

FROM THE GROUND UP

The training of RAAF technical ground staff 1948-1993

C.D. Coulthard-Clark







AIR POWER STUDIES CENTRE

**FROM THE GROUND UP:
THE TRAINING OF RAAF TECHNICAL
GROUND STAFF
1948-1993**

C.D. COULTHARD-CLARK

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ACKNOWLEDGMENTS

This is a book which aims to fill a special niche in the historiography of the Royal Australian Air Force. Amid a burgeoning literature in recent years dealing with units on operations and/or the problems of command and administration, it attempts to tell the story of several training schemes used by the RAAF in the fifty-year period after the Second World War specifically to cater for the service's needs for skilled tradesmen. In an organisation as highly technical as an air force, the story of the supporting personnel who effectively keep the service operational on a day-to-day basis is of more than passing interest.

Recognition that there was a need for a book on this subject at such a time came from the RAAF itself - with some persistent encouragement from individuals who were ex-members of the service but now outside the system, most notably Group Captain Arthur Skimin (retd.). It is to the RAAF's great credit that it was seen as appropriate to pay tribute to the contribution of its technical airmen, NCOs and officers by placing on the historical record what these various forms of training meant for the service as a whole in the second half of the 20th century.

For my part, it was a pleasure working on this project while enjoying the support and assistance of the RAAF Historian, Dr Alan Stephens, and the then-Director of Coordination in the Office of the Chief of Air Force, Group Captain Phil Morrall. Both did their utmost to ensure that, administratively, the project proceeded smoothly and without impediment. Mr David Wilson and the staff of the RAAF Historical Section also have my thanks for their patient efforts to assist wherever possible. Arthur Skimin provided constant advice, contacts and encouragement throughout, while Warrant Officer Ian Butcher acted as an invaluable link-man in Melbourne and in particular ensured that maximum benefit was obtained from a research visit there. In Wagga Mr Bob Gnezdiloff was a willing and helpful point of contact with the Aircare organisation, and ensured that a collection of material gathered at earlier apprentice reunions was made available for me to consult.

Approaches made to other bodies were, without exception, received warmly and helpfully. Assistance with information or access to records or facilities was readily received from the High Commission for Pakistan in Canberra; the Wagga City Council; the Royal Melbourne Institute of Technology (through both Mr Rod Edwards and Dr Adrian Haas); and Mr Radyn Nolan, chief executive of Global Portfolios Pty. Ltd., who is the current owner of the Froggnall mansion in Mont Albert Road, Canterbury.

The photographs used in the book came from a variety of sources, including many from individuals who produced items in their possession for copying. Important blocks of pictorial records were, naturally enough, located in the RAAF Museum Point Cook, the RAAF Museum Wagga Wagga, and the Central Photographic Establishment at Laverton. I am grateful to each of these facilities/units for their co-operation in obtaining copies of items wanted as illustrations; here I should mention by name Ms Monica Walsh at Point Cook and Wing Commander Graham Walton, formerly CO of CPE. In the end, a greater range of material emerged than for which space could be found, but those who made available photographs which have not been included are assured that their contributions have not been lost but remain with the RAAF as a supporting collection to the book.

A great many more people became actively involved in helping to compile the graduate rolls which appear at the end of the book. Surprisingly, there was no single place to which to turn for this information, and hence a major effort was entailed in drawing together course details from a range of scattered sources. I personally contacted many individuals and obtained assistance in this way, and all those who responded have my sincere thanks. A special mention must be made of Squadron Leader Ian Stuart and Warrant Officer Rick Lovett who generously undertook a lot of these inquiries too, since without their exertions the lists or apprentices would not have reached anything approaching an acceptable level of completeness. In the case of the Jeats, I have Group Captain Colin Makin and Warrant Officer Lance Doughty to thank for providing me with names in the first instance and for checking the list which I was subsequently able to generate. Thanks also go to Mr Dave Pullen and his staff at the Discharged Personnel Records Section at Queanbeyan for their patient handling of my endless enquiries, and to Corporal Chris Stephens in DPA who made available relevant sections of the roll-book of apprentice certificate holders.

Considering the complex nature of the effort involved in pulling together lists of names, often either incomplete or full of discrepancies which needed to be clarified and verified, it seems inevitable that there will still be some errors and omissions in the various rolls. While this may be disappointing for the individuals concerned, it must be said in mitigation that the best effort has been made to check information against official RAAF records as the authoritative source. Often, however, it was not apparent that a problem existed unless conflicting information was presented, and where errors already existed in the RAAF's own records there was very little chance of detecting and eradicating any problems.

Among those whose contribution should also be specially mentioned are my wife Tina and son Andrew, who spent a great many hours transcribing tapes of oral interviews conducted in conjunction with this project. As the manuscript passed through publication at the Air Power Studies Centre at RAAF Base Fairbairn it came under the capable hands of Mrs Sandra Di Guglielmo. A final acknowledgement goes to Mr John Saunders, a member of No. 4 Apprentice Intake at Forest Hill, for his suggestion of the book's title; many ideas were offered as possibilities in this regard, but in the end it was felt that 'From the Ground up' - apart from being applicable to all three apprentice streams, Jeats, and graduates of the Diploma/Engineer Cadet Squadron - best conveyed the sense of laying the foundations for youthful careers that would keep the air force flying.

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ABBREVIATIONS

AC	Aircraftman
ADFA	Australian Defence Force Academy
AEU	Amalgamated Engineering Union
AFC	Australian Flying Corps
AGRS	Air and Ground Radio School
AMEM	Air Member for Engineering and Maintenance
AMP	Air Member for Personnel
AMSE	Air Member for Supply and Equipment
AMTS	Air Member for Technical Services
AOC	Air Officer Commanding
ATC	Air Training Corps
CAFP	Chief of Air Force Personnel
CAFTS	Chief of Air Force Technical Services
CAS	Chief of the Air Staff
CO	Commanding Officer
COT	Certificate of Technology
DCS	Diploma Cadet Squadron
ECS	Engineer Cadet Squadron
FTC	Footscray Technical College
FTS	Flying Training School
GTS	Ground Training School
JEAT	Junior Equipment and Administrative Training
OTS	Officer Training School
MTC	Melbourne Technical College
MTU	Melbourne Telecommunications Unit
NCO	Non-commissioned Officer
RAD	Radio
RADS	Radio School
RAAF	Royal Australian Air Force
RAF	Royal Air Force
RAS	Radio Apprentice School
RMIT	Royal Melbourne Institute of Technology
RNZAF	Royal New Zealand Air Force
RPAF	Royal Pakistan Air Force
RSTT	RAAF School of Technical Training
RTC	RAAF Technical College
RTU	Recruit Training Unit
SD	Stores Depot
SEQEB	South East Queensland Electricity Board
STT	School of Technical Training
TAFE	Technical and Further Education
WAAAF	Women's Auxiliary Australian Air Force
WAIT	Western Australian Institute of Technology
WRAAF	Women's Royal Australian Air Force
W/T	Wireless/Telegraphy

CHAPTER 1

THE APPROACH TO TRAINING UNTIL 1945

Air services, be they commercial or military in nature, are technically-oriented organisations which critically depend on the capacity of skilled staffs for efficient performance. Not just the personnel who fly the aircraft comprising the operational element of the service must be competent in their task, or be prepared to pay a penalty frequently of the most drastic kind, but the members of the ground-crews who prepare, maintain and support the effort in the air must be able to fully respond to the technical demands of any situation.

During the earliest days of aviation in Australia, as elsewhere around the world, mechanics and other technicians were drawn directly from civil trades and expected to adapt their skills to the new environment in which they operated. This arrangement still applied when the First World War necessitated the raising of military aviation units on a large-scale and improvised basis. There was, however, an obvious benefit derived on the ending of hostilities, with both the air corps of the standing defence forces and civil aviation able to draw on this well of experienced personnel on the return to peacetime conditions.

For as long as the aircraft themselves were of relatively basic construction, this solution remained quite adequate to the requirement. Moreover, for as long as the total size of the aviation industry stayed modest, or the pool of qualified tradesmen in the community sufficiently large, the air force and civil airline companies could usually count on meeting their needs without mounting a specific training program of their own. This was not to say, though, that considerable pressures would not be felt by individual organisations from time to time to remain competitive in attracting and retaining the best qualified or capable personnel.

This reality was recognised even before the Royal Australian Air Force (RAAF) came into existence. In the scheme for its formation proposed to the government in 1920, there was no talk of the new service providing more than recruit and regimental training for initial inductees. The officers who would pilot the small number of aircraft in use would be drawn from those with wartime flying experience. In the case of other ranks, it was expected that filling positions in the non-technical grades would 'probably not present any difficulty', while it was 'hoped that sufficient personnel already trained in their particular trade will be forthcoming to fill most of the [technical] vacancies'. Where deficiencies were anticipated, as with airmen skilled in seaplane and flying boat work, the suggestion was that a few of these should be obtained from England. The main concern expressed was that the better class of tradesmen would 'not be forthcoming unless

rates of pay are offered which will compare favourably with those ruling in civil life'.¹

Recognising that this approach was unlikely to meet long-term needs, the future of the force was at least addressed - albeit in indefinite fashion. At some stage, 'as the Force develops', it was proposed that an 'Air Force College for Cadets' might be formed to provide candidates for permanent commissions as vacancies occurred in the flying branch, and that a proportion of boys aged under 18 might be enlisted and trained in various trades. For the latter, however, this was a prospect which would be feasible only if 'arrangements can be made for the recognition of such training outside the service'.

When officially formed on 31 March 1921, the RAAF's initial strength of 21 officers and 128 airmen was - as expected - largely made up of ex-members of the wartime Australian Flying Corps (AFC) and British air services. A year later, when these numbers had doubled to 49 officers and 252 airmen, 80 per cent of both groups had formerly served in the Australian Imperial Force (most presumably in the AFC). The latter also represented the bulk of the other ranks tested for appointment to technical trades.²

Such an arrangement had to be borne for much of the 1920s. Courses for first-time pilots - who might now be NCOs as well as officers - were instituted at the Flying Training School (FTS) at Point Cook, in Victoria, from 1923. Other airmen were trained as air gunners or wireless operators for work in the air, usually at the FTS also but sometimes in units. Personnel in non-flying categories, though, received their introductory service training only after they had joined a unit.

In a document prepared early in 1925, Australia's first and longest-serving Chief of the Air Staff (Wing Commander Richard Williams) had set out what amounted to a detailed blueprint intended to guide the development of the RAAF for at least the next decade. This noted that the service still made no provision for training 'men or boys in a trade from the commencement' and could only reaffirm the hope that a sufficient number would continue to offer 'who already have the experience at their trade to enable them to pass a trade test':

If this proves not to be the case then the question of establishing training schools will have to be considered. The latter are in operation in England with remarkable success.³

The British example to which Williams was alluding was the apprenticeship scheme instituted by his Royal Air Force counterpart, Air Chief Marshal Sir Hugh Trenchard. The origins of this lay in the 'Boys' Wing' established in 1916 in conjunction with a flying training school at the Royal Naval Air Service's station at Cranwell, Lincolnshire. The Boys' Wing existed to train naval ratings as air mechanics and riggers able to maintain and repair aircraft and equipment. After the

¹ Submission to Air Council in December 1920, reproduced in R. Williams, *These are facts: The Autobiography of Air Marshal Sir Richard Williams KBE CB DSO*, as Appendix VII, Australian War Memorial and Australian Government Publishing Service, Canberra, 1977, pp. 397-400.

² AA, CRS A1195, item 715/2/224; *Aircraft*, 30 November 1921, p. 104.

³ Memorandum regarding the 'Air Defence of Australia' dated 21 April 1925.

newly-formed RAF acquired Cranwell in 1918, both the wing and the flying school expanded to meet the new service's needs.⁴

In late 1919 Trenchard's proposals for the post-war development of the RAF had been placed before the British Cabinet by the Secretary of State for War and Air, Winston Churchill. The document outlining the plan, published in December and popularly known as 'Trenchard's White Paper', argued the need for a cadet college to train officers and an apprentice school replacing the existing Boys' Wing. It was pointed out that demobilisation had removed most of the RAF's best mechanics, and there was a need to ensure the thorough instruction of their replacements if efficiency was to be achieved in the future.⁵

Both the foreshadowed institutions were brought into operation at Cranwell on 5 February 1920, although this was purely an interim site for the apprentice school. Trenchard had already decided on Halton Park estate in Buckinghamshire, situated close to the RAF station at Tring, as the main home for apprentice training. Used as a temporary depot during the war, the estate was bought by the government (on Trenchard's recommendation) after the death of its owner, Alfred Rothschild, in 1918. It was on this place - rather than Cranwell - that most of the relatively meagre funds voted by parliament for RAF building purposes was lavished. A vast technical training centre of stores, machine shops and barracks was progressively erected over the years until 1926.⁶

When construction at Halton was finished, the apprentice school - officially known as No. 1 School of Technical Training - moved there in 1927 and was now able to accommodate 3000 boys aged 15-18 years. Although the RAF's larger mechanical trades - fitters (engine workers) and riggers (airframe workers), or 'carpenters' as the latter were occasionally known - were trained at Halton, the smaller group of apprentice electrical and radio technicians continued to train at Cranwell as a lodger unit on the RAF College.

While other training centres were brought into existence in the same period, such as Uxbridge which handled recruit training, and The School (later No. 3 School) of Technical Training (Men) at Manston which also trained adult tradesmen, the apprentice scheme focused on Halton was effectively the mainstay of the air force effort to meet its requirements for skilled technical staff. Some notable refinements were later added to the scheme, such as moves by 1935 to widen the apprentice categories to instrument makers and clerks, and the decision in 1935 to enlist Boy Entrants who were chosen from unsuccessful applicants for apprenticeships.⁷

The impact of the RAF's training scheme for youths quickly began to be felt, and ultimately proved to be profound. Quite apart from meeting the service's needs for competent tradesmen, provisions in the scheme for the best graduates to be awarded cadetships at the RAF College (and hence admission to the commissioned ranks) extended its significance across the service. In time, Halton

⁴ Philip Congdon, *Behind the Hangar Doors*, Sonik Books, Woodhall Spa UK, 1985, p. 21.

⁵ H. Montgomery Hyde, *British Air Policy Between the Wars 1918-1939*, Heinemann, London, 1976, pp. 63, 66-7.

⁶ Congdon, *Behind the Hangar Doors*, p. 22; Andrew Boyle, *Trenchard*, Collins, London, 1962, p. 364.

⁷ John James, *The Paladins: A Social History of the RAF up to the Outbreak of World War II*, Macdonald & Co., London, 1990, pp. 113-14, 188-9.

apprentices (or 'Brats' as they were affectionately known) provided the RAF with some of its greatest leaders and aviation engineers. By the time Trenchard's scheme was wound up in 1933, some 35,000 apprentices had passed through Halton and well over 120 of them had become officers of air rank - including one who retired as a Marshal of the RAF.⁸

This was no less than the scheme's author had intended, as shown by Trenchard's remarks in 1921 when called upon to defend it to a high-powered parliamentary committee into national expenditure. After the chairman of the committee, the Minister for Transport (Sir Eric Geddes), suggested shutting Halton down, the CAS pointed to the great difficulty which the RAF had experienced in recruiting trained specialists direct from civilian trades, despite a economic slump affecting industry.

Not only was there no practical alternative to the RAF itself training tradesmen in the 54 skill-areas which were needed, Trenchard claimed, but 'in view of the fact that before the age of 30 he would return to civilian life, every Halton boy should be regarded as a national asset.' It was with this aspect in mind that the precaution had been taken of consulting trade union leaders while developing the apprenticeship scheme, to ensure that union recognition of the Halton system followed. These were compelling arguments with which even Geddes did not disagree.⁹

Much as Williams might admire the British system, there was plainly a great difference in what could be achieved in an organisation the size of the RAF (which had 30,000 officers and men in 1923) compared with one like the RAAF which numbered less than 800 all ranks until 1927. Recruiting brochures distributed at that time still advised intending applicants for the Australian service that it was 'not possible for the present to enter boys for apprenticeship in the Air Force'. Those seeking employment in technical trades were required to obtain their skills before joining, and to prove themselves as qualified at trades tests when applying.¹⁰

The following year brought the first occasion on which the RAAF conducted technical training for new enlistees, this being a course run at Point Cook for seventeen candidates for the signals mustering of wireless operator. It was to be the only such course for another seven years, however, due to economies forced by the Depression.¹¹ Not just recruiting but the acquisition of new aircraft came to an abrupt halt at this juncture.

In 1934, however, the RAAF embarked on a program of rapid growth, which over the next five years saw the size of the permanent force treble to over 3000 officers and men, as well as several new aircraft types introduced into service.

⁸ Paul Tunbridge, *History of Royal Air Force Halton: No. 1 School of Technical Training*, Buckland Publications, London, 1995. The practice of reserving a number of vacancies in each apprentice intake for applicants from the Dominions meant that the scheme had another relevance for Australia, although graduates went on to serve in the RAF rather than the RAAF; see AA, CRS A705/1, file 208/31/4672.

⁹ Hyde, *British Air Policy Between the Wars 1918-1939*, pp. 103-4; Boyle, *Trenchard*, pp. 405, 496.

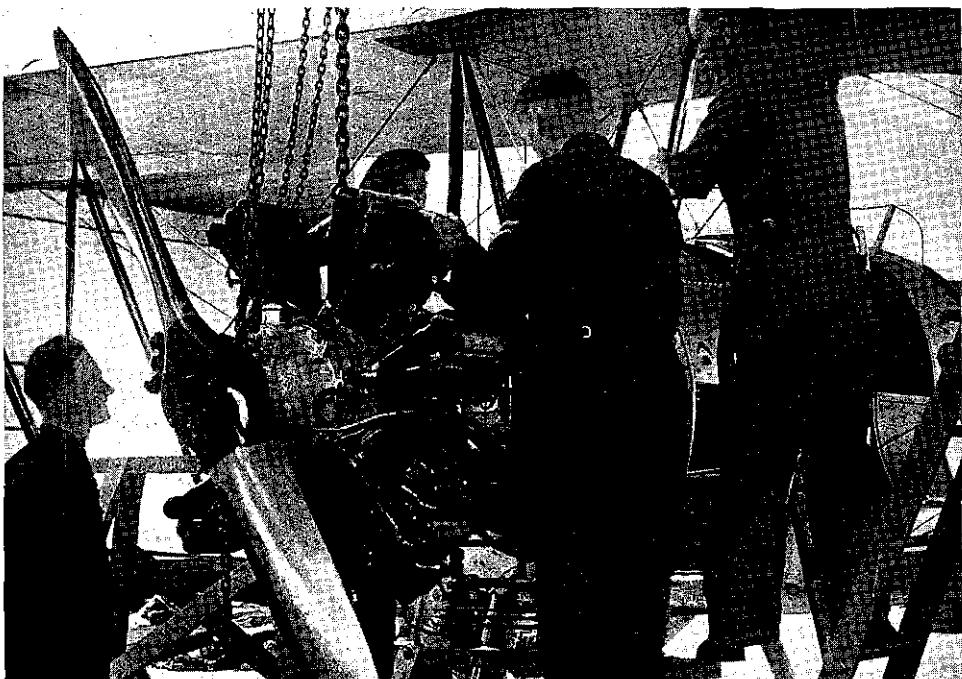
¹⁰ Booklet 'How to Join the Royal Australian Air Force', RAAF Brochure, c. 1927, copy held by Public Library of Victoria, p. 12.

¹¹ E.R. Hall, *A Saga of Achievement: A story of the men and women who operated radio and radar systems of the RAAF over 50 years*, Bonall Publishing, Box Hill North, Vic, 1978, pp. 237-8.

The changes which flowed from the new circumstances were both major and necessary, as one RAAF engineer officer of the period described:

Most of the men, if not the aircraft, were of AFC or early 1920 vintage and age was catching up with them. Furthermore, the majority had grown up on wooden aircraft structures and rotary engines and some were finding it hard to convert to metal structures and the more complex radial and in-line liquid cooled engines, with the exception of those lucky chaps who had been involved with the seaplanes and flying boats.¹²

To cope with this build-up, in 1935 a Recruit Training Section was formed within the Headquarters Squadron of No. 1 Aircraft Depot at Laverton, along with a School of Armament and Signals. As well as grounding newly-enlisted men in drill, trade training was begun for armament and aircraft fitters, metal riggers and W/T (wireless telegraphy) operators. Those joining technical grades had to 'undergo a three to nine months course according to mustering before being posted to other units'.¹³



Mechanics installing an engine in an Avro 643 Cadet MkII training aircraft in about 1936. Prior to the Second World War, the RAAF recruited its technical ground staff from personnel who had already acquired trade qualifications in civilian life and provided only such training as was necessary to enable them to learn the air force application of their skills. (RAAF Museum, Point Cook)

¹² C.R. Taylor, 'An Engineers view of the RAAF between the Great Wars', *AHSA Journal*, No. 3, July-August 1976, p. 12.

¹³ Unit diary for 1AD (microfilm roll 209).

Even with this innovation the RAAF remained heavily restricted in the sort of training it was willing or able to give to technical entrants. A recruiting brochure published in the second half of 1936 made clear that:

It is essential for tradesmen who desire entry into the Air Force to have served an apprenticeship at their trade. Without this qualification, the chances of satisfying the acceptance tests are almost negligible ... There is no avenue for boys to be taught trades or for the further training of partly trained tradesmen.

All that the RAAF undertook to do was provide additional training of the sort necessary to teach a tradesman 'the Air Force application of his basic trade'.¹⁴ Even after receiving training to adapt his skills, the technical recruit had to serve a full year in a unit before being accepted as fully qualified.

With the air force expansion gathering pace and increasing numbers of new personnel entering the service, the pressure on the RAAF's training facilities continued to grow. This was reflected in the up-grading of the 1AD section into a Recruit Training Squadron in September 1936.¹⁵ During October 1937 the Squadron was reorganised as 'Training Depot', at which stage an Engineering School was added to those instructional elements already operating under its umbrella.¹⁶ By 1938 planning was also in train for a bigger and separate signals training facility to be located at Point Cook; known as No. 1 Signals School, this was opened just as the Second World War began in September 1939.¹⁷

After the outbreak of war, the Air Force's need for numbers of ground staff who had trade training increased sharply. Initially, use was still made only of recruits who already possessed technical qualifications. To obtain fitters, for example, tradesmen were enlisted and put through a 16 week course which took the place of the Training Depot instruction and the one-year attachment period. With civil industry similarly facing expansion to meet wartime demand and competing with the fighting services for skilled men, however, the RAAF inevitably found it necessary to 'develop other channels of supply', by enlisting less-qualified men and putting them through several successive courses to bring them up to the required level.¹⁸

¹⁴ Booklet 'The Royal Australian Air Force as a Career' RAAF Publication No. 9, (revised June 1936), copy held in RAAF Museum.

