, An Autobiography*, Australian War Memorial, Canberra, 1977.

Williamson, Gordon, *Aces of the Reich*, Arms & Armour, London, 1989.

Wilson, David, *Jackson's Few, 75 Squadron RAAF - Port Moresby, March/May 1942*, David Wilson, Canberra, 1988.

Wilson, David, *Lion Over Korea, 77 Fighler Squadron RAAF 1950-53*, Banner Books, Canberra, 1994.

Wilson, David, *The Decisive Factor, 75 & 76 Squadrons, Port Moresby and Milne Bay, 1942*, Banner Books, 1991.

Winter, Denis, *The First of the Few, Fighter Pilots of the First World War*, Penguin Books, New York, 1982.

Wrigley, Air Vice-Marshal H.N., *The Decisive Factor*, Edited Alan Stephens and Brendan O'Loughlin, Australian Government Publishing Service, Canberra, 1990.

Wrigley, Wing Commander H.N., DFC, AFC, *The Battle Below, Being the History of No. 3 Squadron, Australian Flying Corps*, Limited Edition, 200 Copies, Errol G. Knox, Sydney, 1935.