¹⁵ Department of Defence (Air Office) file, Air 454/7/2.

¹⁶ 'Training Units', *Units of the Royal Australia Air Force: a concise history*, Vol. 8, RAAF Historical Section, Canberra, 1995, p. 81.

¹⁷ Hall, *A Saga of Achievement*, pp. 240, 242.

¹⁸ Air Board Agendum No. 6768.

TECHNICAL GROUND PERSONNEL

CHART SHOWING SEQUENCE OF TRAINING

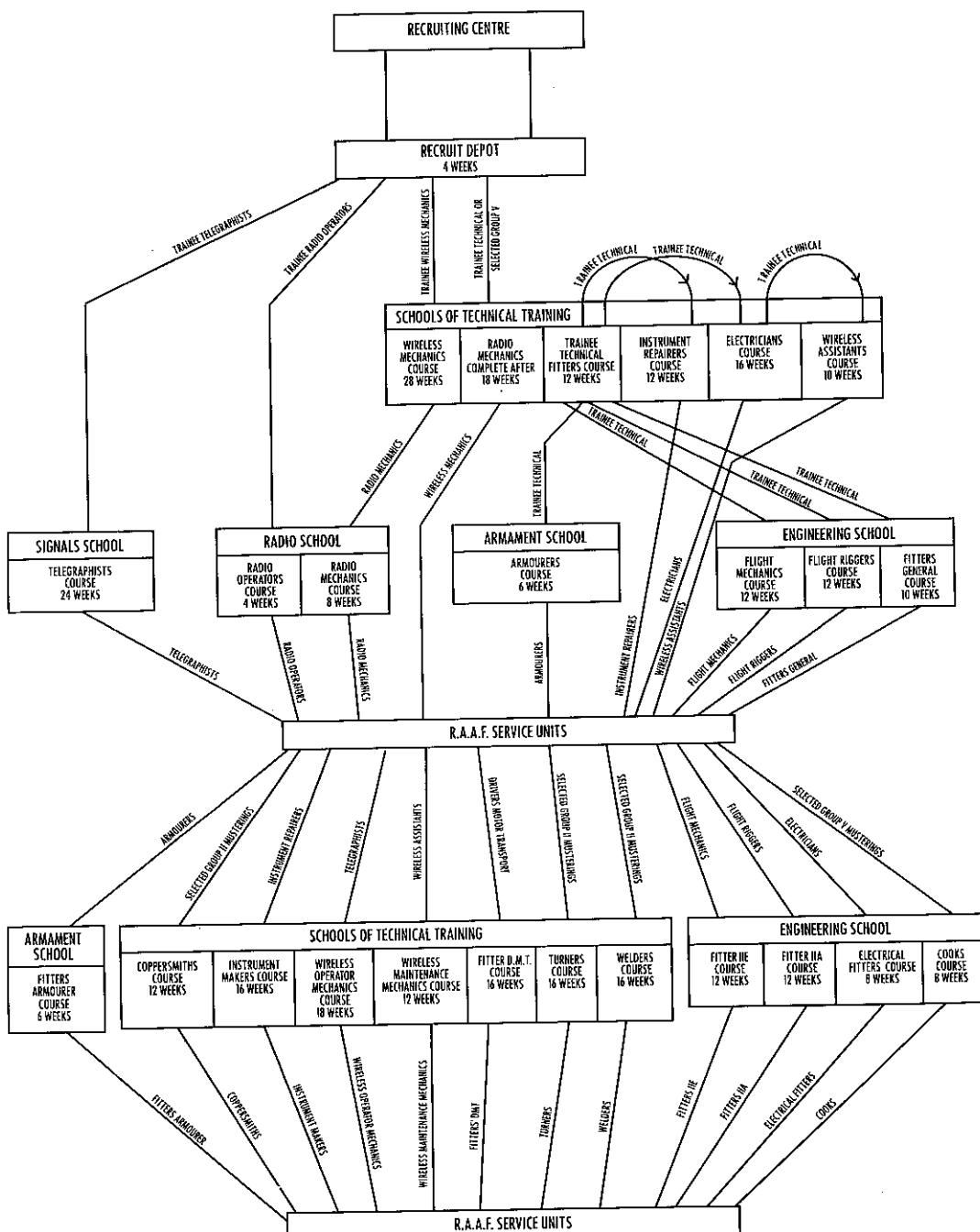


Chart showing the sequence of training for RAAF Technical Ground Staff during World War II.

Towards the end of 1940, the available supply of skilled and semi-skilled recruits had been practically exhausted, and from the start of 1941 the RAAF was obliged to look to satisfy its requirements by turning unskilled enlistees into competent tradesmen. This involved establishing a three-tiered system of training, first passing recruits for aircraft trades through an eight-week course in basic fitting; followed - as with semi-skilled recruits - by courses in one of the specific areas of aircraft maintenance; and, later, upgrading them to higher musterings through conversion courses in more advanced systems.¹⁹



As the Second World War progressed, the RAAF was forced to turn semi-skilled recruits and later even unskilled enlistees into competent tradesmen. Here trainees receive instruction at No. 1 Engineering School at Melbourne's Ascot Vale Showgrounds in February 1940. (RAAF Museum, Point Cook)

From relatively early in the war, the air force had begun expanding its facilities for carrying out technical training. In December 1939 the Engineering School was sub-divided and moved, with detachments sent from Laverton to take over the Melbourne Junior Technical School in Latrobe Street, West Melbourne, and also the Melbourne showgrounds at Ascot Vale. Initially established as sub-units of the Training Depot, these became No. 1 School of Technical Training

¹⁹ Leslie Harold Sullivan, *Not to be shot at or exported*, RAAF Museum, Point Cook, Vic, 1995, p. 166.

(1STT) and No. 1 Engineering School on 29 January and 1 March 1940 respectively.²⁰

The formation of 1STT was directly related to the strategy of making maximum use of existing civilian teaching resources in the expanded training effort. Facilities such as State Technical Schools assisted by conducting the multitude of special courses that were necessary before passing trainees on to the Engineering School to equip them with service-specific skills.²¹ Thus courses run by 1STT were held at the Melbourne, Brunswick and Footscray technical colleges, Amalgamated Wireless (Australia) School, and the Emily McPherson School of Domestic Economy. In March the following year 1STT occupied the Exhibition Building in the inner Melbourne suburb of Carlton and the focus of training was shifted there.²²

Five similar schools were set up around Australia during the rest of 1940: No. 2 in Canberra; No. 3 at Ultimo (Sydney); No. 4 at Adelaide; No. 5 in Perth; and No. 6 in Hobart. The last of these had a relatively brief existence, being raised in August 1940 and disbanded at the end of November 1941. A No. 7 STT was subsequently formed at Geelong, Victoria, in June 1942 and continued to operate until the latter half of 1945, when all these schools were closed.²³ During the course of the war, over 65,000 personnel had been given specialised training at STTs in the 120 musterings (skill categories) into which the RAAF graded its airmen.²⁴ Many of the trainees were women, after more than 70 of the service's trades were progressively opened up to members of the Women's Auxiliary Australian Air Force (WAAAF) (formed in 1941).²⁵

In addition to the courses run by the RAAF's own schools, other training was carried out for the service within various civilian institutions. As early as August 1939, for instance, the Air Board had arranged with the Melbourne Technical College (MTC, subsequently known as the Royal Melbourne Institute of Technology or RMIT) to start running a W/T operator mechanics course that met service requirements.²⁶ The following November it was arranged for the MTC to undertake specialised training needed by the RAAF as a wartime expedient, starting with a course for 100 aircraft fitters which began on 18 December.²⁷ When a new signals mustering of Aircraft Electrician was created to take over the maintenance of electrical systems in aircraft, the first 21 trainees in this trade were also sent to the MTC in January 1940 to complete a basic theoretical course before starting at the

²⁰ *Units of the Royal Australia Air Force: a concise history*, Vol. 8, pp. 36, 81, 91.

²¹ Douglas Gillison, *Royal Australian Air Force 1939-1942*, Vol. 1, Australian War Memorial, Canberra, 1962, p. 98.

²² *Units of the Royal Australia Air Force: a concise history*, Vol. 8, p. 91. In September 1944 the Wireless Training Section of 1STT was separated off to become No. 4 Radio School at Carlton; see Hall, *A Saga of Achievement*, p. 246.

²³ *Units of the Royal Australia Air Force: a concise history*, Vol. 8, pp. 93-9; AA, CRS A705/1, file 208/33/123 Pt 1.

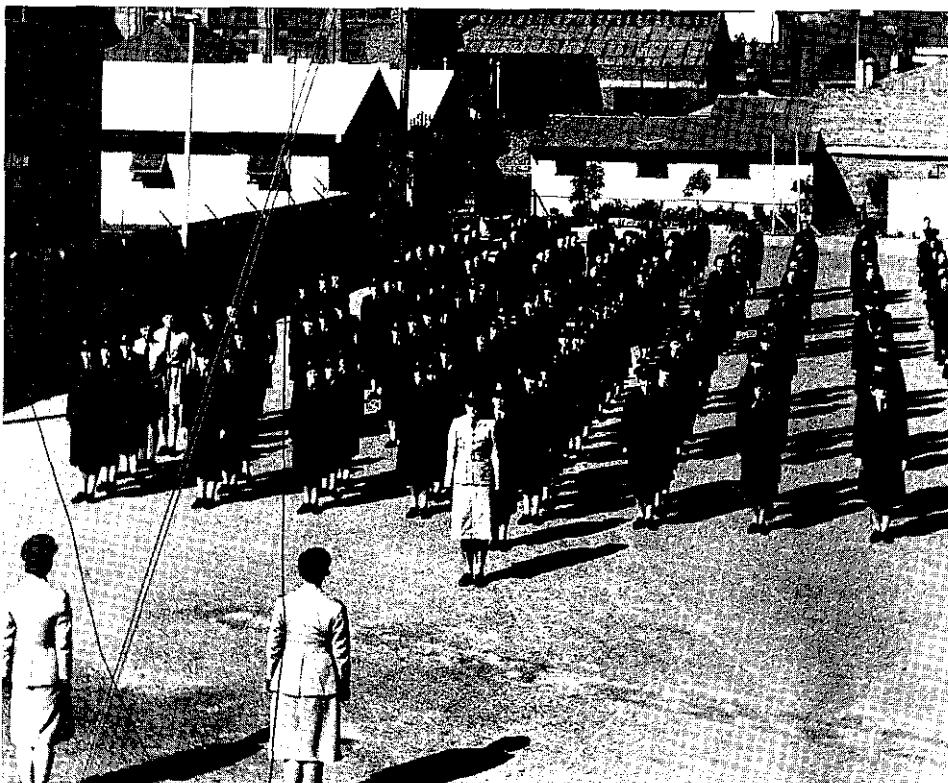
²⁴ *War Report of the CAS RAAF to the Minister for Air, 3 September 1939-31 December 1945*, p. 31.

²⁵ Joyce A. Thomson, *The WAAAF in Wartime Australia*, Melbourne University Press, Carlton, Vic, 1991, pp. 342-3.

²⁶ Hall, *A Saga of Achievement*, p. 246.

²⁷ D.P. Mellor, *The Role of Science and Industry*, Vol. 5., Australian War Memorial, Canberra, 1958, p. 179.

Signals School at Point Cook in May to learn the RAAF application of their new skills.²⁸



Women trainees on morning parade at the RAAF's No. 1 School of Technical Training, West Melbourne, about November 1941. One consequence of the RAAF's wartime shortage of skilled ground staff was that over 70 of the service's trades were opened up to members of the WAAAF. (AWM neg. Y116)

Although the RAAF was first off the mark, it was not alone in recognising the great importance of places like MTC in meeting service needs for skilled technicians. By the end of the war just on 100,000 members of all three armed forces had passed through some 80 different types of courses conducted at 60 technical colleges and schools around Australia.²⁹ Over 18,000 RAAF personnel were completely trained under these arrangements, and a further 35,000 had received basic technical training at civilian institutions prior to joining service schools.³⁰ The MTC alone had produced over 10,000 mechanics, electricians and operators of aircraft systems for the RAAF.³¹

²⁸ Hall, *A Saga of Achievement*, p. 242.

²⁹ Mellor, *The Role of Science and Industry*, pp. 179-80; S.J. Butlin, *War Economy 1939-1942*, Vol. 3, Australian War Memorial, Canberra, 1955, p. 237.

³⁰ *War Report of the CAS RAAF to the Minister for Air*, 3 September 1939-31 December 1945, p. 31.

³¹ Hall, *A Saga of Achievement*, p. 246.

Following the end of hostilities in August 1945, the RAAF's need for the output from its numerous training facilities led to a predictable contraction in the number of these establishments. There was, however, no question of dispensing with them altogether, even though the chief catchcries of the immediate post-war period seemed to be 'disbandment', 'demobilisation' and 'caretaker basis only'. The fact was that the existence of the war had not been wholly responsible for the creation of all these specialist training schools anyway, since - as previously outlined - this was a trend already evident well before 1939. The need for such establishments actually derived from the increasing technical complexity of air force equipment, with the consequent need for personnel trained beyond the levels readily obtainable solely through recruitment of civilian tradesmen.

This was a development of a type which the war years had exacerbated and hastened, quite apart from massively expanding in scale. The complicating effect which rapid advances in technology associated with the war effort had produced is well illustrated by the RAAF's decision to follow the RAF's example by adopting a 'technical list' of its engineer officers as early as 25 August 1941, although this was an informal arrangement done purely for administrative purposes and the officers were still retained in their basic categories of General Duties, Administrative & Special Duties or Commissioned Warrant Officers branches.³²

In September 1942 the Director of Technical Services at RAAF Headquarters, Air Commodore E.C. Wackett, was appointed to the Air Board in the newly-created post of Air Member for Engineering and Maintenance (AMEM). The branch he now headed comprised directorates of technical services, aircraft maintenance, signals and armament, with aeronautical inspection later added. Initially he had 373 officers under him, but by the war's end the size of the AMEM's branch had grown to 859.³³ Meanwhile, the specialist categories included in the Technical List had expanded from three - engineer, signals and armament - to eight by April 1943, with the engineer section divided in May the following year into ten sub-categories.³⁴

To ensure that the post-war RAAF retained a capability to continue meeting its technical requirements, the reduction of training facilities still aimed to keep alive the basis for imparting the range of skills which such a service would surely need. In November 1945, No. 1 Signals School ceased operating at Point Cook and moved to Ballarat where it formed the basis of a new Air and Ground Radio School. In January 1946 the Engineering School at Ascot Vale (which had by now absorbed all technical training functions apart from signals) sent a nucleus of its staff to Wagga Wagga, New South Wales, to establish what became known from March that year as the RAAF Ground Training School, before it too closed down.

³² Summary of Department of Air file 566/1/43 Pt 1 (now missing); see also C.R. Taylor, '50 Years of Aircraft Engineering in the Royal Australian Air Force', p. 60.

³³ Air Vice-Marshal R. Noble, text of address 'Sixty Years of Engineering in the Royal Australian Air Force', 1981, copy held by Air Commodore E.J. Bushell, Mount Waverley, Vic, p. 20.

³⁴ Department of Air file 566/1/43 Pt 1.

CHAPTER 2

ADDRESSING FUTURE NEEDS

With the outcome of the Second World War judged to be certain more than a year before the conflict actually ended, thinking about what the return to peacetime might entail was also well advanced by the time that moment finally came. In planning the size of the post-war RAAF, the Chief of the Air Staff (CAS), Air Vice-Marshal G. Jones, reportedly recommended to the government a service of about 72,000 personnel originally, but had been obliged to progressively modify this figure to 59,000, and then 34,000.¹ It was to this level which the service was ordered to shrink itself immediately upon the Japanese surrender, with the target to be attained by June 1946. The shape of Australia's post-war defence forces was a matter of such uncertainty, however, that this figure was reduced still further at government direction, and in January 1946 was down to only 20,000. In fact, the RAAF's strength continued to plummet, and at the end of October 1946 stood at just 13,000. By mid-1947 the number was down to around 11,600, and by the end of the following year stood at less than 7,900 - barely double the service's strength on the outbreak of war nine years before.²

In addition to focusing on the issues of size and shape, RAAF planners were also prompted to consider the aspect of what other elements would be necessary to sustain the future structure of the permanent service. This was a process which produced a range of decisions to provide for educational needs which were to have major long-term impact. To obtain a regular source of professionally well-grounded officers, there was to be a cadet college equivalent to those maintained by the Army and Navy at Duntroon and Jervis Bay respectively; approved by the government in mid-1947, this institution was brought into being at Point Cook later that same year and received its first intake in February 1948.³ As successor to the wartime Staff School operated at Mount Martha, Victoria, in June 1949 a RAAF Staff College was also opened at Point Cook to provide advanced service education to prepare selected officers for command and staff appointments.⁴

In the same period, on the technical side of the service, the wartime arrangement regarding a de facto Technical List was finally formalised into a fully-fledged Technical Branch - again following a course already charted by the RAF. After commissioning a committee headed by Group Captain J.W.C. Black, Director

¹ J.E. Hewitt, *Adversity in Success: Extracts from Air Vice Marshal Hewitt's Diaries 1939-1948*, Langate Publishing, South Yarra, Vic, 1980, p. 294.

² Alan Stephens, *Going Solo: The Royal Australian Air Force, 1946-1971*, Australian Government Publishing Service, Canberra, 1996, pp. 11, 15, 20.

³ R.E. Frost, *RAAF College & Academy 1947-86*, RAAF, Canberra, pp. 14-29.

⁴ Stephens, *Going Solo*, p. 142.

of Repair and Maintenance, to report on the feasibility of forming such a branch, early in 1947 the AMEM (still Wackett, now holding the temporary rank of air vice-marshal) directed the preparation of proposals that he could present to his Air Board colleagues. The scheme, the fine detail of which was worked out by Group Captain H.B. Seekamp assisted by Wing Commander C.R. Taylor, was approved by the Board in August 1947 and implemented in September the following year. The new branch (later Engineer Branch) was still headed by Wackett, from November 1949 with the new title of Air Member for Technical Services (AMTS).⁵

It was in the context of all these other important initiatives that the suggestions were also made in the immediate post-war period for the RAAF to introduce an apprenticeship scheme to train young airmen to serve in technical ground trades. Technical training was an area of concern for the RAAF which had prompted serious consideration even before the Second World War had reached its final stages. Between August 1943 and March 1944, for instance, a RAAF mission had visited England, Canada and the United States to study the technical training arrangements and methods in use in those countries. Squadron Leader J.F. O'Neill, Staff Officer for Signals Training, was a member of this mission, and later recalled that the report produced on the mission's return to Australia was subsequently shelved until after the war.⁶ In the event, though, neither the report nor O'Neill's involvement would turn out to have been wasted.

In mid-1944 there was also a specific call for the RAAF to look at adopting a technical training scheme similar to the RAF's. On 8 July 1944 Wing Commander W.E. Gardner, the CO of 3STT in Sydney suggested 'the formation in Australia of a School for Apprentices', and proposed that 'a competent officer' should visit Halton 'to observe, at first hand, the requirements and methods of working practiced since the formation of the School' there. No doubt he had himself in mind for this task, since he cited his own qualifications in support of the suggestion. These were that he had 'considerable time and experience in command of all types of technical training' and had served an apprenticeship as a mechanical engineer in England.⁷

Gardner's idea was taken seriously within the relevant staff branch at RAAF Headquarters, though it was immediately apparent that major obstacles made it unlikely such a scheme could be implemented at that stage. Group Captain H.A. Winneke,⁸ then Director of Personnel Services, observed that, quite apart from the actual merits of the proposal, there were many difficulties which would have to be resolved first - such as age limits for enlistment, rates of pay and manpower considerations. The Director of Training's deputy for technical and ground training, Group Captain D.H. Brown (himself a former CO of No. 1 Engineering School), agreed the next month that an apprentice scheme 'has not present application', but noted that it 'may be of value for the post-war RAAF'. In June of 1945 Brown was still maintaining that an apprentice system might be suitable once the war ended, but argued that the long training period involved precluded its adoption to meet present requirements. The main problem which he identified was simply that:

⁵ Stephens, *Going Solo*, pp. 171-2; see also C.R. Taylor, '50 Years of Aircraft Engineering in the Royal Australian Air Force', pp. 60-1.

⁶ *RAAF News*, January-February 1973, p. 4.

⁷ AA, CRS A705/1, file 208/31/4672.

⁸ Later Sir Henry Winneke, Victoria's Chief Justice 1964-74 and Governor 1974-82.

... personnel cannot be posted to operations areas under 19 years of age and ample time exists for training during the year available between this and the enlistment age [of] 18 years.⁹

Others at about this time had reached a different conclusion as to whether such a scheme might yet be appropriate, and had began taking steps to seek approval for its introduction. According to a later account by the then Director of Training, Group Captain P.G. Heffernan, the subject of apprentice training resurfaced during a chat with his deputy, Wing Commander W.J. Cameron, 'over a cup of morning tea'. As a result of this discussion Cameron was asked to prepare a plan, in which task he was assisted by J.F. O'Neill (now a wing commander), Squadron Leader G.T. Miles (an armaments specialist) and the Principal Education Officer, Wing Commander H.C. Pratt.¹⁰



Group Captain P.G. Heffernan, Director of Training in 1945-46, was a leading figure behind moves to establish both the RAAF College at Point Cook to provide for Officer education; and the RAAF Apprenticeship Scheme.

⁹ Minute note by Brown dated 20 June 1945, on AA, CRS A705/1, file 208/31/4672.

¹⁰ *RAAF News*, January-February 1973, p. 5.



Air Vice-Marshal J.E. Hewitt, pictured here in 1949 shortly after relinquishing the post of Air Member for Personnel to become Australian Defence Representative in London, was the driving figure behind the major educational initiatives of the post-war RAAF. (Ms B. Hewitt)

In this process of developing a viable scheme which would prove convincing to both the Air Board and the government, Heffernan's planning team found a crucial ally and senior advocate in the Air Member for Personnel (AMP), Air Commodore J.E. Hewitt. By Hewitt's own account, he took no persuading to convert him to the cause, since he already knew from close association what benefits the RAF had derived through its Apprentice School at Halton. While on an attachment to the Air Ministry in London during 1935 he had worked on files dealing with works and buildings in which the RAF's first CAS (Trenchard) had set forth his early policy, particularly in regard to training and educational establishments. When subsequently appointed to command a new RAF bomber squadron (No. 104) in 1936, he had seen at first hand the value of Halton in the large number of ex-apprentices in his unit's ground crew.¹¹

From his position within RAAF Headquarters, Hewitt now recognised more fully than most people the nature and extent of the problem which the air force would face in coming years to secure a steady supply of competent technicians. Not only was rapid demobilisation about to rob the service of the bulk of its trades personnel, but it was also abundantly clear that with a heavy phase of post-war reconstruction about to get underway the RAAF would find itself competing fiercely with industry for people who were both the most suitably qualified and the best able to absorb the pace of technological advances which had occurred during the war. And this was a contest in which civil industry would be able to offer wage levels which the RAAF could not match.

In the proposal which he argued before his Air Board colleagues on 21 September 1945 - less than six weeks after the Japanese surrender - Hewitt recommended that the RAAF create its own Training College to conduct apprentice training 'on the lines of that carried out in the RAF'. In supporting his case, Hewitt relied heavily on the value the British service had derived from its scheme during the period of rapid expansion prior to and during the early stages of the Second World War. Referring to recent laudatory comments by the British CAS, Marshal

¹¹ J.E. Hewitt, *The Black One*, Langate Publishing, South Yarra, Vic, 1984, pp. 146, 151-52.

of the RAF Sir Charles Portal, concerning the Halton system, it was particularly noted that Britain was returning its scheme to its previous shape and duration after the disruptions of the war years.¹²

Hewitt succeeded in obtaining the Board's approval, in principle, and it was left to him to work out the details necessary for implementation in conjunction with the CAS, Jones. Other documentation generated while the AMP's proposal was being drafted reveals some interesting side aspects to what was expected to be entailed by the scheme at this early stage. For instance, it is clear that even in advance of the Board's concurrence planners were assuming the presence of a population of 480 apprentices in drawing up the scheme for the RAAF Ground Training School.¹³ Although - as earlier noted - the establishment of the school went ahead early in 1946, it initially did so without any apprentices, since winning final approval for this scheme proved far more complex than originally anticipated.

In the event, it was to be 12 March 1946 before AMP was ready to return to the Air Board with a firm outline of a scheme. In the meantime the team under Heffernan had gone off in search of information about Halton. According to an account given by the then Director of Training within a few years of these events:

A study of this RAF scheme greatly assisted the RAAF in formulating the policy and training programme for its own project. One of the ticklish problems which was overcome by this study was the introduction of a curriculum, which gets the results without overworking the lads.

The basic plan devised was consequently built around four main objectives:

- to place RAAF technical training on a sound basis;
- to provide the RAAF with the most highly trained and qualified technicians;
- to provide an exceptionally sound basis on which to recruit the best type of youth; and
- to provide each successful apprentice with the necessary qualification for future employment on discharge from the Service.¹⁴

In essence, the scheme espoused to the Board by AMP proposed that there should be up to 940 'boy candidates' aged 15-16 years under training at any one time, who would undertake courses over three years which would fit them to become skilled tradesmen and ultimately senior NCOs. The scope of the scheme covered both engineering and electrical trades, and - as in the RAF - provision was made for graduates of the scheme to qualify for aircrew training, with those displaying outstanding qualities being eligible for nomination to the RAAF cadet college then also being planned. The preferred location for the training of engineering apprentices was Forest Hill, the base at Wagga Wagga, New South Wales, which was in course of becoming home to the GTS, while the radio trades

¹² Air Board Agendum No. 6768. During the war, the February 1941 entry to Halton was cancelled and subsequent entries reduced to two years' duration until August 1943; see notifications from London on AA, CRS A705/1, file 208/31/4672.

¹³ AA, CRS A/705/1, file 208/31/5422.

¹⁴ *RAF Quarterly*, July 1953, p. 301

would receive their training at civilian technical colleges and the Air & Ground Radio School at Ballarat.¹⁵

After some debate over the details of the scheme, Hewitt was obliged to take back his blueprint for some redrafting before presenting it again at the Board's meeting on 22 March. The revised plan which he tabled spelt out that on completion of three years of training, each apprentice would be required to serve another twelve years in the permanent air force, instead of 18 as originally envisaged. Moreover, the output from the scheme was intended to fill only 60 per cent of the RAAF's higher trade musterings, the remainder coming from direct entry tradesmen and airmen who underwent conversion courses in the service.

During their training, apprentices would be accommodated and receive their meals separately to other airmen. They would also receive their uniform and equipment free of charge, along with their medical and dental care, and rail travel home during bi-annual leave periods. They would be paid, but their spending would be subject to limits set by the commandant of the training school. This was in line with the notion that it was for the RAAF to assume 'the normal responsibilities of Guardians in providing for [apprentices'] social, spiritual and recreational welfare', a function which specifically meant that they were to be denied access to intoxicating liquor.

This time Hewitt was not to be disappointed. His plan was accepted by the Board and approved for submission to A.S. Drakeford, the former railway engine driver and union official who was then in his fifth year as Minister for Air, with a strong recommendation that the scheme be adopted. In addition to drawing attention to the proposal's links with practice in the RAF and plans for an RAAF Cadet College, Board members went on to remark:

While it appreciates that the size of the Post-War Air Force has not yet been determined, the Board considers it essential that approval be given for the immediate institution of the Scheme, at least on the basis of the 1939-40 peace-time establishment, with a first entry of 200. This should enable the Post-War Air Force to obtain the earliest possible benefit from the operation of the Scheme.¹⁶

Fully seven months were now to lapse before the Air Board received any response from the Minister. When Drakeford finally replied on 25 October, it was to advise that a decision on the matter had been deferred pending the government's consideration of recommendations from the Defence Committee regarding the permanent size and organisation of all three armed services in the post-war period. Recognising, however, that resolution of these wider questions was likely to be subject to lengthy delay, and since he personally agreed that it was desirable that the apprenticeship scheme be implemented as early as possible, he had taken the action of writing to the Minister for Defence, F.M. Forde, to ask that the Defence

¹⁵ Supplement No. 1 to Agendum No. 6768.

¹⁶ Air Board minute of meeting of 22 March 1946 referring to Supplement No. 2 to Agendum No. 6768.

Committee be requested to give the Board's specific proposals for the scheme 'urgent and separate consideration as a special project'.¹⁷



A.S. Drakeford (in overcoat), the Minister for Air 1941-49, pictured with groundstaff of No. 10 Squadron, RAAF, during a visit to the RAF base at Mount Batten, outside Plymouth in England, on Christmas day 1944. The airman in the foreground at left is the Minister's cousin, LAC Ernie Buszard. By this stage some in the RAAF were already beginning to focus on the problem of meeting the post-war service's needs for trained technical ground staff, and by 1946 Drakeford was being presented with detailed proposals. Described as 'clear minded rather than brilliant', Drakeford at least deserves credit for approving the introduction of the RAAF Apprenticeship Scheme during his period as Minister. (AWM neg. UK2324)

The Defence Committee duly discussed the matter on 13 December,¹⁸ basing its examination of the RAAF Apprenticeship scheme on a comparative statement made available to it regarding what the Air Force proposed and a similar scheme devised by the Army. Although the latter differed significantly, being based on a five-year term at rates of pay equivalent to civilian apprentices, the Committee accepted that the RAAF scheme was 'designed to meet RAAF requirements which

¹⁷ Minute by Drakeford considered at Air Board meeting of 29 October 1946, bound with Agendum No. 6768.

¹⁸ AA, CRS A5799, Defence Committee Agendum 236 and Minute 509.

are peculiar to all air forces and aviation generally' and was similar to one which had operated successfully in the RAF for 25-30 years. The Committee was therefore prepared to endorse the RAAF proposal in principle, but urged that an endeavour should be made to ensure uniformity as far as possible in regard to rates of pay and conditions of service for Army and RAAF apprentices. In advising Drakeford of this outcome in January 1947 Forde's successor as Minister for Defence, J.J. Dedman, indicated that he had accepted the Committee's recommendation, while at the same time arranging to draw the latter aspect to the notice of the Department of the Treasury.¹⁹



Much of the work negotiating details for the implementation of the RAAF Apprenticeship Scheme fell to Wing Commander W.J. Cameron, who from January 1946 was Deputy Director Training (Ground and Technical) at RAAF Headquarters in Albert Park Barracks, Melbourne. (M. Cameron)

to ensuring that pay rates for the air force apprentices under training were set at levels 'so that they should not have an unfair advantage over their civilian contemporaries'²¹ - a somewhat unlikely consideration in view of the imbalanced competition which, on other occasions, the AMP claimed the RAAF faced from civil industry.

It was, apparently, this qualification regarding certain financial points which subsequently prompted close attention being given to such aspects by the RAAF's team of planners. According to Hewitt's published memoirs recalling events at this time, much of this work fell to Wing Commander Cameron who he described as 'our department of air Treasury man'.²⁰ Cameron was reportedly also heavily engaged in negotiations to ensure that the trade-training curriculum for air force apprentices would not differ from that in civilian apprenticeship training establishments, at least to such an extent that would debar RAAF men from entitlement to join the union appropriate to their trades when they took their discharge from the service. Hewitt maintains that Cameron's role extended, too,

¹⁹ Dedman's letter to Drakeford dated 21 January 1947, AA, CRS A705/1, file 208/88/1.

²⁰ Hewitt, *Adversity in Success*, p. 299.

²¹ *Ibid.*, p. 296.

Again according to Hewitt's account, Cameron carried on the necessary preliminary work of negotiating with relevant trade union officials 'with considerable skill and tact'. Chief among his union contacts was an official named Southwell, whom Hewitt described as secretary of the Amalgamated Engineering Union (AEU) - the forerunner of the Amalgamated Metal Workers Union. Such was this figure's alleged influence within the Labor government then in office at federal level that after AMP discussed his Air Board agendum on the apprentice scheme with Drakeford, and the Minister later discussed it with the Prime Minister, J.B. Chifley, at a Cabinet meeting in Canberra, Hewitt was subsequently informed that the prime minister had advised by telegram that the whole scheme could go ahead only if the curriculum received Southwell's agreement. At this point Cameron was supposedly despatched to Sydney bearing a copy of the complete curriculum, and Hewitt recounts:

When Cameron returned with a broad grin on his face and in a voice full of enthusiasm said, 'It is O.K., Southwell has sent a telegram to the PM' I told him to go and tell AVM Wackett, who later called to see me in my office looking as pleased as I felt.²²

Although there are some discrepancies in Hewitt's recall of events - for instance, the fact that C.M. ('Cup') Southwell was actually the *Victorian* organiser of the AEU, and there would have been no need for Cameron to visit him in Sydney - there are grounds for taking seriously his suggestion that obtaining union support for the RAAF's plan had been an important consideration. Certainly Chifley was a person who, more than any other, would have understood that securing union acceptance was likely to be crucial to the scheme's eventual success. A former Minister for Defence under J.H. Scullin until he (and Scullin's Labor government) had been defeated in 1931, from June 1940 he had been Director of Labour Supply and Regulation in the Ministry of Munitions until he resigned to seek (successfully) re-election to federal parliament in September. He therefore knew how much the Menzies government had needed the support of not just the Australian Council of Trade Unions (which had only about 10 per cent of unionists affiliated to it), but powerful groups like the Australian Workers' Union and the AEU, when it sought to expand the number of tradesmen in essential industries to meet urgent wartime demand. In May 1940 the AEU had risked the wrath of the rest of the union movement by negotiating a self-protective agreement which allowed carefully controlled 'dilution' of labour with semi-skilled workers under adult training schemes.²³ On several grounds, therefore, the AEU may very well have been seen as a key to ensuring the new scheme's acceptance.

With these hurdles crossed, other arrangements for the introduction of the RAAF Apprentice Scheme pressed ahead. The intention of the Air Force to introduce such a training scheme for boys had already been publicly announced by Drakeford in March 1947,²⁴ and was followed up by a further statement in July that

22 *Ibid.*, pp.296-7.

23 S.J. Butlin, *War Economy 1939-1942*, Vol. 3, Australian War Memorial, Canberra, 1955, pp. 225, 237, 242-3; Paul Hasluck, *The Government and the People 1939-1941*, Vol. 1, Australian War Memorial, Canberra, 1952, p. 410.

24 *Sydney Morning Herald*, 4 March 1947, p. 4.

the scheme would be introduced early the next year following the establishment 'soon' of an apprentices training squadron at Forest Hill.²⁵ It was not until 31 July, however, that the Air Board actually approved the publication of a brochure detailing the full conditions of entry and service for applicants to the scheme.

This document set out the nine trade categories as fitters, mechanics or instrument makers which would be open to aircraft apprentices in either of the broad trade groups of 'engineer' or 'radio'. Entrants would receive three years full-time study, followed by a year's productive employment (regarded as on-the-job or field training) under supervision at a selected RAAF unit, during which they would be granted the paid rank of AC1 though still regarded as a minor. If they passed a trade test at the completion of this fourth year, they would be reclassified as a leading aircraftman and automatically became eligible for further promotion. The brochure contained one important variation on what had been originally proposed with regard to the age of entrants. Whereas Hewitt had initially stipulated (and the Board agreed) an upper age limit of 16, subsequent consideration now favoured raising this to 17 to ensure that boys who were completing their Intermediate Certificate (the equivalent these days to Year 10 of High School) were not excluded.²⁶

From this point, the pace of movement towards recruiting the first intake under the new scheme in the first months of 1948 began to quicken. On 22 August, the eve of the sixth anniversary of founding of the Air Training Corps (ATC), Drakeford announced that ATC members would soon be invited to enter the RAAF College at Point Cook and the Apprenticeship Training School at Wagga.²⁷ Less than a week later he made a public reference to the plan to end all recruiting for the Interim RAAF at the end of August, and to begin recruiting from 1 September for the permanent post-war RAAF, including for apprentices.²⁸

The foreshadowed campaign to recruit apprentices, aircrew and cadets did not actually get underway until 20 October 1947,²⁹ although this delay initially seemed not to have caused any lack of interest in the careers on offer. After just one week it was reported in one Melbourne newspaper that the campaign had brought in 1411 inquiries - 608 alone for the apprentice scheme;³⁰ a fortnight later more than 2700 inquiries had been received, including nearly 1000 for apprenticeships.³¹ Although an impression had thus been created that the new scheme had met with widespread public interest and enthusiasm, it would soon be discovered that there was a significant difference between a promising rash of requests for information and an actual number of applicants engendered.

Even at this relatively late stage some important administrative aspects had yet to be finalised. For example, not until 7 November did the Air Board actually consider and agree the principles and procedure to apply in selecting applicants for training under the scheme. The arrangements approved provided for the appointment of a selection committee, with an officer of air rank as president and

²⁵ *Argus* (Melbourne), 12 July 1947, p. 1.

²⁶ Supplement No. 3 to Agendum No. 6768.

²⁷ *Argus*, 23 August 1947, p. 4.

²⁸ *Argus*, 28 August 1947, p. 16.

²⁹ *Argus*, 20 October 1947, p. 14.

³⁰ *Argus*, 28 October 1947, p. 7.

³¹ *Sydney Morning Herald*, 10 November 1947, p. 7.

two senior technical officers and a senior education officer as the other members. After all applications had been scrutinised at Air Force Headquarters to establish basic compliance with requirements such as age, educational level, race and residential qualifications, the applicants themselves were to be requested to attend for a selection session, at which their medical fitness would be established and they would be subjected to aptitude tests and a personal interview which aimed to assess each candidate's intellectual capacity and personal characteristics. In this process applicants who were formerly members of the ATC were to be given preference, 'all other things being equal'.³²

The lateness of the Board's determination of selection guidelines gave little leeway to the members of the first interview panel which assembled under the chairmanship of Air Commodore H.A. Austin, the AOC of Maintenance Group. Accompanied by Group Captain J.W.C. Black (now senior maintenance staff officer on Austin's headquarters), Wing Commander J.E. Reynolds (a radio officer with the Directorate of Training) and Squadron Leader J.E. Needham (senior education officer at GTS), he began the process of visiting all state capitals later that same month - beginning in Brisbane on 24 November.³³ But at least hard action was underway to bring the long-awaited scheme into operation.

As a final aside to the process leading up to this point it should be noted that the RAAF was not alone among Australia's armed services in adopting apprentice training to meet its needs for skilled tradesmen, merely the first to do so. As mentioned previously, the Army had prepared a similar scheme and was also moving to implement it in the same period. Not until late in 1947, however, did the Army make public its plan for a school training 450 apprentices to be 'established soon at an existing Army camp',³⁴ with a further announcement following in February 1948 that this facility was expected to be opened in July at a site in Victoria with a former master at Ballarat Grammar, Scotch College and St. Peter's College (SA) as its commandant.³⁵

When the Army Apprentices' School began to function at Balcombe, on the Mornington Peninsula south-east of Melbourne, later in 1948, the lines on which it operated were not so different to those applied by the Air Force after all. This school also aimed to train youths aged 15-17 as skilled tradesmen with a three year course of intensive theoretical and practical work, followed by one year in an appropriate Army workshop or technical unit. At the end of the third year, the boys took their Army trade test and also the Victorian Apprenticeship Commission's final grade public examination, to ensure 'that they will be accepted as qualified tradesmen in civil life when they eventually leave the Army'. In addition to trade training, the Apprentices' School provided general educational facilities up to the School Leaving (Year 9) standard.³⁶

The Navy, on the other hand, did not follow suit until 1956, when it started up its own Apprentice Training Establishment (HMAS *Nirimba*) at Quakers Hill, on Sydney's north-west outskirts, formerly the site of a wartime airfield and since 1953 the site of the RAN's Schofields air station, with an initial intake of 50 boys in July.

³² Air Board Agendum No. 8445.

³³ AA, CRS A705/1, file 208/88/15 Pt 1.

³⁴ *Argus*, 28 November 1947, p. 7.

³⁵ *Argus*, 3 February 1948, p. 1.

³⁶ *Official Yearbook of the Commonwealth*, No. 42 - 1956, p. 1038.

This school, too, accepted youths aged 15-17½ years and provided them with secondary education as well as technical trade training over a total of four years, at the end of which they were expected to reach a standard recognised by the New South Wales Apprenticeship Commission. The only difference was that the course duration was split equally between classroom instruction at *Nirimba* and on-the-job training in ships of the fleet and at shore establishments. As with the RAAF scheme, however, provision was made for naval artificer apprentices of outstanding ability to progress to matriculation (Year 12) level and be considered for admission to the RAN College or an engineering diploma course at RMIT.³⁷

During 14 days spread over the last week of November and the first two weeks of December 1947, Air Commodore Austin's selection board interviewed a total of 191 applicants for the first intake of the RAAF Apprenticeship Scheme. Out of this group of hopefuls, only 41 were assessed as suitable (and passed examination as medically fit) for entrance into engineering and 15 for radio training - vastly down on the 150 places available in the former category and 50 in the latter. Clearly, the board's members had meant what they said at a conference held prior to embarking on their task, when it was decided that 'quality should not be sacrificed merely to obtain quantity'.³⁸

In an undated report subsequently submitted on the panel's activities, Austin outlined the difficulties under which he and his colleagues had laboured in discharging their task. For example, not all applicants could produce documentary evidence that they met the age requirements, and in the case of at least one candidate who did it was discovered that his birth certificate had been altered to conceal the fact that he was six months over the limit. Even so, the age requirements had been interpreted flexibly, resulting in several candidates who were only a month or two too old or too young gaining selection.

When it came to educational qualifications, the board was also confronted with a situation where many candidates were unable to demonstrate that they had attained the requisite minimum standards - Sub-intermediate for engineering apprentices, and Intermediate (with Mathematics and Science) for radio apprentices. In most cases this was because candidates had only just completed the public examinations in their respective states and were yet to receive notification of their results. The documentary evidence presented by some, however, clearly showed that they failed to satisfy the requirement, leading Austin to comment that these 'should undoubtedly have been eliminated in the preliminary assessment' of applications conducted by Air Force Headquarters.

So far as medical fitness was concerned, the board had been dismayed to find itself dealing with a number of applicants who had 'obvious disqualifying defects':

One had only one eye! At least two (discovered during medical examination after selection) had hernias not remediable within three months. Others had known defects of vision sufficient for disqualification, but had not correctly understood the statement of requirements in Pamphlet No. 55. Others had

³⁷ *Official Yearbook of the Commonwealth*, No. 56 - 1970, p. 89; see also George Odgers, *The Royal Australian Navy: an illustrated History*, Child & Henry, Hornsby, NSW, 1982, pp. 214-15.

³⁸ AA, CRS A705/1, file 208/88/15 Pt 1.

chests or spines grossly misshapen and not of the standard expected from boys who had taken an active part in sport. As a result of this situation, no fewer than a dozen candidates who had been assessed as suitable at interview and after aptitude testing were subsequently eliminated on medical grounds.

All in all, the board felt able to classify only a few of those actually selected for engineering training as 'all that could be desired', the remainder being 'only fairly good' or 'immature with promise of satisfactory development'. Many seemed doubtful prospects based on the results of their aptitude tests. Those selected for radio trades were generally superior in quality, although even here four had been indicated by aptitude testing as 'doubtful'. On the other hand, two were considered outstanding, with one of these thought likely to attain a cadetship in due course.

Arising from responses elicited in interviews, the board was moved to offer several observations about the selection process and the standard of applicants it had seen. Austin noted in particular the 'considerable portion of the applicants [who] were either orphans or ... children of "broken marriages" and were looking to the RAAF to become father and mother'. Added to this was an impression gained from talking to candidates and their parents that applications had been motivated 'almost universally [by] the desire to "learn a trade"'. There was, he complained, 'practically no appreciation of the potential careers awaiting apprentices':

As a result the type of boy coming forward was more often than not the one who already showed signs of being one of Life's failures or at best 'one of the crowd'.

Austin was in no doubt that the apprentice scheme had not been represented to the public in the best light, and he urged that action be taken to rectify this deficiency.

Nearly half a century on, these observations of the first selection board were themselves the subject of some unfavourable comments by historians. To one writer, the problems encountered by the board were clear evidence that recruiting material advertising the scheme had been put together with too much haste and too little thought, being couched in service jargon which confused parents and applicants about what was really required.³⁹ Another has pointed to the gratuitously offensive tone of many of the board's generalisations, remarking that this 'perhaps indicated that not all of the problems lay with the applicants'.⁴⁰

Criticism on each of these grounds is true and reasonable, and yet both miss the essential point that the even the initial pool of applicants was well down on the level the RAAF had in mind to admit to its scheme. A grand total of 361 applications had been received for the 200 places on offer, but after preliminary culling based on whether these met basic age and educational requirements the number of candidates who were asked to present themselves for interview had been reduced to 217.⁴¹ Austin's report noted that 17 candidates had simply failed to

³⁹ George Homer, *Indentured in Blue*, G. Homer, Belmont, NSW, 1992, p. ii.

⁴⁰ Alan Stephens, *Going Solo*, p. 132.

⁴¹ Air Board Agendum No. 8519.

show, and the remaining nine not seen by the selection board were accounted for by withdrawals and deferrals prior to that point.

The fact of the matter was that - just as Hewitt had anticipated as AMP in 1946 - the RAAF was being forced to conduct its post-war recruiting in an increasingly tight labour market, often on relatively disadvantaged terms. The extent of the problem has been highlighted by yet another historian who in recent years pointed out that:

In 1939, the average unemployment figure for the whole year for those unions who returned figures showed an Australia-wide rate of 9.7 per cent. From 1948 through to 1952 it was less than one per cent. More jobs had been created during the war than there were skilled tradesmen to fill them and thus the armed services faced unprecedented competition for labour. Recruiting for both the Permanent and Citizen Air Force was affected.⁴²

The RAAF high command was well aware of this problem, with the CAS (still Jones, now holding the rank of air marshal) publicly stating in October 1948 that his service needed another 5,000 men and that these 'would have to be obtained in the next two or three years'.⁴³ So serious was the situation that by February 1949 the RAAF was prompted to attempt the recruitment of 1000 ex-RAF electrical and engineering fitters, instrument makers, radar mechanics and carpenters in Britain.⁴⁴ Many of the trades included in this drive were, of course, precisely those which the apprenticeship scheme was ultimately intended to fill.

Meanwhile the Air Board was presented with a large and quite embarrassing problem arising from the shortfall in the first apprentice intake. The Minister (Drakeford) was particularly pointed in a minute he sent the Board on 22 December, expressing his disappointment that instead of 200 apprentices the RAAF would be admitting only about a quarter of that number. He was expressly concerned that 84 per cent of applicants should have been unsuccessful, considering that this 'raises the question whether the basic principles, standards and procedures observed in making selections are sound in every respect'. Drakeford accordingly tasked the Board with making an analysis of these matters and providing him with a 'full report'. In the meantime he insisted on substantial reductions in the staff being assembled at Wagga and the works projects which had been authorised in anticipation of a much larger intake there.⁴⁵

In responding to the Minister's requirements, the AMP (Hewitt) advised his colleagues on the Board on 13 January 1948 that the principles which had guided the selection process were still considered to be sound and pointed to the impact of other factors. Those he particularly identified were a 'general shortage of suitable youths', as evidenced by the failure by several large commercial and government organisations such as BHP and the Postmaster-General's Department to secure their apprentice recruitment targets either (in the case of the Victorian Railways, despite a long campaign), and inadequate advertising to acquaint parents and schools with

⁴² John McCarthy, *Defence in Transition: Australian Defence and the Role of Air Power 1945-1954*, Australian Defence Studies Centre, Canberra, Defence Paper No. 2, January 1991, p. 8.

⁴³ *Argus*, 9 October 1948, p. 5.

⁴⁴ McCarthy, *Defence in Transition*, p. 8.

⁴⁵ Drakeford's minute, bound with Air Board Agendum No. 8519.

the benefits of the RAAF scheme. Nonetheless he gave an assurance that the aptitude tests and system of scoring interviews would also be revised, with a view to improving these for future use.⁴⁶

While the Board accepted all these assurances, it also decided to have AMP investigate the possibility of making a further call for applications, with the object of accepting another intake in July that year. At the same time consideration was also to be given to accepting a lesser educational standard than the Intermediate Certificate, such as the Victorian Education Department's Merit Certificate, or whether a special purpose entrance examination ought to be introduced.

When Hewitt delivered his findings on these matters to the Board on 16 January, he recommended that there should be no change to the educational standard sought, or resort to a special entrance examination. He did, however, urge the need for an additional mid-year intake, since this might enable the RAAF to pick up many boys who did not know their school results at the time of the first round of applications. Noting that the Army was about to call for applicants for its initial apprentice intake planned for June that year, he also expressed a concern that 'this may deprive the RAAF of some suitable material unless an immediate call is made'.⁴⁷

To support a second campaign leading to a mid-year intake, the AMP proposed that a letter be sent out to all headmasters of schools drawing attention to the RAAF scheme and inviting them to do the same with their students. The AMP also informed the Board that a 'survey' was currently being made of the rejected applicants for the first RAAF intake, to ascertain whether any of these might, 'in view of the changed circumstances', be found to be suitable after all.⁴⁸ As a result of this further 'desktop' evaluation of applications the number of engineering apprentices in the first intake was eventually raised from 41 to 53.⁴⁹ It was these who duly arrived at Wagga on 2 February to actually inaugurate the scheme.

These were measures which satisfied Drakeford and shaped the course of subsequent action. The Minister approved an additional amendment later that month which increased the upper age limit to apply for the second intake in July to 18 years,⁵⁰ and it was on this basis that press advertisements appeared from February until applications closed at the end of April 1948. In addition to the promised action of canvassing school principals by letter, in places like Sydney the step was taken during March of arranging special briefings at Air Force House in Goulburn Street for headmasters of boys' secondary schools, at which senior RAAF officers explained the educational opportunities offered by the service.⁵¹

Within a month of the commencement of training for Course No. 1, another three-man selection board was assembled to embark on the task of assessing further applicants. Between 8 and 24 March this panel - comprising Wing Commanders Cameron (president), Reynolds and Pratt - visited Brisbane, Sydney, Perth and Melbourne to interview 58 candidates who had submitted applications too late for

⁴⁶ Supplement No. 1 to Agendum No. 8519.

⁴⁷ Supplement No. 3 to Agendum 8519.

⁴⁸ Supplement No. 3 to Agendum 8519.

⁴⁹ Homer, *Indentured in Blue*, p. iii. See also AA, CRS A705/1, file 208/88/10, which contains a nominal roll of No. 1 Aircraft Apprentice Course at GTS dated 7 April 1948 listing 52 members.

⁵⁰ Supplement No. 4 to Agendum 8519.

⁵¹ *SMH*, 17 March 1948, p. 5; 19 March 1948, p. 2.

the February intake, and to reconsider certain candidates who had missed out on selection during the first round. A total of 25 did not attend for interview, although five offered good reasons (including two prevented by a railway strike) and were deferred until the next interview round scheduled for May; of the 33 who did present themselves, however, 29 were chosen - 25 for engineering apprenticeships but only four for radio.⁵²

Cameron and his colleagues were again employed during May and June to complete the process of selecting the second intake. When they finished, they had settled upon another 64 candidates (from 192 applications received) to add to those already selected during March. Several of this earlier batch had been eliminated for various reasons, but the size of the next course now stood at 71 engineering apprentices and 18 radio apprentices - and there were still nine who were regarded as 'likely to be accepted prior to intake'. In the event, the group which entered Wagga on 5 July 1948 numbered 75. Even at this date there was still a batch of late approvals who were expected to be under training there by 28 July, bringing the total size of No. 2 Course to 84.⁵³

By the time the selection panel for the second intake had completed its work, Cameron was able to reflect on the satisfactory situation which had emerged whereby the apprentice scheme was plainly 'becoming well known throughout Australia and ... attracting "trade-minded" candidates'. While there was still insufficient applicants for radio training, the standard of youths seeking a place in the scheme was 'fairly high' with the result that the percentage gaining selection was 'correspondingly high'. As a result of the second recruitment drive the number of apprentices under training by the end of July 1948 was around 170 - not far short of the 200 which had been originally allowed for.

Cameron's report gave reason to hope that the initial glitch in the scheme's launching had been effectively overcome, and indeed the recruiting position for the 1949 intake seemed to bear out such a conclusion at least so far as engineering vacancies were concerned. When Cameron's team had completed their work in October and November 1948, the number expected to enter Wagga the following year stood at 148. The only real worry was over the low number of radio applicants which resulted in only 20 gaining places. The selection board also made it clear, however, that included in the engineering total were 20 candidates whose qualifications were rated as the bare minimum:

... their acceptance has been recommended because it is considered that they have other characteristics which should ensure a reasonable chance of successfully completing the course of instruction. It was discovered from the previous intake that nine out of a total of twelve such types were progressing very satisfactorily and it is therefore suggested that such a course of action is acceptable until such time as selection becomes competitive.⁵⁴

Although there were some losses on these figures initially arrived at by the selection board, there were also some further gains, with the result that by late

⁵² Cameron's report on AA, CRS A705/1, file 208/88/15 Pt 1.

⁵³ Minute to AMP from Director of Training dated 23 July 1948, on AA, CRS A705/1, file 208/88/15 Pt 1.

⁵⁴ Cameron's report for 1949 intake on AA, CRS A705/1, file 208/88/15 Pt 1.

January 1949 the engineering quota looked to have been actually filled. Considering the size of the deficit in radio applicants, though, it was considered necessary to run a second campaign solely for this category in the months before the new entry actually began training.

Any sense that the scheme's worst problems were behind were confounded when it came time to go through the process again for the 1950 intake. This time, although the publicity campaign had produced over 3,000 enquiries (up 50 per cent on the previous year), the number of applications received totalled only 366 - a drop of 30 per cent. Out of this field there looked to be an engineering intake of only 124-130 and another small radio intake of about 20.⁵⁵ While the selection panel suggested that the position with the former group be regarded as 'acceptable', again the RAAF was prompted to make an extra effort to get radio numbers up before the new course actually started. When this failed, there was even a second late call made in February 1950. Ultimately the numbers for the two streams came out at 136 engineer and 31 radio trainees, but it had been a hard slog to reach these levels.

By the time the recruiting campaign for the 1951 intake was over, it was discovered that the overall position continued to worsen. With the number of inquiries received having fallen to nearly half those for 1950 and even below the level of the year before, Cameron's selection panel had been able to recommend only 106 engineering and 15 radio candidates.⁵⁶ The RAAF immediately proceeded to a second round of applications, so that by February 1951 these numbers were pushed up to 131 and 23 respectively. What these figures did not disclose, however, was that the size of the engineering intake was still being bolstered by up to ten candidates who so barely met the basic requirements that they were regarded as 'risks' which the RAAF would have preferred to reject if more suitable applicants had presented.

While it was undoubtedly a struggle in the first few years to ensure that there was an adequate and sustained flow of recruits, the scheme's viability was at least sufficiently established to enable the focus to shift to the problems of actually running the course.

⁵⁵ Cameron's report for 1950 intake on AA, CRS A705/1, file 208/88/15 Pt 1.

⁵⁶ Cameron's report for 1951 intake on AA, CRS A705/1, file 208/88/15 Pt 1.

CHAPTER 3

ENGINEER APPRENTICES: 1948-1960

The Ground Training School at Forest Hill (then also known as Allonville) was an adequate but hardly inspiring place at which to train engineering apprentices. The site was a large, bare wartime base covering 92 hectares beside the Sturt Highway 11 kilometres east of Wagga. Originally planned as the home of a new flying school for the permanent Air Force, the government's intentions had been first announced in May 1939 and funding approved just a month before the Second World War began.¹ No. 2 Service Flying Training School officially opened here on 29 July 1940, under the command of Wing Commander F.R.W. Scherger, later to become one of the RAAF's most famous leaders.²

Although endowed with a core of substantial and solid buildings befitting a permanent station, the planned development of the base had undergone considerable modification as a result of the war. The site was now also covered with a rash of temporary structures ranging from large workshops and hangars to numerous huts of timber, corrugated iron and fibro-cement construction meant to serve as offices and classrooms, sleeping quarters, storerooms and many other purposes. From April 1942 Forest Hill had become the home of No. 5 Aircraft Depot, a unit concerned with the overhaul and maintenance of frontline aircraft, engines and components. This remained the base's primary role until the end of the war when a care and maintenance unit took over, as evidenced by the large array of aircraft - Beauforts, Beaufighters, Boomerangs, Mitchells, Venturas and Vengeances - which remained behind in the area beside the airfield known as the 'graveyard'.

Although proclaimed a city in April 1946, Wagga itself was little more than a large country town with a population of 15,000. Moreover, instead of hosting only one service establishment, the area actually had two. Since 1942 the Army also operated a training camp a few kilometres south-west of town at a railway halt called 'Kapooka Loop'.³ While having two sizeable facilities was of significant benefit to the local economy, the presence of so many servicemen within one

¹ Neville Parnell & Trevor Boughton, *Flypast: A Record of Aviation in Australia*, Australian Government Publishing Service, Canberra, 1988, p. 177; and Douglas Gillison, *Royal Australian Air Force 1939-1942*, Vol. 1, Australian War Memorial, Canberra, 1962, pp. 55-6.

² Harry Rayner, *Scherger: A biography of Air Chief Marshal Sir Frederick Scherger KBE CB DSO AFC*, Australian War Memorial, Canberra, 1984, p. 39.

³ Initially set up as a training centre for engineer recruits, the story goes that the Engineer-in-Chief, Major-General C.S. Steele, made sure that he would have quick approval for his plan by choosing the town which was the birthplace of General Sir Thomas Blamey, Commander-in-Chief of the Australian Army; see Ronald McNicoll, *The Royal Australian Engineers*, Vol. 3: 1919 to 1945: *Teeth and Tail*, RAE Corps Committee, Canberra, 1982, p. 145.

relatively small community was something not welcomed by all sections of the populace.



This photograph, taken in about 1950, captures the open bareness of RAAF Forest Hill as viewed from the north-west. The base is bisected by the Wagga Wagga-Tumbarumba railway line, with the hangars and instructional facilities of the Technical Area south of the line and the Domestic Area containing messes and sleeping quarters to the north. The Stuart Highway running past the base's northern boundary is out of frame at the left. (P.L. Lawrence)

RAAF personnel passing through the Ground Training School comprised not just apprentices, since the school was responsible for running various courses for adult trainees as well. Apart from providing initial training for all new recruits except those destined for aircrew, it conducted trade training for all technical musterings except those requiring radio and photographic skills and also undertook initial administrative and clerical trade training. In the years 1951-57 the school also became responsible for providing general service and some trade training to National Service trainees, a situation which placed so much strain on the available accommodation and other facilities at Forest Hill that detachments of the school had to be established at other bases to handle the overflow.

It was in recognition of the school's wider function and that in May 1950 it was renamed the RAAF Technical College (RTC) and finally, in December 1952, the RAAF School of Technical Training (RSTT). (Some time before 1954 a proposal was briefly floated to establish a self-contained unit known as the 'RAAF Apprentice School' which would conduct training for both engineering and radio apprentices, but nothing came of the idea.)⁴ Under a reorganisation which came into

⁴ See undated minute on AA, CRS A705/1, file 208/31/4672.

effect at Wagga in 1956, RSTT comprised no fewer than six elements: Headquarters, Base Squadron, Instructional Squadron, Apprentice and Junior Trainee Squadron, Adult Trainee Squadron, and No. 4 National Service Training Squadron.



The dux of the first course from Wagga, Flight Sergeant Apprentice W.H. Bowles, holds his haul of trophies following the graduation ceremony on 8 December 1950. Although not the first graduate selected for aircrew training, Bowles subsequently became the first to graduate as a pilot. He left the RAAF in 1959 and flew with an aerial survey company before joining the Department of Civil Aviation in 1963 as an air safety investigation specialist - thereby becoming an early example of those graduates who 'spread their wings' into other fields both within and outside the air force. (W.H. Bowles)

Despite the important role the school was fulfilling within the RAAF, in the post-war mood of stringent economy the local administration was expected to make do to the maximum with the facilities which were already available. It was this spirit which also guided the preparations made to receive the first apprentice intakes, even though some expenditure was essential on the wartime buildings merely to bring these up to a basic standard of habitability. In late 1947, for example, when the Air Board forwarded to the Minister for Air (Drakeford) a forecast of expenditure at Forest Hill deemed necessary in connection with the

apprentice scheme, the latter made clear that he intended to scrutinise every penny by requiring that each specific item was to be submitted to him for authorisation.⁵

The Minister was happy enough when the Board submitted detailed plans in October 1947 for upgrading a group of ten sleeping huts for apprentice accommodation, proposing that these be lined internally, partitioned to create study rooms and NCO cubicles, and fitted with minor improvements such as fly-screens to doors and windows.⁶ But when he received a request at the same time for the floors of these buildings to be covered with linoleum he refused to countenance public money being spent in this way. Noting that ordinary airmen lived in quarters with polished timber floors, he expressed the view that to vary this practice for apprentices would create 'unwarranted discrimination', especially since on completing their training apprentices would revert to airmen's standards of accommodation.⁷

The Board did not let matters rest at this, but made a second submission pointing out that the practice followed in respect of airmen's quarters was normally feasible because flooring was usually of a quality which allowed of sanding and polishing. This was not the case with the huts in question at Forest Hill, which had a poor quality local softwood which was full of knots and badly splintered. Polishing would therefore be neither economical or effective. More to the point, however, the Air Member for Supply and Equipment, Air Vice-Marshal G.J.W. Mackinolty, bluntly asserted that:

It is considered that the fact that airmen are, in some instances, living under sub-normal standards is not sufficient justification for imposing upon apprentices the same conditions. In this connection it should be borne in mind that apprentices will be boys immature both physically and morally and it is during their early years in the Service that great efforts should be made to ... develop in them a pride in the Service which, it is believed, can be more effectively undertaken if we offer the best practicable living standards ... On the general question of standards of accommodation it might not be out of place to mention that the parents of apprentices will, from time to time, be permitted to visit their sons and it would be in the interest of both the Apprentice Scheme and the Service generally if all reasonable efforts were made to create a favourable impression in the minds of the parents.⁸

Faced with these arguments, Drakeford duly gave way and approved the laying of the lino.

In respect to other aspects, too, communications between the Board and the Minister often descended to a surprisingly minute level of scrutiny. Board members may have been understandably dismayed to find their time in meetings being taken up with deliberations over arrangements for providing apprentices with expendable toilet requisites (soap, toothpaste, razor blades, etc), hair cuts and laundry services,⁹ or worrying over whether the issuing of uniforms, clothing and other

⁵ Air Board Agendum No. 8428.

⁶ Air Board Agendum No. 8395

⁷ Minister's minute dated 13 October 1947 on Air Board Agendum No. 8392.

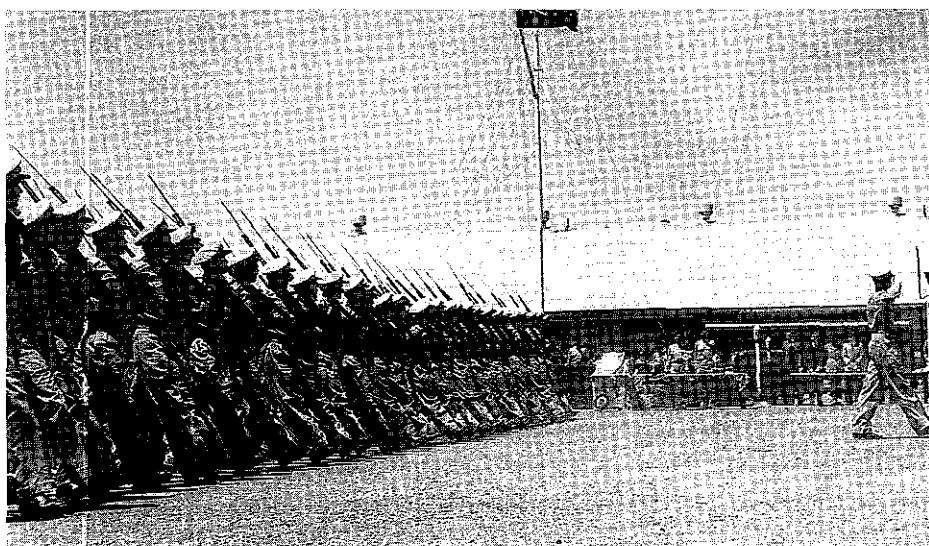
⁸ Supplement No. 1 to Agendum No. 8392.

⁹ Air Board Agendum No. 8427.

necessaries was on a sufficiently generous scale to allow apprentices to change their underwear every second day or only twice a week!¹⁰

Another aspect over which special care was taken concerned the daily ration scale provided for apprentices. In recognition that this group comprised young men who were still at a crucial stage of their physical and mental development, early in 1948 the Air Board approved the free provision of extra food such as certain cereal products, fresh fruit, eggs and milk.¹¹ The practice thus begun was continued, with a 1968 RAAF recruiting pamphlet proudly declaring that:

In addition to the standard ration scale which provides adult members of the RAAF with adequate and well-balanced meals, there is a 'vitamin additive' ration for apprentices. This provides for extra milk, fresh fruit, flour products (bread, biscuits or cake), peanut butter and meat extract.¹²



A haze of summer dust hangs in the air as members of No. 3 Intake march past during their graduation parade in December 1951.

To a large extent, such attention to detail merely typified the degree of seriousness to which the RAAF attached to the responsibility it recognised it was assuming in regard to the young men coming under its care. By assuming the role of guardian from the parents of these under-age youths, the Air Force became responsible for providing all the physical necessities of food, shelter and clothing, as well as ensuring that the form and nature of their continued upbringing was to an acceptable standard.

¹⁰ Air Board Agendum No. 8364.

¹¹ Air Board Agendum No. 8579.

¹² RAAF Recruiting Publication No. 55 (April 1968), p. 9.

To meet this obligation, the RAAF arranged that at Forest Hill the apprentices were accommodated separately from adult airmen and followed a weekly routine which was both regimented and busy. In addition to attending formal classes, time was found for activities as diverse as drill, sport (which was compulsory), weekly classes of character guidance, and hobbies. To allow sufficient time for all that was packed into each day, only one hour was allowed in the daily schedule for dressing, undressing and bathing. Alcohol was prohibited, as was smoking for apprentices aged under 18; those over 18 who wished to smoke off-duty had to apply for permission and have already obtained written authorisation from their parents. Weekends were filled with more organised games, and church services which were also compulsory during an apprentice's first year.

As was realised in 1958, the wording of the Defence Act did not, strictly speaking, allow attendance at church services to be made compulsory. Nonetheless the commander at Wagga was reminded that, in view of the youth and impressionable age of apprentices, 'it is considered incumbent upon the CO ... to ensure that regular Church Services are conducted and that every encouragement and opportunity is given to all Apprentices to practice their faith'.¹³ To foster that encouragement, the school took the step of advising parents that it was expected their sons would attend services, and asked if they had 'any objection' to the CO assuming the responsibility of ensuring this happened.¹⁴ In practical effect, an apprentice could refuse to attend only if he specifically had his parents' approval to do so.

Because all normal living expenses were found by the RAAF, including medical and dental care, apprentices received little in the way of pay - only five shillings a week in their first year (the equivalent of 50 cents), of which two shillings was kept as deferred pay. This rate rose to fifteen shillings in an apprentice's third year, but was still only intended to be 'pocket money' for incidental expenses. The belief underpinning the policy of deliberately setting pay so low may have been well-intentioned, the assumption being that there was not much that the boys would need and little opportunity to spend anyway, but right from the start the level was realised as totally inadequate. Indeed, its meagreness obliged the Air Board in August 1948 to even consider a special grant to defray the cost of admission to RAAF cinemas for apprentices, since these could not readily afford even the discounted entry charge of a shilling.¹⁵

Discussion on the question of recreational expenses quickly led on to more general consideration of the adequacy of the drawing rate of pay overall, and it was during this process that it was brought home to the RAAF that the existing pay rate was regarded as an unattractive feature of the Apprentice Scheme in recruitment terms. Once comparisons showed that, even after making adjustments for items such as food and clothing, RAAF apprentices in their third year were receiving little more than half the pay of their civilian counterparts, at the end of 1949 the Air Board proposed effectively doubling the air force rates. After the Minister for Air pointed out the even greater disparity which existed with the pay received by

¹³ Peter A. Davidson, *Sky Pilot: A History of Chaplaincy in the RAAF 1926-1990*, Principal Chaplains Committee - Air Force, Canberra, 1990, Chapter 11, p. 9.

¹⁴ Sample of letter sent to parents of new apprentices in March 1962, provided by R.G. Lewis (16th Intake).

¹⁵ Air Board Agendum No. 8967.

apprentices in the Commonwealth public service, the Board revised its figures and made the increases even more substantial.¹⁶

By 1953 apprentices were being paid 62 shillings a week (\$6.20) in their first year, and in their second year the equivalent of \$7.45 (or \$7.80 if over 18). In the third year, the weekly rate was \$8.70 if under 18, and \$9.05 if over 18. During their final training year, when apprentices were doing field training at a RAAF unit, they received £12 and 4 shillings a week (\$24.40) - the same as an AC1. Deductions from weekly pay amounted to \$1.10, of which 50 cents was deferred pay and the rest laundry allowance.¹⁷

During their first year at the school, apprentices remained ungraded and studied a single course including general Air Force administration and other service and technical subjects. Under the heading of 'workshop theory and practice', they were taught basic fitting, materials, heat treatment, machine shop soldering, brazing and coppersmithing, welding, and basic carpentry. They also undertook further educational studies - these continuing, in fact, over their whole three years - with the main subjects being English, social studies, mathematics, science and technical drawing.

Only at the start of their second year were apprentices grouped into trades, each furthering his first-year knowledge and advancing a step further along the technical trade route mapped out for him. Training now was in one of six trade specialisations: engine fitter, airframe fitter, electrical fitter, armament fitter, motor transport driver/fitter, or instrument maker. Each apprentice could nominate his preference of trade, but that to which he was eventually allocated remained the RAAF's prerogative and was determined both by the individual's natural ability and the vacancies existing at the time. For members of the No. 1 Intake the choice was restricted in any event to the instrument, engine, airframe and electrical trades; not until the second intake was training offered in the armament trade, or motor transport until the third intake in 1950.¹⁸

After this formal training, and prior to his graduation, an apprentice was required to pass the RAAF trade test relevant to his particular trade. On passing out from Wagga, all apprentices were placed on adult rates of pay and became, to all intents and purposes, airmen - with all the attendant privileges and responsibilities. The only difference between the ordinary airman and an apprentice at this stage was a requirement for this latter to complete a further two years of 'supervised productive work' - the first at a RAAF aircraft depot, the second in an operational unit - during which time they were reported upon at six-month intervals. Having finished the five-year period of apprenticeship, a RAAF Proficiency Certificate would be awarded which carried recognition by the Apprentice Commission and trade unions.

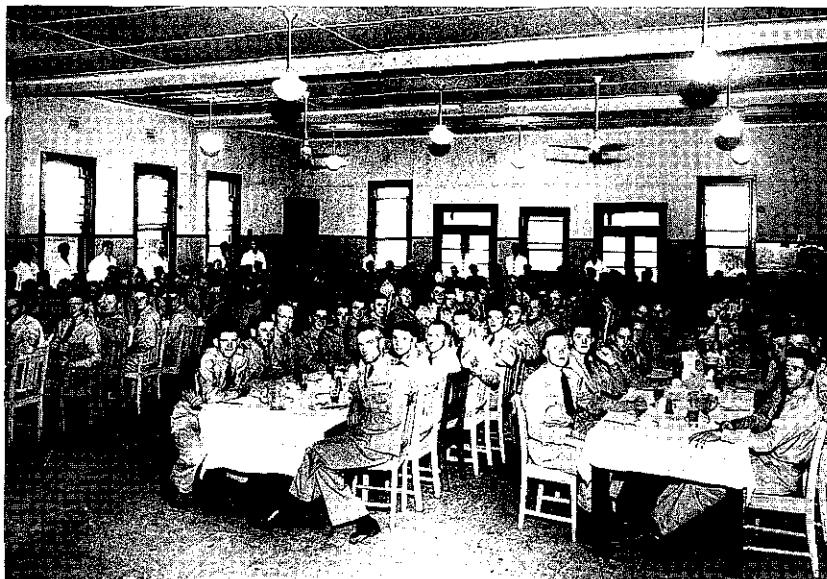
It was on the basis so described that successive intakes of apprentices began entering Forest Hill, at yearly intervals except during the scheme's first year when there were two courses admitted. The first intake referred to themselves as the 'Anzacs', thereby initiating the tradition of each course bearing a distinctive name. It became the privilege of the senior apprentices to choose the nickname of the new

¹⁶ Air Board Agendum No. 9900.

¹⁷ *RAF Quarterly*, July 1953, p. 305.

¹⁸ *Apprentice Journal*, 1963, pp. 34-5.

intake, with the result that these fluctuated between the whimsical and the unflattering. In the former category were Rainbows, Sunbeams, Dewdrops and Donuts; in the latter, Snails, Skunks, Rats, Scorpions and Leeches. Full marks also went to the sharp-eyed staff member who first observed that the initial letter of each successive course name would in time spell out another message, enabling this effort to be thwarted.



No. 4 Intake (Dewdrops) celebrate their graduation dinner in the Airmen's Mess, 1952.

In 1951 the trainee population at Apprentice Squadron underwent a unique change with the arrival of the first of two intakes of around 20 young members of the Royal Pakistan Air Force (RPAF). Pakistan had become a separate British dominion only in August 1947, at the time that India also attained independence, and Australia had been approached about assisting in building up the new country's armed forces as early as 1948.¹⁹ Following a visit by a senior RPAF officer in 1950, the RAAF agreed to provide apprentice training while the new service set about establishing its own apprentice school near Karachi.²⁰ The result was that Pakistani trainees remained a feature of the Forest Hill scene until the last two members of the intakes graduated in 1955.

Coming from a predominantly Moslem country, the Pakistani apprentices added a distinctly different flavour to life at Forest Hill. Aware of the added sense of isolation which applied in their case, staff at the school made extra efforts to make them welcome - even inviting them into their married quarters to enjoy some

¹⁹ Defence Committee Agendum No. 40/1948, supplement No. 1, AA, CRS A5954, Sheddien box No. 2323, file 1.

²⁰ *Apprenticeship* (RSTT Apprentice Journal), 1952-53, p. 14.

occasional home cooking. The wife of the then chief instructor, Wing Commander C.R. Taylor, well recalls:

From time to time we would have two or three home for a meal, just to break the monotony of the Apprentices Mess for them. They were all very nice boys, but seemed so young to be so far away from their homes. The townspeople of Wagga also used to invite them for meals, just to get them off the base for a while, and were good to them in other ways. I remember they had special dietary requirements, and of course normally insisted on handling all their own food in accordance with their religion. This meant they killed and prepared their own poultry which they bought from a local farm. They also asked for a tent to set up for use as a mosque, and spent ages scrubbing it clean. Then one night some of the Australian apprentices went too far and cut the guy ropes while they were at prayer. Understandably there was umbrage taken over that and matters had to be sorted out, but otherwise there weren't any other problems that I heard about.²¹

That the experience was a relatively harmonious one is attested to by a member of the first of the RPAF intakes, who maintained that:

I found Australians warm and courteous, and at the RAAF Wagga school the staff was well experienced and readily available to assist. It was on our return to Pakistan that most of us (those without elite background) felt in a deep valley and ignored.²²

For their part, the Pakistani apprentices had an impact on the Squadron which was out of all proportion to their numbers. As the first batch prepared to graduate with the Australians of No. 5 Intake, for example, one of the Pakistanis, M.A. Mir, took out the award of dux of the course with another of his countrymen, A. Maqsood, coming second in a close result; Ahmad Maqsood also received the honour of being appointed Warrant Officer Apprentice for the graduation parade.²³ That Maqsood was an individual of outstanding calibre was shown by his later career in the Pakistan Air Force, in which he became Deputy Chief of the Air Staff (Maintenance) and later Director-General of Defence Procurement, and reached the rank of air vice-marshal before retiring in July 1990.²⁴

If living alongside the Pakistanis could be described as harmonious, the same was frequently not true of relations with adult trainees or national servicemen. Meal arrangements which saw the young apprentices fed first were, understandably, resented by the older trainees, and there was a level of friction which lay never far below the surface. Many apprentices recall the raids which each side perpetrated on the other's quarters, and the fights which periodically erupted. Says one, 'It got a bit serious at times, with boots with steel caps on the heel being chucked in a kitbag

²¹ Information of Mrs N. Taylor, 7 April 1997.

²² Information of Mr M. Saleh, 12 February 1997.

²³ *Apprentice Journal*, 1954, pp. 8, 11.

²⁴ Information supplied through First Secretary, High Commission for Pakistan, Canberra, 31 May 1997.

to be used as a waddy to dish out a few bruises and bumps'.²⁵ Another recounts an all-in brawl on the night of his arrival:

There was a mob of nashos there and we got mixed up in a great fight out on the parade ground - hundreds of us all slogging away with rolled up mats, cakes of soap tied up in towels, plus anything else we could lay our hands on. It was good fun until it suddenly got serious and several jokers ended up with their skulls split open.²⁶



The Pakistani members of No. 5 Apprenticeship Intake pictured following their graduation from Forest Hill in December 1953. At left is A. Maqsood, who led the graduation parade for that year as Warrant Officer Apprentice, while M.A. Mir, who topped the course, is seventh from the right. The identities of the remainder are unknown, apart from M. Saleh fifth from the right. (M. Saleh)

Even here, matters were never entirely one-sided. Others recall that many apprentices made extra money by undertaking to wash adult trainees' overalls, doing up to 30 pairs at a time by hand,²⁷ and that the adult trainees often performed the friendly function of obtaining beer for their underage colleagues.²⁸

Often it seemed that worse treatment was meted out *between* different apprentice courses, both in the form of initiations and the bullying practices which in the services carried the nickname of 'bastardisation'. The former were really no

²⁵ Information of Group Captain J.R. Bartram, 15 November 1996.

²⁶ Information of Flight Lieutenant A.J. Nicholls, 26 August 1996.

²⁷ Information of L.J. Grinham, 29 September 1996.

²⁸ Information of Flight Lieutenant R.L. Stone, 25 September 1996.

different or worse than in comparable institutions at the time, entailing such things as the inflicting of mohawk haircuts, blackening with boot polish, and blanket tossing. One favoured torture involved a tree behind Hut 230 which had overhanging branches, suitable for suspending an iron bed by ropes:

The unfortunate victim had to ride the bed and hang on while being swung and gyrated. Any resistance resulted in further treatment and punch-ups were not uncommon.²⁹

Bastardisation was generally a more protracted affair. Recalls one early graduate:

All I can remember is that for several weeks you would suddenly wake up in the middle of the night and you'd be lying on the floor. Somebody had tipped you out of bed, and this wouldn't be once a night but three or four times. You'd have to remake your bed every night because it'd been short-sheeted. And if you walked into the shower when older guys were there, then suddenly they'd start wanting you to do little errands for them, like clean their boots. I never saw anybody physically hurt, but the threat was ever present.³⁰

Under this system, it was usual for the second-years to be the principal tormentors of the newcomers while the more senior third-year apprentices played a moderating role. The situation would generally last until about mid-year, when the first-years had found their feet and began to retaliate. Such practices prevailed at least into the early 1960s, when oral evidence suggests a significant decline took place at about this time due to the amount of damage being caused to buildings and property.³¹

As with any such new scheme, a little time was necessary for arrangements to assume the character of a settled pattern and for problem areas to be resolved. The position was no different at Forest Hill, where matters more than once reached the stage of mutiny. The first such occasion was during 1950 when the Apprentice Squadron found itself with the unusual (and never to be repeated) situation of having four intakes in residence. Not just unacceptable pressures on messing arrangements but the RAAF's inability to deliver on earlier promises of extra privileges for the senior course produced such a level of discontent that eventually the whole of No. 1 Intake submitted a mass resignation.

After initial attempts at coercion, the school's commanding officer reported the situation to his superiors at Headquarters Southern Area and drew in response a personal visit by the AOC, Air Vice-Marshal A.L. Walters. After listening to the grievances of the group from the four apprentices holding sergeant rank, Walters took quick action to ensure that these matters were redressed. As one member of the 'Anzacs' later recounted:

²⁹ Information of C.W. Keehn, 13 November 1996.

³⁰ Information of Air Vice-Marshal D.A.E. Tidd, 19 September 1996.

³¹ Information of Flight Lieutenant R.L. Stone, 25 September 1996.

... within days, the boys ... were notified that additional service transport for the station was on its way and therefore, the promises made earlier of additional liberties would be made good. Furthermore, messing conditions were to undergo a complete review with the view to improving the standard of meals ... The boys were elated.³²



Being suspended from a tree on a stretcher was one form of torment inflicted on new arrivals by senior apprentices. Although most antics were in the nature of pranks, the potential always remained for such practices to lead to physical bullying. (B.W. Green)

Another member of this course recalls that a subsequent change in the base commander helped ensure that there was no backslicing over the hard-won improvements in the standard of the food:

Group Captain [J.W.C.] Black was staying in Wagga before moving on to the station. One cold morning we were shuffling along the breakfast queue. The cooks had either arrived late or had cooked the breakfasts the night before. The results were cold and unappetising, slapped without much care or ceremony on the plates poked through the servery. Suddenly, an arm shot through the servery holding a plate. The cook splashed something onto the plate and then realised in terror that the arm was wearing a uniform and the uniform had four blue rings around the sleeve. The cook let out a panic-stricken yell and headed for the door of the mess in an attempt to escape, but the Group Captain headed him off. We don't know what followed, but it

³² George Homer, *Indentured in Blue*, G. Homer, Belmont, NSW, 1992, p. 182.

must have been effective as things turned around sharply. The sight of our new CO in the mess queue was not unusual for a short while afterwards.³³



In 1951 the OC of Wagga, Group Captain J.W.C. Black, instituted the Black Shield for annual competition in discipline, drill, hobbies, sport and quarters between the RAAF Technical College's four 'Apprentices Houses' named after prominent figures in aviation: Hargrave, Hawker, Ross-Smith and Whittle. Black (second from left, pointing) is seen here with the Minister for Air W. McMahon (left) and Sergeant Apprentice J.R. Bartram (right) who received the shield for the first time on behalf of Ross-Smith House in December 1951; the other officer pictured is not identified. In 1961 the basis for this competition was changed to be between apprentice 'years', but the next year it was altered again so as to be conducted between squadrons. (L.J. Grinham)

Yet another instance of mass revolt occurred in January 1952, when apprentices arrived back from Christmas leave to find themselves accused of having left the barracks in deplorable condition prior to their departure. In fact, members of No. 4 Intake insist that the mischief had been caused by either adult trainees who remained at the base over the Christmas period, or members of the Air Training Corps.³⁴ The apprentices were held responsible nonetheless, and all leave privileges were stopped. As further punishment, all intakes were assembled on the parade ground and kept at attention for what one who was present describes as 'an abnormally long period', with the drill instructors prolonging the agony by ten minutes everytime someone moved:

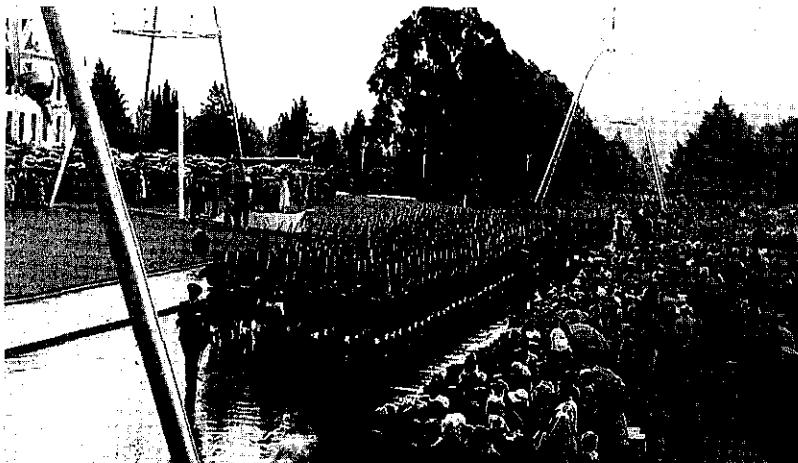
It had been a stinking hot day, and as time went by many apprentices began to faint in the heat. They were left on the ground where they fell, as no-one on parade was allowed to touch or assist them.³⁵

³³ Information of Air Commodore E.J. Bushell, 9 December 1996.

³⁴ Information of G.S. Auld, 19 August 1996, and J.C. Saunders, September 1996.

³⁵ Information of G.B. Fisk, 9 September 1996.

That night, at about 9 pm, anger flared within the barrack huts, fuelled by an orator who took on a leadership role. A corporal drill instructor who attempted to intervene was threatened with lynching, whereupon the assembled crowd moved along the road beside the main parade ground and stood facing the Officers' Mess chanting 'We want leave!' When the OC Apprentices and other officers arrived to face the mob, the apprentices defied orders to return to their quarters and eventually only dispersed after it was agreed that a petition of grievances would be delivered to the base commander the following morning. The outcome was that peace was finally restored - along with the apprentices' leave entitlements. Fortunately, the local RAAF authorities during such episodes had the good sense to see them as youthful outbursts rather than treat them as instances of mutiny.



In 1954 Queen Elizabeth II came to Australia on the first royal visit by a ruling British monarch. A detachment of 180 apprentices was sent from Forest Hill to Canberra to take part in the ceremonial review of troops at the opening of Parliament on 15 February. While these personnel were absent, preparing for the big occasion (which in the event was marred by heavy rain, as evidenced by the umbrellas and wet road in the photo), the Queen and the Duke of Edinburgh paid a visit to Wagga on 13 February during which they arrived and departed from the Forest Hill aerodrome. (C.W. Keehn)

Not all rebellions fomented by the Apprentice Scheme took place at the time of training either. Upon the scheme being established, entrants had been required to enlist for a period of twelve years following the completion of their initial three years of formal training, which meant that they were effectively committed for 15 years of their life. Within a few years of the first courses having graduated, this arrangement began to be challenged by former apprentices who felt that it was unreasonable for the RAAF to expect such a lengthy return of service. The groundswell of feeling over this issue appears to have first come to notice in 1956, when the Air Board was asked to rule on the case of an airman engine fitter - a graduate of No. 1 Intake - who had notched up a lengthy list of convictions for disciplinary offences in support of efforts to secure his release from the service.

The Air Force was determined to resist what it saw as a form of blackmail, by granting a discharge but only on the basis that the airman's services were no longer required 'on account of misconduct'. In recommending such a response the AMP, Air Vice-Marshal F.R.W. Scherger, offered the hope that:

a firm stand taken in this case may lead to an improvement in conduct and trade proficiency by several other ex-apprentices and ex-JEATS who have been the subject of adverse reports in the past.³⁶

While the example made in this case may well have served to demonstrate the system's ability to hit back at individuals who defied it, the issue did not simply disappear. The following year the RAAF was taken to court by another airman, this time a graduate of No. 4 Intake, who obtained an order nisi for mandamus claiming that he had been denied discharge even though his original enlistment was for a period not then provided for by Air Force Regulations and effected when he was under the age of 18. Because this man's case was only one of a number which the RAAF had pending, the Air Board felt obliged to answer the order in a hearing before the High Court in Sydney. The judgement delivered on 19 December 1957 was in favour of the RAAF, and the order nisi was discharged.³⁷ Although this appeared to settle the matter for a time, recruiting pressures on the service would eventually force a modification of the enlistment policy by the mid-1960s (see Chapter 4).

The fact that apprentice training was conducted at Forest Hill in parallel with so many other unrelated courses carried a penalty apart from the ones already described. The pressure which the presence of so many trainees placed on accommodation was not merely uncomfortable, but also posed a serious health risk. As the CO pointed out in February 1951 on learning of one scheme to add another 200 adult trainees to the base's already stretched facilities, the camp's population was unusually susceptible to certain diseases on account of its uniquely youthful composition - quite apart from periodic epidemics of influenza and glandular fever. The Wagga region then had the highest incidence of poliomyelitis in Australia, with the result that five confirmed cases of anterior polio had been diagnosed at Forest Hill within the previous 12 months. This number had only been kept down by rigid insistence on maintaining ventilation in sleeping quarters and avoiding overcrowding where possible.³⁸

The environment of Wagga presented other hazards, perhaps most notably in the form of the Murrumbidgee River which flowed around the city's northern edge. Floodwaters from the river periodically created natural disasters by inundating the central business district and forcing many residents from their homes, as happened in 1950, 1956, and again in 1959. On each of these occasions civilian evacuees were temporarily accommodated at the RAAF base, thereby adding to all the other pressures of overcrowding. The river also provided the local community's only recreational swimming area at the so-called 'bathing beach' (actually no more than an open bend in the water course), at least before construction of a proper Olympic-

³⁶ Air Board Agendum No. 12623.

³⁷ Air Board Agendum No. 12700.

³⁸ AA, CRS A705/1, file 208/31/5402.

size pool was begun in 1950. Until this was in use, there were six to eight drownings annually and many near-misses - inevitably including some air force personnel from the base.



In the 1950s the City of Wagga suffered three flood disasters when the nearby Murrumbidgee River burst its banks. During these emergencies evacuated residents were accommodated at Forest Hill, and a bond forged between the RAAF and the local community which did much to smooth the sometimes rocky relationship which formerly existed. (J.R. Bartram)

It was this latter situation which prompted several attempts by commanders at Forest Hill from 1946 to persuade the RAAF into building a separate swimming pool on the base itself. Even when it was known that the City Council was moving to construct a community facility in town, the CO of GTS, Group Captain Black, continued to argue the case. The limited availability of transport, especially outside working hours when personnel had free time, meant that any location in Wagga was not really convenient, yet considerations of morale and discipline cried out for access to a facility of this type. The extreme heat of the summer months at Wagga and the 'lack of pleasant or profitable occupation for the leisure time of airmen' was, he said, directly behind the unduly high level of breaches of the civil and service codes of behaviour:

The City of Wagga has little to offer airmen for their leisure but hotels, picture shows and district sport competitions. The latter are of little use since most trainees are in the district for one season at the most and cannot hope to achieve selection. (The same factor limits the formation of friendships with local residents.) Picture shows cover only a limited period and are unattractive in view of those provided on the Unit. Hotels are the remaining avenue for leisure occupation with the quoted unfortunate result.

At present, conditions in the Unit in summer are little better. Recreation hut facilities are entirely inadequate, sleeping quarters are extremely crowded. There are no summer sport facilities capable of coping with the large mass of airmen. The not unexpected result of lack of employment of leisure is the low morale of airmen on the Unit with many offences, largely of the type resulting from boredom.³⁹

Concern over the lack of recreational facilities eventually saw Forest Hill get its pool. In addition, a range of other measures were undertaken to improve conditions for those living on the base, such as installing a milk bar in the Apprentice Club in 1956, and efforts to encourage the apprentices to use their free time in beautifying the barracks area through sowing lawns and planting flowers and shrubs. Part of the logic for the latter program was, of course, to reduce the extent of muddy surroundings. As the commander of Apprentice Squadron sardonically remarked, 'panics' (the Monday night before the CO's weekly inspection, during which living quarters had to be brought to sparkling condition) were a 'splendid' experience whenever rain turned the barracks area into a quagmire.⁴⁰ The attempt at beautification was initially spoiled by heavy down-pours which produced floods in the Riverina. The milk bar, on the other hand, proved such a hit that the following year the Apprentice Club became the scene of popular Friday night dances held monthly, for which the RAAF laid on buses to town to collect and return the girls who accepted invitations to attend.

Relations between the base and local residents of Wagga were frequently troubled, and often difficult. Apprentices of the first intakes speak of the existence of a situation where it was usually unwise for them to walk city streets in small numbers, since this was to invite attacks by groups of local toughs, in particular the 'Gumly boys'.⁴¹ These kinds of incidents persisted into the mid-1950s, with the rise of new gangs usually referred to as 'bodgies' and 'widgies'. By early 1957 the stage had been reached where decisive action was required. Following several assaults on first-year apprentices in town, the base authorities took what one officer referred to as 'certain unofficial action'. What this actually entailed was the dispatch of third-year apprentices by bus into town to confront the troublemakers, it being reported subsequently that 'the "bodgie" element has called a truce'⁴² Although this episode

³⁹ Minute by Black to Headquarters Southern Area, 19 January 1950, on AA, CRS A705/1, file 208/31/5402.

⁴⁰ Monthly report by CO Apprentice & Junior Trainee Squadron for May 1956.

⁴¹ Information of Group Captain J.R. Bartram, 15 November 1996.

⁴² Monthly report by CO Apprentice & Junior Trainee Squadron for March 1957.

clearly quietened things down for a time, even a few years later there were incidents where apprentices in uniform were singled out by local 'hoods' and assaulted.⁴³



Monday night 'panic' involved detailed cleaning of living quarters in preparation for inspection by the commanding officer the following morning. This view is of the inside of one of the apprentice huts in the mid-1950s. (B.E. Cummings)

The opinion of local people towards personnel at the RAAF base was often not helped by the activities of a few individuals, such as seven second-year apprentices who in late 1957 were charged with civil offences relating to theft of motor car parts and in some cases petrol.⁴⁴ Of course, when such outbreaks occurred it was not just the civilian community which was the target. For instance, at the end of 1956 the base canteen was the scene of a break-in which resulted in three second-year apprentices appearing before Wagga Children's Court.⁴⁵

Despite what such occasional dramas might suggest, in fact the relationship between RAAF apprentices and the local community worked much more smoothly and on a quite ordinary level. Because apprentices were - unlike adult trainees - resident in the district for a reasonable period of time, they frequently did forge significant links with local sporting bodies. It was the same with various community organisations, such as church groups, or the local Caledonian society which recruited several apprentices into the ranks of its pipe band.⁴⁶ Dances at local venues such as the Half Holiday Tennis Club and the Coconut Grove were regularly attended by apprentices, these providing some of the few avenues available for them to meet local girls. Social contacts of this sort inevitably led to a number of the apprentices forming relationships which later led to marriage.

The presence of the civil aerodrome at Forest Hill led to other forms of contact with civilians. A member of the first intake recalls the attraction which the

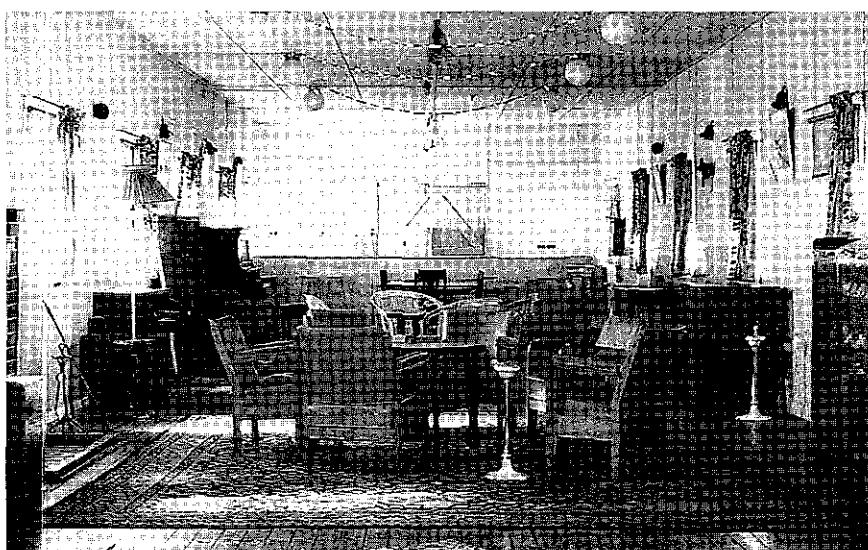
⁴³ Information of Flight Lieutenant R.L. Stone, 25 September 1996.

⁴⁴ Monthly report by CO Apprentice & Junior Trainee Squadron for December 1957-January 1958.

⁴⁵ Monthly reports by CO Apprentice & Junior Trainee Squadron for December 1956 and January 1957.

⁴⁶ Information of J.B. Skuthorpe, October 1996.

sight of actual flying taking place held for him and a colleague, with the result that they were regularly hanging about near the local aero club hangar whenever they had free time. Eventually, during their final year, the two were approached by the club's chief instructor, who offered them a half-hour free flying a week in return for cleaning the aircraft twice a week. With a special dispensation from the squadron leader in charge of training, they were permitted to take up this offer by unofficially breaking camp after lights out. As a result of this arrangement, the two apprentices were able to reach the level necessary to go solo before graduating at the end of 1950. Thus was laid the basis for later careers in aircrew, in the case of both men leading to test pilot duties.⁴⁷



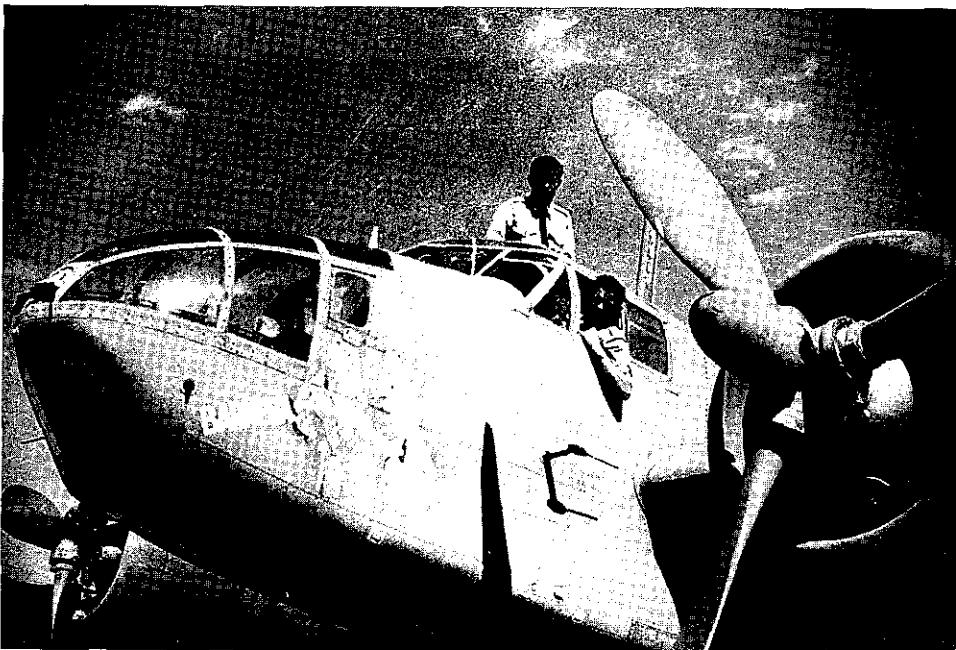
The relaxed surroundings of the Apprentice Canteen, pictured in about 1960. (R.G. Lewis)

Not all the school's connections with the aero club were so happy, at times becoming dangerous and even tragic. One such occasion occurred at about 10.20 am on 17 May 1953 when a Tiger Moth being flown by a trainee pilot, R.J. Jackson, who was a second-year apprentice then making only his third solo flight, collided above the aerodrome with one of a formation of six RAN Sea Fury aircraft making an unannounced low-level flypast. It was actually the leader of the Navy planes who hit Jackson's machine before crashing three kilometres away, the pilot being killed.⁴⁸ Meanwhile Jackson fluttered downwards in the wreckage of his aircraft, landing on the tarmac directly into the path of another Tiger Moth (piloted by another apprentice, D.R. Murcutt) which fortunately managed to pull up in time

⁴⁷ Information of Air Commodore J.I. Thomson, 21 August 1996.

⁴⁸ Department of Civil Aviation report on the crash (file 410/4/95), reproduced in *Man & Aerial Machines*, No. 2, March 1989, pp. 13-14.

just short of him. He was then taken to the base medical facility and, incredibly, was discovered to have suffered only a dislocated shoulder and a black eye.⁴⁹



The variety of wartime machines resting in the aircraft graveyard at Forest Hill (in this case a Beaufort Bomber) provided a source of interest and amusement to apprentices with free time on their hands, as well as a source of income to those who assisted in their demolition. Souvenirs from the aircraft also occasionally created hazards when apprentices took items to their quarters. (J.L. Thompson)

Other activities in the early days involved the jumble of surplus wartime aircraft in the 'graveyard'. These were progressively being converted to scrap by a civilian contractor, who often employed apprentices to assist him in breaking up these machines for the blast furnace using hammers and axes. Apart from the wages paid, this work provided another form of income to the lowly-paid apprentices. Recalls one:

Lots of these aircraft still had fuel in their tanks, so there was a rule that we could take this out and sell it if we could. Many was the time I rolled a forty-four gallon drum of high octane gas to the bottom of the incline there at Forest Hill at two in the morning and sold it off to the local taxi-drivers. The going rate was about four pounds a drum, so that both kept me fit and going financially.⁵⁰

Other items salvaged from these 'old war-birds' presented opportunities for mischief of a different kind. This was especially the case, as a member of No. 4

⁴⁹ Display notes from RAAF Museum, Wagga, and information from C.W. Keehn, 13 November 1996.

⁵⁰ Information of Group Captain J.R. Bartram, 15 November 1996.

Intake remembers, after 'some clever lad discovered that each of them contained a cordite cartridge in the undercarriage system (used as a last-ditch effort to lower reluctant wheels when the hydraulics were inoperative due to damage or malfunction)':

OK, we have a large supply of propellant and a bunch of inventive trainee fitters, so what have we got? Peenemunde at Forest Hill, that's what! The number and variety of rockets which were built and tested during that period would put Woomera to shame. The methods employed to initiate these little jewels were many and varied as well, ranging from 240 volt injections to at least one attempt with a pool of petrol being ignited by a match. Strangely, we had no fatalities.⁵¹

Far less mischievous and potentially dangerous was the involvement of apprentices in the production of a unit newspaper from late 1951. Titled 'The Triangle', in recognition of the blue triangle which apprentices wore on the upper sleeve to denote their special trainee status, the publication was described as being 'By Apprentices for Apprentices'.⁵² In November 1953 The Triangle gave way to a new base newspaper called 'Groundel', which remained in publication at least into the mid-1970s.

Although the Apprentice Scheme had always been seen as a source of future NCOs for the RAAF's technical branch, within a few years it was also recognised as a potential source of commissioned officers as well. The number of applicants who possessed educational qualifications at the top end of the scale was initially only small, but the scheme was nonetheless attracting some who were quickly identified as deserving of consideration for pre-selection to the RAAF College. The more pervasive impression of the apprentice population at RSTT during the 1950s was often focussed on the relatively high proportion coming from disadvantage backgrounds, such as broken marriages, single-parent families, or orphanages and boys' homes - some put the figure as high as 50 per cent.⁵³ This tended to obscure the fact that, though denied the opportunity to shine thus far, many possessed considerable talent and capacity for advancement.

In 1952 the training directorate at RAAF headquarters, acting at the direction of the Air Member for Personnel, investigated the possibility of raising the educational level of selected engineering apprentices. The result of a survey of that year's intake at RSTT resulted in a recommendation being made in June that in future those apprentices who entered already holding the Intermediate Certificate should be grouped into one or more of the school's six flights, where they would undertake special classes - conducted in conjunction with the syllabus followed by all other apprentices - designed to take them to Leaving Certificate and, hopefully, Matriculation standard. The aim of this arrangement was to qualify them for consideration for selection to the RAAF College, although it was emphasised that 'no assurances' were given in this regard:

⁵¹ Information of J.C. Saunders, September 1996.

⁵² Copies of issues Nos. 2 and 3, made available by R.W. Frost, 4 September 1996.

⁵³ Information of R.R. Miller, 24 September 1996.

Nevertheless, the higher education gained should of itself enhance the future prospects of members, whether for aircrew, promotion, appointment to a commission or for ultimate civilian recognition.⁵⁴



Nervous new additions to RSTT pictured at Melbourne's Spencer Street railway station prior to catching the train to Wagga, January 1958. (R.I. Gretton)

Under a plan devised in consultation with the New South Wales Education Department, it was decided to form one special flight of 25 apprentices from the intake arriving in January 1953 and to have these attend the Wagga Technical College for 11 hours a week, taking classes on Tuesday and Wednesday afternoons and evenings. Although the scheme was not taken to the Air Board for formal approval, it commenced anyway. By the end of this first year, it was found to have enjoyed 'moderate success only'. Despite the effort of RSTT's own educational staff in providing extra tuition for up to five hours a week, this had not prevented the initial number of students reducing to only fourteen by December. It was thought worthwhile, however, to persist with the scheme and to admit further selected groups in 1954 and subsequently, but with a further refinement to enable the whole of the higher instruction to be carried out at RSTT - thereby saving on the fees charged by the Education Department and the very considerable disruption caused by travelling.

In March 1955, the RAAF approached the Royal Melbourne Institute of Technology to enquire whether that institution - already involved in the training of radio apprentices - would be prepared to accept a group of ex-apprentices for Associate Diploma courses in either Aeronautical or Electrical Engineering. This

⁵⁴ AA, CRS A705/1, file 208/88/1.

request did not mention the higher education courses being run at Wagga for selected apprentices under training, but indicated that the proposed Associate Diploma courses were for apprentices with an ordinary Intermediate qualification and three years of full-time RAAF training. It was stated, however, that the air force had in mind selecting a class of 25 trainees, who would commence the new form of training proposed in 1956 after receiving 'some preparatory educational instruction in the RAAF during 1955'.⁵⁵ It was this scheme which formed the basis of an agendum taken before the Air Board by the AMP (Air Vice-Marshal Scherer) later that same month,⁵⁶ which itself became the origins of the Diploma Cadet Scheme described in Chapter 7.

As a result of this new initiative, life assumed a different pace for a small proportion of apprentices at RSTT, beginning with No. 10 Intake joining in January 1956. As one entrant affected later recalled:

I had been at Wagga for about three weeks when some kindly education officer walked around and said, 'Hands up those who'd like to do their New South Wales Leaving Certificate'. About ten of us were allowed, on the results of our previous schooling, to do five subjects in our first and second years which led to us sitting the Leaving exam. That sort of took up my time pretty much. I found I was doing night school three nights a week and the year just seemed to blur with all this blessed study.⁵⁷

The experience was no different for those entering RSTT a year or two later, with a member of No. 12 Intake recalling:

We felt a bit out of the mainstream within the School, and handling the workload of all this extra study was a bit hard to take at times - especially when you looked around at the guys not doing this and saw that they seemed to be having plenty of fun.⁵⁸

At least this apprentice knew before his arrival at Wagga that such a scheme existed. The shock, and challenge, was perhaps greater for those who were not so prepared, with another member of No. 12 Intake stating that:

At the time I enlisted I didn't realise that the opportunity existed to go on to a Diploma course. I'd certainly joined, though, hoping for opportunities for advancement. The Apprentice Scheme was aimed at a particular section of the community and, like a lot of those who went in as apprentices, I did so because it seemed a way of getting beyond Intermediate level when my family could not afford to put me through any further.⁵⁹

Although in the early days of the scheme it was usual for those apprentices of what was nicknamed 'boffin flight' to find out only during their final year

⁵⁵ See further correspondence between the RAAF and RMIT on AA, CRS A705/1, file 208/88/1.

⁵⁶ Air Board Agendum No. 12483.

⁵⁷ Information of Air Vice-Marshal D.A.E. Tidd, 19 September 1996.

⁵⁸ Information of Group Captain R.I. Gretton, 12 November 1996.

⁵⁹ Information of Air Vice-Marshal E.M. Weller, 13 November 1996.

whether or not they had been selected to enter RMIT, from 1959 those destined for this further training were selected upon enlistment.⁶⁰ By the end of 1960, selections from 'pre-diploma flight' at RSTT included members destined not just for RMIT but also Sydney University.⁶¹ It could now be fairly said that the Apprentice Scheme had become a highly significant element in providing for the RAAF's needs with regard to technical officers, as well as the level of airmen and NCOs originally envisaged for it.

⁶⁰ Monthly report by CO Apprentice & Junior Trainee Squadron for February 1959.
⁶¹ Monthly report by CO Apprentice & Junior Trainee Squadron for November 1960.

CHAPTER 4



ENGINEER APPRENTICES: 1960-1993

The decade of the 1960s was a period of immense change and growth for RSTT, as indeed it was for the entire air force. Almost from the outset of the period, the service was launched upon a program of expansion and development involving the purchase and introduction into service of a range of new aircraft, weapons and other equipment. Not only was the RAAF's inventory modernised at this time but the number of personnel on full-time duty also rapidly rose, from around 16,000 in 1963 to just short of 23,000 before reaching a plateau in 1969. Inevitably, change on such a scale was dependent on the ability of existing staff to absorb and deal with the technical demands of so much new and increasingly complex materiel, as well as the capacity to recruit sufficient numbers to meet the growing maintenance requirement. In many ways, the apprentice scheme was one of the central planks in the platform of measures by which the RAAF coped.



The scene inside the Basic Hangar in about 1960. Most apprentices vividly recall the joys of filing, chiselling and hammering on a cold winter morning. (R.G. Lewis)

As evidence of the new emphasis which was about to settle upon RSTT, in February 1960 the first batch of nine teenage members of the Royal New Zealand Air Force (RNZAF) arrived in Australia to begin apprentice training. This followed a change of policy by the New Zealand government under which RNZAF apprentices had previously been trained in Britain with the RAF.¹ Two members of the group went to the Radio Apprentice School, while the other seven went to Forest Hill.² One of the latter batch, J.H. Seward, became the top RAAF engineering apprentice for NSW in 1962 and led the annual Apprenticeship Week march through Sydney streets in September that year.³ Seward also received the honour of being chosen as the Warrant Officer Apprentice to lead 14th Intake's graduation parade in December.⁴ The record of success thus quickly established by New Zealanders at RSTT was maintained the next year too, when R.A. Cross was selected to lead the graduation parade as Warrant Officer Apprentice.⁵

New Zealanders remained a feature of Wagga's apprentice population at least up until No. 34 Intake graduated in 1981.⁶ For the intakes which included a Kiwi component, the 'Anzac tradition' was a lived experience which often entailed learning about the differences between each other's service. As a New Zealand member of No. 19 Intake recalls:

On our first day in 1965 we were laying about in a room, yarning with Aussies, when a drill instructor came in looking for us. Upon his entering the room, the Kiwis leapt to attention in typical RNZAF style and the Aussies didn't flinch. The corporal appeared bemused, noting that he had obviously found the Kiwis he was looking for. So we had learnt that it was true the Australian services were really laid back - such disrespect by trainees in the more British-style RNZAF would have earned a weekend whitewashing kerbs. Conversely, Aussies were mortified to discover that the Air Force Act in New Zealand still contained the death penalty for many offences.⁷

The arrival of the first New Zealanders coincided with the completion of three brick accommodation blocks in April, replacing old timber barrack huts. These improved quarters were allotted to second and third year apprentices, and their benefit was noticed almost immediately in a marked reduction in the number of members of these courses reporting sick with colds.⁸ Occupation of the new sleeping quarters also meant that the old buildings vacated could be used to help

¹ *RAAF News*, March 1960, p. 3. In fact, an approach had been made to the RAAF as early as October 1949, when the Secretary of the New Zealand Department of Air asked for an indication of the likely cost involved in training engineering apprentices for the RNZAF. When advised, however, that the estimate for the three-year course was £900 per apprentice, the New Zealanders opted to introduce their own boys training scheme. See minute notes 40-43 to AA, CRS A705/1, file 208/88/1.

² *Apprentice Journal*, 1959-60, p. 36.

³ *RAAF News*, October 1962, p. 5.

⁴ *Apprentice Journal*, 1962, pp. 16-17.

⁵ *Apprentice Journal*, 1963, p. 14.

⁶ *Daily Advertiser* (Wagga), 3 June 1981, p. 16.

⁷ Information of G.G. Neal, 9 September 1996.

⁸ Monthly report by CO Apprentice and Junior Trainee Squadron, April 1960: RHS.

house an overflow in the hobby club, which found itself with 'so many members that the facilities available are insufficient'.⁹

The year 1960 was also notable for a general restructure of Forest Hill which occurred in December, occasioned by the transfer to Wagga of No. 1 Recruit Training Unit (1RTU) to function as a separate unit. Coincident with this move, it was decided to reorganise the whole base 'to conform to the pattern of all other RAAF formations where units are located together'. The station headquarters was formed as an independent unit, with RSTT, Wagga Base Squadron and 1RTU as distinct units under its command.¹⁰ This arrangement remained in operation until 1964 when - because of a continued shortage of accommodation at Forest Hill - 1RTU was relocated to the RAAF base at Edinburgh, north of Adelaide.

In 1961 Forest Hill celebrated the 21st anniversary of its foundation as a RAAF base. To mark this milestone the Wagga City Council decided unanimously at its meeting on 9 March to confer the Freedom of the City on the personnel at the base.¹¹ The ceremony at which this honour was conferred and first exercised took place on 29 July and was a major local spectacle attended by Air Marshal Sir Frederick Scherger, who was now Australia's most senior serviceman as Chairman of the Chiefs of Staff Committee. As apprentices formed a significant portion of RSTT's population, naturally they shared in this momentous occasion.



The Mayor of Wagga Wagga, Alderman I.J. Jack, inspects members of the RAAF contingent from Forest Hill during the ceremony to mark the granting of the Freedom of the City to the base on 29 July 1961. Standing behind the mayor (face to the camera) is the station commander, Group Captain A.T. Fay. (RAAF Museum, Wagga)

⁹ Monthly report by CO Apprentice and Junior Trainee Squadron, February 1960.

¹⁰ HQ Support Command, Administrative Instruction No. 23/60.

¹¹ Wagga City Council records, file F. 58.

As further evidence of the greatly improved state of relations between personnel at the RAAF base and the local Wagga community, the City Council also donated a trophy for annual competition among apprentices. Awarded for the first time in 1966, its recipient was initially decided upon on the basis of 'citizenship', but from July 1969 it was awarded to the apprentice gaining the highest place in the order of merit in all subjects during their course. Another trophy was presented by the Kyeamba Shire Council for the apprentice attaining the highest results in Electrical Trades Theory; when the Shire became defunct in 1980 the sponsorship of this award was also subsequently taken over by the City Council.¹²



The Governor-General, Lord Casey, presents Flight Sergeant L.F. Baldwin with the Governor-General's Medal for being the top RAAF Apprentice during the graduation of No. 18 Course at RSTT on 1 July 1966. (CPE)

purpose. By the time No. 15 Intake passed out from RSTT in December that same year, the parade was conducted using the new SLR service rifle.

Because of Wagga's proximity to Canberra, the base at Forest Hill was called upon when the requirement arose for the RAAF to provide personnel to take part in important ceremonial occasions in the national capital. One such occasion was the royal visit to Australia in February 1963, mirroring the events during the Queen's first visit eight years earlier. A contingent of 107 third-year apprentices was sent to mount a guard of honour at Fairbairn airbase for the arrival of the aircraft carrying the Queen and the Duke of Edinburgh. The members of No. 15 Intake also had the honour of forming the royal guard when the Queen departed Australia the following month.¹³ The latter occasion was notable for being the last on which RAAF personnel used the .303 rifle for such a significant ceremonial

¹² Wagga City Council records, file R. 76.

¹³ *Apprentice Journal*, 1963, p. 9.

The graduation of No. 15 Intake was also the last by a course completing three years at RSTT - thereafter intakes would finish up in July having done just 2½ years. In explaining the change, Air Vice-Marshal W.L. Hely - the Air Member for Personnel who reviewed the parade - claimed that it was because the 'popularity of the apprentice scheme' had made it increasingly possible for the RAAF to select entrants who had passed their Intermediate Certificate prior to enlistment, including passes in the key subjects of physics and mathematics. Consequently, commencing with No. 16 Intake, the educational prerequisite had been raised to Intermediate Certificate and the first 12 months academic training reduced by half.¹⁴ A further change to the system had been made in October 1963, when the Department of Air notified RSTT that it was no longer mandatory for all apprentices to serve a year at an aircraft depot. Starting with the members of No. 15 Intake, apprentices might be posted to 'any suitable unit for productive employment'.¹⁵

Despite the rationale which notionally underpinned such changes, the reality was that the RAAF was increasingly finding itself squeezed for skilled ground staff and this was creating pressure for changes which increased output from the apprenticeship scheme. As this pressure mounted, the annual requirement for graduates was raised from 200 to 220 in 1964,¹⁶ and to 278 in 1965 - 230 engineering and 48 radio apprentices.¹⁷ For the intake joining in 1966, the period for which new entrants were required to sign on was cut from fifteen years to nine in a move to boost the attractiveness of the scheme to applicants. This was actually a measure made necessary by the discovery by RAAF personnel planners that the Army and Navy were both drawing more recruits by offering shorter terms of enlistment than the Air Force.¹⁸

Symbolising the changing scene at Forest Hill was the departure on the last day of 1964, on retirement, of Group Captain A.T. Fay, the Officer Commanding at RAAF Base Wagga since March 1960. It was Fay who introduced an Apprentice Honour Code at RSTT in 1962, a short set of principles for ethical conduct aimed at encouraging the young trainees to be self-reliant and to take pride in their work and the school. The idea behind the code was not actually original - Fay admitted to borrowing it from the United States Military Academy at West Point - but had led to a crop of requests for copies from other organisations such as the Boy Scouts Association, Teachers Colleges and the police.¹⁹

Fay also felt some pride in other marks which he had left on the School, such as the water ski club which he had been instrumental in forming. Having introduced apprentices to the sport using his own speed-boat, the growth in interest had finally led to suggestions that the staff build a boat and form a ski club. Now, at the time of his going, it was reported that the club was 'the most active of the many sporting activities on the base - all sections participating'. Fay it was, too, who had

¹⁴ *RAAF News*, January-February 1964, p. 3.

¹⁵ *Apprentice Journal*, 1963, p. 35.

¹⁶ *Defence Report*, 1964, p. 43.

¹⁷ Air Board Agendum No. 13101.

¹⁸ Alan Stephens, *Going Solo: The Royal Australian Air Force 1946-1971*, Australian Government Publishing Service, Canberra, 1996, p. 134.

¹⁹ *RAAF News*, May 1962, p. 7, January-February 1965, p. 5.

been behind the introduction of 'Corporal Boxer', the pedigree Alsatian dog which from 1963 served as the apprentices' mascot.²⁰

By 1966, when RSTT received its largest intake of engineering apprentices ever (190), Forest Hill could boast a trainee population totalling some 1800 - the bulk of these being adult trainees in a range of mustering units. The pace of adult training had also accelerated sharply to meet the increasing demand in units, and as a result the number of courses run annually at Wagga had risen from 58 in 1963 to 120 in 1965.²¹ This increase in the number of students meant, as the then-CO of the School pointed out, that RSTT was now the largest unit in the RAAF - comprising ten per cent of the service's entire personnel strength.

This was a situation which created its own pressures, such as accommodation blocks on base being fitted with double bunks while some staff found themselves rostered for 37 lecture periods a week. Among the adult trainees and apprentices a strong sense of rivalry also sprang up, as manifested by the trading of derogatory nicknames - the trainees being known as 'thicks' and the apprentices as 'sprogs'. Other rivalries developed between personnel training in the electrical and mechanical trades, a situation which was reportedly stirred up by members of the staff perhaps from a misplaced belief that a degree of competition was healthy and helped to cement group loyalties.²²

In town, too, the RAAF was obliged to take into account the increasing number of trainees for whom Forest Hill was temporarily home. In 1959 the base authorities had been dismissive of a proposal raised within the Wagga Council for the establishment of an 'Apprentices Amenities Centre' in the city. In responding to an invitation to discuss the idea with the mayor, the base commander, Group Captain E.V. Millett, then stated that he did not consider there was any need for apprentices to have such a centre since he 'does not "want them in town"', and has no desire to encourage them to spend their time in Wagga when they have every amenity on the station'. Such had been the change in the situation by 1965 that the Air Force was itself prompted to consider setting up a recreation centre to cater for the off-base leisure time of so many of its personnel.²³

The heightened pace of training at RSTT quickly came to be reflected, too, in the number of apprentices being graduated, which in June 1967 reached an all-time record of 164.²⁴ In recognition of the school's outstanding contribution to Australia's defence over 25 years through training thousands of Air Force technicians, in 1971 it became the first RAAF unit to be honoured with a Queen's Colour. At this time the only other ceremonial flag in the air force was the RAAF Ensign, which had been awarded to the service as a whole in 1952 and was held at Point Cook. The presentation of the new colour by the Governor-General, Sir Paul Hasluck, took place at Wagga on 19 November at a ceremonial parade involving 800 personnel from the school, and was witnessed by some 2,000 visitors including many civic and military figures and members of the diplomatic corps.²⁵ This colour

²⁰ Graduation ceremony program for No. 15 Course, 13 December 1963, p. 6.

²¹ *RAAF News*, September 1966, p. 6.

²² Information of LAC H.J. Clark, 12 November 1996.

²³ Wagga City Council records, file R. 76.

²⁴ *RAAF News*, July 1967, p. 1.

²⁵ *RAAF News*, December 1971, p. 1.

was proudly borne by the unit until a replacement was presented by Governor-General Bill Hayden in 1991.



This picture - taken at No. 5 Squadron (flying Iroquois helicopters) at Fairbairn, Canberra in 1974 - illustrates the remarkable way in which ex-apprentices made their impact across the Air Force. Shown from left are: Flight Sergeant D.G. Keast; Sergeants A. Lapins and B.J. Broderick, airframe fitter; Squadron Leader E.M. Weller, the squadron's senior engineering officer; and Flight Lieutenant M.J. Haxell, a squadron pilot. All are members of No. 12 Intake. Weller rose to the rank of air vice-marshal, while the flying skills Haxell demonstrated while serving in Vietnam in 1966 had already earned him the award of the Distinguished Flying Cross. (D.C. Hersey)

In 1972 the Apprentice Commission made a change to the normal length of an apprenticeship which brought this back from five years to four, and which allowed the ratio of formal training to field experience to be varied within certain limits. In line with this policy, RSTT conducted a rationalisation of course content the following year which saw the length of training varied for different musterings, with field experience making up the difference in time before individuals were recognised as fully qualified tradesmen.²⁶

The effect of these changed arrangements was to bring an end to the long-standing practice whereby the whole of an intake graduated at the one time. The first course to experience the new arrangement was No. 26, which saw 46 of its members (those specialising as airframe and armament fitters) graduate in

²⁶ *Groundel*, 6 December 1973, p. 8.

November 1973, followed by the remainder at intervals over the next several months.²⁷ When the time came for this intake's Electrical Fitters to pass out in February 1974, yet another change occurred which had the graduating apprentices parade with two flights of adult trainees who had also completed courses at RSTT. The base newspaper commented of this situation that:

As well as helping to set a new tradition, the presence of the two flights of adult graduates is also symbolic of the closing gap between the RAAF apprentice training scheme and the RAAF adult training scheme in the Engineering trades. Formerly, there were considerable differences between the two RAAF training schemes in both content and duration of courses. Revisions of syllabi, the narrowing age gap between students starting on the two schemes and the shortening of the apprentice courses now brings the schemes even closer together.²⁸



A member of the new intake in January 1974 (No. 24 Scorpions) moves into his quarters while juggling some of the kit which he has been issued. At this stage the newcomer is still smiling. (CPE)

²⁷ *RAAF News*, December 1973, p. 4.

²⁸ *Groundel*, 28 March 1974, pp. 10-11.

Perhaps inevitably, there were fears that the quality of the apprentice 'product' had been weakened or diminished as a result of all these variations. In 1973, for example, the base newspaper concluded its description of the 'streamlining' of apprentice courses by observing:

For those who may be concerned that with shorter training time, the end product may not be as good as it was, let there be no doubts that the product turned out under the new system will be as efficient as ever. The RAAF is proud of its record in the field of training and nothing would be entertained which would in any way jeopardise this high standard.²⁹

The *RAAF News* was also eager to provide reassurance on this score, remarking in 1976 that the work performed at RSTT was of 'immense importance to the RAAF' - not least because in a service where 45 per cent of all personnel were technical tradesmen, the proficient specialist was a highly valued member:

Its graduates, together with the graduates from the RAAF School of Radio, Laverton, particularly when they reach senior NCO level, have been referred to as 'the backbone of the Air Force.'³⁰

In 1978 the period spent at RSTT by some musterings rose again to 27 months. Again, officially, this was the result of a re-evaluation of course content and training effectiveness, but members of the 30th Intake tell a different story. According to one of those affected, the situation actually arose because of problems experienced by the previous course with phases of their training:

They were apparently intended to graduate together in December, but in the event the Instruments group had to stay on for a few months. It was their presence that threw out our intake, because just by them still being around we could not get into the classrooms to finish our training. In fact we didn't graduate until the end of April 1978; our Electrical people had passed out about a month earlier, and of course the others had already gone in December. So our course effectively had a three-tiered send-off. We were told by the staff that none of this was because we were failing, or anything like that. It was simply a case where the school couldn't get us through the course any quicker.³¹

Even this change was not the last word, however, and for courses from 1985 training time was again reduced to an average of 23 months (the precise course length being dependent on the trade of the apprentice).³² The last trade course, No. 46, had just 15 months at Wagga before graduating in March 1993.

The realisation that things had changed markedly at RSTT impressed itself deeply on Group Captain J.R. Bartram, a graduate of No. 3 Intake who in late 1977 was named to become the first ex-apprentice to return to Forest Hill as Officer

²⁹ *Groundel*, 6 December 1973, p. 8.

³⁰ *RAAF News*, July 1976, p. 4

³¹ Information of Warrant Officer P.B. Duncan, 11 November 1996.

³² *Apprentice Journal*, 1985, p. 2.

Commanding the base.³³ To achieve this particular first had been his avowed ambition since being on the staff at Wagga as a flight lieutenant in the early 1960s. Within days of his arrival in January 1978 he was surprised to discover the extent to which the old *esprit de corps* which he experienced and found so uplifting nearly 30 years before had disappeared:

I took over command on a Monday, only to find that CO's parades on Tuesday mornings were a thing of the past. It was too late to organise one for the following day, but we did have a parade the next week. I consciously set out to bring back traditions, like dining-in nights. I'd found the Queen's Colour stored, hidden away really, in a converted toilet block at the back of the administration offices. Now, if you read the rule-book, the Colour is supposed to be protected with life and body. I just couldn't understand the attitude that had crept in. Anyway, I had the Colour installed in a cabinet in the mess behind glass, and I remember the proud feeling when we had our first dining-in night and toasted the Queen's Colour. We took off from there. Apprentice graduations, for instance. Because these were now by flights, depending on the length of course, it was difficult to get back to the big events of the early days, but we ended up with two graduations a year. And I gave them back swords, despite a lot of objection from Support Command that airmen didn't carry swords. I suspect the system was tolerant of what I was doing because it could see I was breaking down barriers which seemed to have gone up between various groups within the school and trying to get some team-work going.³⁴

For the graduation ceremony held in December 1978, coincidentally marking the 30th anniversary of the commencement of apprentice training at Wagga, Bartram re-instituted the practice of having the parade conducted wholly by apprentices. As the RAAF newspaper reported:

For the first time, the 92 apprentices carried the complete performance, bore the Queen's Colour, without the help of officers or senior NCOs being placed in executive positions.³⁵

This had formerly been the practice, certainly during apprentice graduations in the early 1960s,³⁶ but for some reason had been abandoned.

Under Bartram's guidance RSTT also began to achieve a different profile in the wider community. He recalls:

I remember being invited to a Sportsman of the Year presentation and meeting Ken Warby, who was the holder of the Australian water speed record. I asked him what he powered his boat with and he told me a J34 engine that he'd bought. I said, 'I've got a few of those in store' - actually I

³³ *RAAF News*, October 1977, p. 1.

³⁴ Information of Group Captain J.R. Bartram, 15 November 1996.

³⁵ *RAAF News*, January-February 1979, p. 7.

³⁶ See, for example, the monthly report submitted by CO Apprentice and Junior Trainee Squadron for December 1959-January 1960.

had the RAAF's last 33 of them, with spares, which we'd captured when the Neptune was phased out of service. He said, 'Can I have a look?' and I agreed. When Warby saw all these engines in the hangar, of course he wanted one. This was how the RAAF got involved in his bid on the world water speed record. I had stuck my neck out a bit, I knew, but I was instrumental in getting him the support he needed. The bosses warned me to be a bit careful and undertake it as part of a training course, which we did. A course of engine fitters overhauled three engines and then did all the necessary testing of them, before the best of them was used in Warby's boat 'Spirit of Australia' which he'd virtually built in his backyard.³⁷



The arrival of Group Captain J.R. Bartram as OC of the RAAF Base at Forest Hill in January 1978 marked the first time an ex-Apprentice had returned to take charge of RSTT. Bartram - shown here inspecting the graduation of Electrical Fitters of No. 30 Intake in March that year - was a member of No. 3 Intake in 1949 and made it his purpose to restore a sense of tradition and military style among the apprentices and to infuse them with a renewed spirit of teamwork.

(J.R. Bartram)

A team of apprentices from the RAAF base at Forest Hill, working under Flight Lieutenant D. Appleby, became involved in supporting Warby's attempt at the record on Lake Blowering, near Tumut, during the latter half of 1978. Success came on 8 October, when Warby achieved an average speed of 464.4 km/h; on 20 November he also recorded the fastest speed then achieved on water - 556 km/h.

Even after he had left Wagga, Bartram retained a keen interest in apprentices and their training. In 1984 he acted in conjunction with a fellow member of No. 3

³⁷ Information of Group Captain Bartram, 15 November 1996.

Intake, Group Captain R.A. Kee, to institute a sword of honour to be presented annually to each year's top apprentice. The initiative for creating this award actually came from Kee, who had become CO of RSTT in 1982 (in succession to another ex-apprentice, A.W. Skimin, a graduate of No. 4 Course). He recalls:

I was in the process of buying a service sword for myself, and I was also trying to solicit interest from industry in sponsoring prizes and awards that we could award to the new courses of technologist apprentices when they graduated. I suggested to Bob that he might like to share with me the cost of getting another sword through the system, which we could then donate. The AOC Support Command was dead against a graduating apprentice getting a sword of honour, so we weren't allowed to call it that. We ended up calling it the 'R.A. Kee and J.R. Bartram Perpetual Sword'.³⁸



Ken Warby stands in the cockpit of 'Spirit of Australia' while members of his maintenance crew, including apprentices from RSTT, manoeuvre the jet-powered boat during trials on Blowering Dam in mid-1978. On 8 October Warby succeeded in setting a new world water-speed record. (RAAF Museum, Wagga)

In trying to preserve and bolster some of the school's past traditions, there was admittedly an element of resisting changes which were being forced on it by evolving community attitudes. An example of this was to be seen in the matter of admitting females to RAAF apprenticeships. Although adult female trainees had been passing through RSTT for some years, by the early 1980s there were still none among the apprentice population of nearly 500. In 1982 the Parliamentary Standing

³⁸ Information of Air Commodore R.A. Kee, 8 February 1997.

Committee on Public Works, having been tasked with examining proposals for the construction of new student living quarters at both Laverton and Wagga, had urged the RAAF to reconsider its policy on the recruitment of young women as trade apprentices. Pointedly observing that the new accommodation it had just approved was suitable for occupation by either male or female apprentices, the Committee's report went on to comment:

When these facilities are completed, the lack of suitable accommodation for female apprentices at Wagga can therefore no longer be cited as a reason for discouraging their recruitment.³⁹

Despite the expectation thus clearly expressed, the acceptance of female applicants for apprenticeships was, in fact, resisted for several years subsequently. To quote Bob Kee again:

I had a thing against them coming in as apprentices, though on practical rather than ideological grounds. Occasionally I'd have mums phoning me up to query why I wouldn't have their daughters there, and I would tell them that we were not properly set up to cope with female apprentices and until we were it wasn't going to happen. It wasn't purely a question of domestic facilities; there also had to be an attitude change generated among the teaching staff and changes in the training area. A policy decision from Canberra was needed about three years in advance to have all the necessary infrastructure in place that we should have, and that wasn't there in my time. Sure, we had facilities for female adult trainees but not within the apprentice set-up, at least not that I judged to be of sufficient standard or quality.⁴⁰

The advent of female apprentices could be delayed, but not frustrated entirely or indefinitely. When Instrument and Electrical Fitters of No. 40 Intake passed out of RSTT on 3 December 1987 the graduating class included among its members the first female apprentice to train at Wagga. This was Aircraftwoman D. Smith, who had entered Forest Hill in January 1986 and trained as an instrument fitter.⁴¹

In the view of the officer who was CO of RSTT in 1988-90, the presence of female apprentices certainly added a new dimension to his role:

Administratively the half-dozen girls going through on each course were very difficult to look after. This was because the nature of what we were doing at Wagga really was, whether one liked to admit it or not, very much a man's world. There were very few women on the staff - a couple on the administrative side, but none among the instructors except for education officers. They came in very handy for counselling.

³⁹ Parliamentary Standing Committee on Public Works report, Parliamentary Paper No. 100/1982, p. 12.

⁴⁰ Information of Air Commodore Kee, 8 February 1997.

⁴¹ *Apprentice Journal*, 1988-89, p. 10.

I must admit though that the girls, by and large, handled the situation very well themselves. It might have been because they are more mature than boys at that age anyway, but I felt they had a better focus on what they were after. And they were perfectly capable of standing up for themselves if they came up against any discrimination. A couple of them were really quite tough.⁴²

As these comments show, the change to a mixed intake of apprentices had not been the end of the world after all.

Another area where the school found itself under pressure from values and behaviour which, while commonplace in civilian life, were in conflict with service policy, was drugs. There had been instances in the early 1980s of apprentices being caught experimenting with prohibited substances obtained through established channels in Wagga or via adult recruits who brought supplies with them from the RTU at Edinburgh. As Skimin, the CO in 1981 observes, the reaction of the system at that time showed no interest in employing rehabilitation as a solution to the problem, allowing no other avenue but discharge.⁴³ This was the approach followed in subsequent years too, with Skimin's successor also recalling several drug busts and a spate of discharges.⁴⁴

Although a sign of the times, in many respects an aspect of this kind could be misleading as an indicator of the nature of the changing lifestyle of apprentices. So far as problems went, access to alcohol, misuse of cars, destructive high jinks in the barracks, anti-social behaviour such as graffiti or vandalism, or petty crime such as shoplifting, were all more commonplace even in the 1980s than more serious misbehaviour - and in these respects, nothing had changed from the apprentice scheme's earliest days. At least the school was better set-up to deal with the occasional episodes of these kinds which occurred and the causes which underlay them. As several former COs have pointed out, whereas in the 1950s RSTT had never heard of a psychologist, by the 1980s there were three or four such specialists employed full-time on the staff. These were adept at assisting the proportion of apprentices who - as in the past - came from adverse family backgrounds, along with the vast majority who entered with attitudes instilled from secondary schooling focussed on 'the individual' to the detriment of concepts of discipline and team effort.

For those tempted to decry the standards of modern youth, several areas of apprentice endeavour demonstrated that positive virtues still flourished at RSTT right up to the school's last days. One example which could be cited was the many thousands of manhours expended between 1982 and 1987 by volunteers, including apprentices, while restoring a World War II Japanese A6M2 Zero fighter to display condition for the Australian War Memorial in Canberra.⁴⁵ Or the heavy involvement of RSTT personnel with the local community of Wagga to restore an historic pioneer cemetery under a project conducted as part of the Australian Bicentennial commemoration. Beginning with about 100 apprentice volunteers in August 1987, by the time this project was completed in May 1988 more than 10,000

⁴² Information of Wing Commander J.S. Rae, 22 September 1996.

⁴³ Information of Group Captain A.W. Skimin, 30 January 1997.

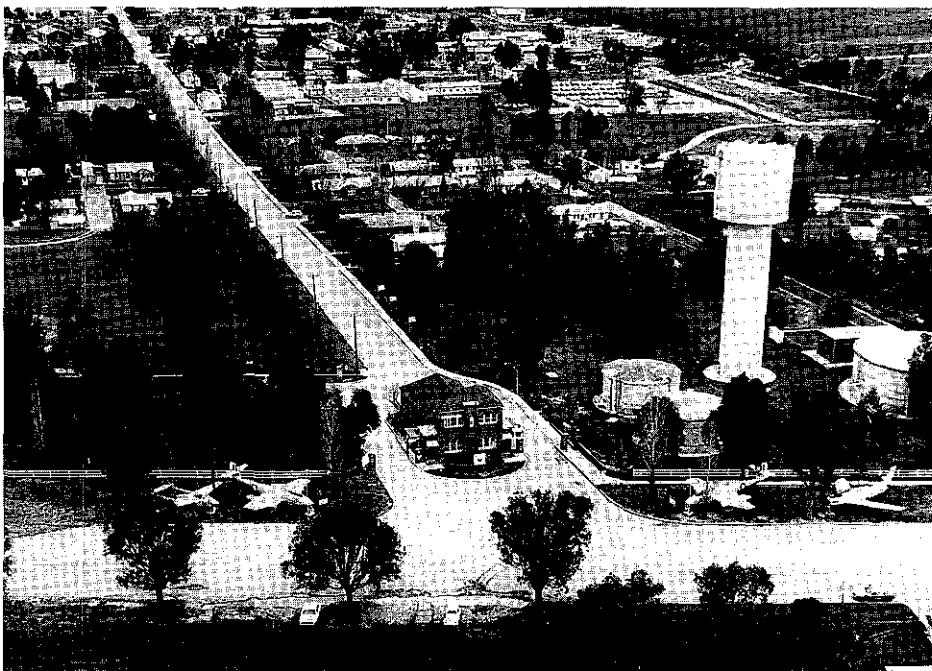
⁴⁴ Information of Air Commodore Kee, 8 February 1997.

⁴⁵ *Apprentice Journal*, 1985, pp. 53-4.

manhours had been tallied up by the various groups (including the apprentices) that participated in cleaning the nearly 9,000 graves which the cemetery contained.⁴⁶

Also demonstrating that whatever harm occasional outbursts by apprentices did to relations with the local community was never enough to permanently blight them was a family sponsorship scheme commenced in 1988. Aimed at easing the transition of new apprentices coming from around Australia to service life at RSTT by providing a 'home away from home' environment, this depended on having staff members and Wagga citizens who were willing to invite individual new apprentices into their homes on a regular or frequent basis, to enjoy some family life and old-fashioned home cooking.⁴⁷ As one who enjoyed the benefits of the scheme in 1991 later remarked:

My sponsor family was living in Forest Hill and I got to meet them and their kids by going there for a meal once a week. It wasn't long and I was going along to see their kids play hockey and that sort of thing.⁴⁸



The main entrance to the RAAF base at Forest Hill in 1985. The whole appearance of the base was in marked contrast to the barren picture presented during the 1950s, as shown on page 30. (CPE)

Not only was the way opened for apprentices to become involved in the civilian community at large, it often led to long and firm friendships being forged between the sponsor and real families of apprentices.

⁴⁶ *Apprentice Journal*, 1987-88, p. 21; 1988-89, pp. 66-7.

⁴⁷ *Apprentice Journal*, 1988-89, pp. 61-2.

⁴⁸ Information of Corporal D. Burge, 11 November 1996.

By the late 1980s, therefore, the RSTT and the apprenticeship scheme had travelled a considerable distance from the days of its birth in 1948, and yet - in so many ways - it remained recognisably the same. Even so, events were continuing to evolve in ways which would seriously challenge the scheme's ability to continue to adapt. Symbolic of these trends was a further major restructure of RSTT in 1985, the 45th anniversary of the Wagga base's foundation, which saw the formation in June of two new schools - the RAAF School of Clerical and Supply Training and the RAAF School of Management and Training Technology - and the reduction of RSTT's role to encompass solely technical training. As the 1980s closed and the new decade of the 1990s began, the forces of change (as described in Chapters 8 and 9) began to shake Forest Hill to its very foundation.

CHAPTER 5

RADIO APPRENTICES: 1948-1992

Once the Air Board had given in-principle approval in September 1945 for apprentice training to be introduced, work began on devising and shaping the scheme which should apply to the radio trades of wireless maintenance mechanic (air), wireless maintenance mechanic (ground) and telegraphist mechanic. The proposal initially presented to the Board had identified a key factor which determined the way this planning would develop, in so far as providing the instruction in theory was concerned. This involved the recognition that there were three methods available for giving technical training of this nature: use resources wholly from within the RAAF; use wholly the resources of 'selected civilian Schools within the Commonwealth of Australia'; or conduct a course within the RAAF, but coopt the facilities of civilian schools for 'those academic subjects of the curriculum which the RAAF is at present not equipped to undertake'.¹

In weighing these various alternatives, it was clear that a major determinant would have to be the service's ability to secure recognition of the quality and standing of its course - not just by the civilian industry, but also the Institute of Radio Engineers and the Apprenticeship Commission. Without a guarantee that a worthwhile qualification was being obtained, the RAAF would have little chance of attracting 'the right type of youth, suitably educated', since once they completed their term of engagement in the service they would be unable to 'compete on an equal footing with similar tradesmen in civilian life'.

This consideration quickly narrowed down which option was the most viable and attractive. The plain fact was that the RAAF did not have either the qualified instructional staff or practical facilities such as laboratories with which to teach physics. By the same token, no civilian school was competent or equipped to undertake the sort of service training required, so that sole use of these institutions was equally impracticable. The most logical and economical approach was to use the best civilian facility that was available to provide the technical instruction required, but to maintain a service environment for the purpose of all other training. It was this realisation that formed the basis for the recommendation put to the Air Board that the training of radio apprentices would be conducted in two phases - the first entailing two years at a civilian technical college, the second of one year spent at the RAAF's Air & Ground Radio School (AGRS) at Ballarat, Victoria.²

In compliance with this plan, as soon as the Board's approval was obtained a survey was carried out to identify 'the most desirable place at which to undertake

¹ Air Board Agendum No. 6768.

² Air Board Agendum No. 6768, appendix C.

Phase 1 of this training'. For this purpose, preference quickly settled on the Melbourne Technical College - it being recalled that this institution's radio and electrical laboratories had been set up largely under the guidance of RAAF technical officers during the war, and had enabled it to play a leading role during that conflict by training about 5,500 radio tradesmen for the air force.³ In a new submission made to the Air Board on 20 August 1947, the AMP (Hewitt) recommended acceptance of the idea of utilising the College's diploma-level course in radio engineering to satisfy the formal technical training requirement for apprentices.⁴

An additional factor in favour of selecting MTC was that suitable accommodation for the apprentices in training was already available at 'Frognall', a RAAF establishment situated in Mont Albert Road, Canterbury, some nine kilometres east of the city centre. This property had been the home of the Melbourne Wireless Telecommunication Station (soon to be renamed the Melbourne Telecommunication Unit, or MTU, in December) since 1942, when the RAAF acquired it as a wartime measure. At the height of the Pacific War the base was a high-security facility with a staff of 800 comprised mostly of members of the WAAAF, 300-400 of whom lived in huts on the grounds covering seven acres (2.8 hectares). Since then, the size of the staff had shrunk steadily and was now down to only about 120 personnel, so living quarters were plentiful.

Originally the property had been a private residence, and the most prominent building on the site was still the ornate mansion dating from the 1880s. Having bought the property in October 1887, late the following year the new owner, Clarence Hicks - recently elected to the Boroondara Shire Council (now City of Camberwell) - commissioned the construction of a stately home for himself and his wife, Duance, to replace the existing dwelling. The contractor engaged for the project was Robert Gamlin, a figure already well-known in Melbourne for his work on a number of major public buildings, including the Camberwell and Fitzroy Town Halls, the Eastern Markets and the original Wilson Hall at the university.⁵ The structure designed by architect James Gall was an imposing two-storey house in faintly Italian style, with porticos, ornate entrance hall, stained-glass windows and a four-storey observation tower.

The Hicks probably moved into their new home in 1889 - the same year in which Clarence was elected Shire President for a one-year term. They did not have long to enjoy gracious living at Frognall, since Clarence's business fortunes soured with the onset of an economic depression in 1892 and he was forced to mortgage his house to the National Bank of Australasia in January 1893.⁶ When his fortunes did not recover, the bank foreclosed on the mortgage and gained title to the property in September 1896. The bank let the house only twice in ensuing years - until 1898 to the proprietress of a Ladies' College, and subsequently to a James Warne, another

³ Another reason suggested by Stephen Murray-Smith & Anthony J. Dare, *The Tech: A Centenary History of the Royal Melbourne Institute of Technology*, Hyland House, South Yarra, Vic, 1987, p. 286, is that the RAAF 'wished to keep a training programme at the college in case of a national emergency'. This may have been true, but was not specifically argued to the Air Board.

⁴ Air Board Agendum No. 8322.

⁵ H.J. Gibbney & Anne G. Smith, *A Biographical Register 1788-1939*, Vol. 1, Australian Dictionary of Biography, Canberra, 1987, p. 251.

⁶ Department of Housing & Construction, Conservation Management Plan for Frognall prepared by Allom Lovell Sanderson Pty. Ltd, 1984, Vol. 1, pp. 37, 53-5: copy held by RAAF Museum, Pt. Cook.

Melbourne businessman - before finally selling it in February 1901 to Burdett Laycock, partner in a prosperous wool trading and blanket and textile manufacturing business.⁷



Often known as the 'White House', the headquarters building at Froggnall was originally a private mansion. Dating from 1888-89, the house continued in use as a private residence until acquired by the RAAF during the Second World War. (RHS)

Laycock had to wait until Warne's lease had expired before gaining possession, but by July 1902 he and his wife, Mary Ann, were in residence with their two sons and two daughters aged between 17 and 9. Although the children were all married by 1918, leaving Burdett and Mary Ann as the sole occupants, Froggnall remained the centre of family life for the Laycock clan for another 20 years.⁸ By 1941, however, Burdett was a elderly widower,⁹ and, two months before his own death in December 1941, the surviving family offered the property for wartime uses to the Commonwealth.

The government moved to buy Froggnall, finally completing the transaction for £20,000 in December 1943. In the meantime, steps had already been taken the previous February to ease overcrowding at Victoria Barracks by transferring the RAAF's signals office to there. By June that same year the necessary equipment had been installed and operations were fully transferred to the new site.¹⁰ One wartime WAAAF resident of Froggnall recorded that:

⁷ See entry on Frederick and Burdett Laycock in *Australian Dictionary of Biography*, Vol. 10, pp. 28-9.

⁸ N.J. Holt, *The House of Laycock 1879-1959*, Laycock, Son & Co. Pty Ltd, Melbourne, 1959, pp. 31, 46, 47.

⁹ The conservation analysis prepared by Allom Lovell Sanderson contradicts information in the *ADB* entry on Laycock by stating (pp. 38, 56) that his wife did not survive her husband but died in 1935.

¹⁰ Joyce Thomson, *The WAAAF in Wartime Australia*, Melbourne University Press, Carlton, Vic, 1991, p. 220.

From the street, apart from the Guard House at the gate there was not much for passers-by to see so very different from the stately home era, except for one long building at the top of the lawn, now a parade ground ... [However] Rows and rows of barrack huts stretched behind the main building in what was once a spacious garden, together with all the workshops and departments of a large unit.¹¹

By the end of 1947, five years after the site had been occupied by the service and barely two years after the war's end, not much had changed at Frognall. While planners recognised that another of the RAAF's permanent bases might carry more advantages, utilising Frognall would still make it possible to conduct the necessary parades, physical training and drill periods - and to impose the 'necessary standard of disciplinary control' over boy apprentices. The factor chiefly favouring this improvised base was, however, its proximity to MTC, which would enable apprentices to be bused to and from the campus each day by service transport - a journey of only 25 minutes in peak traffic.



Members of the first intake to enter the Radio Apprentice School arrive at Frognall in February 1948. (R.W.A. Fretwell)

¹¹ E.M. Robertson, *WAAAF at War: Life and Work in the Women's Auxiliary Australian Air Force*, Mullaya, Canterbury, Vic 1974, pp. 89-90.

Once this scheme for implementing the new form of training was approved by the Air Board at its August meeting, matters moved swiftly. On 8 December 1947 the Radio Apprentice School (RAS) was formed under the command of Flight Lieutenant W.D. Sullivan as a lodger unit on MTU at Frogner. Just two months later the first trainees arrived to begin training. The precise start date for the apprentice scheme had earlier been the subject of discussion. The first week in February 1948 was tentatively chosen by the CAS (Jones) at a conference in July 1947, but the next month the Air Board had been asked to consider the case for advancing it to early January for the radio trades. This was because the academic year at MTC usually began on the first Monday in February, and it seemed desirable for members of the initial intake to arrive early enough to 'enable the necessary kitting and preliminary work to be undertaken prior to the commencement'. In the event, delays in the process of selecting the youths who were to make up the inaugural intake would prevent the earlier date being achieved.

On 9 February, just two days after No. 1 Course joined the RAS, its 16 members were launched into their studies at MTC. By August the Air Board was presented with some disturbing facts regarding the progress of this course, as revealed by mid-year examinations. The results achieved by apprentices showed clear evidence that serious problems were present, with only five having passed satisfactorily in all subjects and qualified to proceed to the next stage of their studies. Another ten had achieved only partial success, having failed in enough subjects to demonstrate that they were 'incapable of proceeding with more difficult work at present'; one member had failed so comprehensively that he had been promptly suspended and discharged.¹² On the basis of this performance, the RAAF was obliged to make some hurried inquiries into what had gone wrong and to implement some remedial measures.

In originally agreeing in June 1947 to meet the Air Force's requirements for a two-year programme for its personnel, the principal of MTC, F. Ellis, had expressed doubts as to whether 'the subject matter ... can be covered in the time stated with members of Intermediate Standard'.¹³ The course which the apprentices had begun was, accordingly, one for which the curriculum for the College's Associate Diploma in Radio Engineering had been condensed to suit. As an educational historian has observed, the resulting arrangement was an innovative one involving tuition in six-month 'blocks' - thus making the course 'possibly the first to operate in Australia on the semester as opposed to the yearly cycle of tuition then virtually universal in Australian educational institutions'.¹⁴ For all that the course itself might thus be said to have been somewhat new and experimental, the root of the problem appeared nonetheless to rest entirely within the RAAF's province.

After looking into matters, the RAAF acknowledged that the problem lay partly in the low admission standard which had characterised this first apprentice intake. The shortage experienced in the number of applicants had seemed to justify the selection of some candidates 'whose chance of success was assessed [as] below

¹² Air Board Agendum No. 8947.

¹³ Letter, F. Ellis to the Secretary of the Department of Air, 10 June 1947, included as Appendix A to Air Board Agendum No. 8322.

¹⁴ Adrian R. Haas, *Para-professional Engineering Education in Australia*, Royal Melbourne Institute of Engineering Associations, Hobart, 1986, p. 29.

that normally desirable'. That being said, however, the number admitted who might be expected to have been eliminated in a more rigorous application of selection guidelines regarding educational background and aptitude scores still numbered only four out of sixteen; the others 'fully met minimum requirements'.

Other factors which had to be taken into account were differences between the levels and content of educational syllabuses in the States, which meant that some apprentices were poorly prepared in subjects such as trigonometry, and the fact that some entrants had already left school when they applied for the RAAF and were thus out of the habit of study. In several cases sicknesses had played a part, and the RAAF's inability to supply drawing instruments and text-books at the required time had retarded progress for a period. One further major factor was identified as having contributed to the outcome, which was that:

Apprentices experienced a rapid and complete change of environment on entry to the Service and almost immediately commenced their training at the Melbourne Technical College. It is considered that this dislocation, inoculations, etc, would set the apprentices back approximately one month in their studies.

The immediate action for which AMP sought the support of his Air Board colleagues in August was simply to allow the ten apprentices who had not produced satisfactory progress to repeat the first half-year of their course, by transferring them to join the 19 members of No. 2 Course which was already underway. In addition, though, he wanted to signpost some changes which it was thought advisable to make and which would be the subject of a future submission to the Board. These measures would include the insertion of a three-month preparatory training phase for each intake to RAS, during which the new arrivals would be given refresher training in academic subjects such as physics and mathematics along with some service training. The aim was to provide the newcomers with a period in which to settle down to service life prior to beginning their studies. Although this would mean prolonging the period of training planned for radio apprentices, it would also mean that the service gained the opportunity to eliminate at an earlier stage those who were unsuitable and 'so avoid costly wastage later'.

When Hewitt brought this matter up again, as fore-shadowed, in the Air Board meeting on 5 November, he reported that the same problems evident with the first course had been found to be present in No. 2 Course as well. The RAAF was attempting to counter the situation by providing extra tuition in the evenings from within the limited resources of its own Education Service, but the key cause of the apprentices' difficulty in keeping up with their studies did appear to be the lack of an adequate preparatory period before they started their MTC studies. He therefore proposed that from 1949 the arrival of intakes to RAS be deferred until the end of March each year, and that the first three months of each course's training be devoted to a preliminary phase which would precede their commencement at MTC in July. Since College authorities endorsed the change, the Board happily approved the AMP's recommendation.¹⁵

¹⁵ Air Board Agendum No. 9109.

While this modification held promise of easing the path of future intakes, for those radio apprentices already in training the problems were far from over. Once the end-of-year examination results for 1948 were available, it was clear that at least eight members of No. 2 Intake at RAS were struggling and were probably unsuitable for further studies at the Diploma level. Rather than discharge them, with all that this would mean in terms of the loss of the time and money already invested by the RAAF, and perhaps causing the viability of the scheme as a whole to be called into question, the solution was adopted from February 1949 of enrolling them in a modified course leading to the award of a Radio Technician Certificate from MTC.¹⁶

Radio apprentice training thus continued throughout 1949 on the basis of two distinct streams. At the end of the year, the MTC examinations produced a fresh crop of transfers to the technician course in the form of four members of the first intake and six from the second. In February 1950 these ten joined the seven remaining members of what was referred to as No. 1 Modified Radio Apprentices Course. This number was reduced by one in June, when a member suffered a serious football injury which required his suspension from training for an indefinite period and was expected to lead, at a minimum, to him not resuming until the following year. Once the examination results for 1950 were available it was discovered that another four had failed, so that ultimately the number who successfully completed this portion of the first modified course on 8 December totalled only twelve.

Notwithstanding that four members were clearly not up to the required standard, these were still permitted to accompany their colleagues to AGRS in February 1951 for the final practical phase of training on RAAF equipments. The intention of the training directorate at headquarters was to have them complete the service section of the syllabus, plus an additional three months of equivalent theoretical training in the subjects in which they were behind. Once at Ballarat, however, the deficiencies in the grounding of three of the four became only too apparent and they were returned to MTC for supplementary training expected to last until October. In the meantime the remaining 13 members of the modified course completed their training and at the end of August were remustered as Wireless Maintenance Mechanics (Air) - or Radio Fitter (Air) as this category was soon renamed.

In parallel with this stream, the group of apprentices following the more advanced Diploma-level course continued to progress - albeit with some further reduction in numbers. Of the five members of the first intake who had qualified to proceed without impediment, one was selected to enter the RAAF College in January 1950 and undergo officer training, and another who fell behind due to absences caused by a broken thumb was back-coursed. The remaining three had been sent to AGRS in February 1950 and commenced training as Radio Fitters (Air). Upon completing a year's work here, they were remustered as aircraftmen on 16 December and all posted to the Aircraft Research and Development Unit. By late in March 1952 the RAAF was able to advise MTC that the three had now completed all requirements to qualify for issue of their Associate Diploma of Radio Engineering certificate. Plans were made to present these to their recipients - the

¹⁶ AA, CRS A705/1, file 208/88/18.

first fully fledged radio graduates of the apprentice scheme - at a ceremonial parade at Ballarat on 20 June.¹⁷



The man responsible for designing the radio portion of the RAAF Apprenticeship Scheme, Wing Commander J.F. O'Neill (centre), chats with four ex-Froggnall apprentices during a get-together in the Support Command Officer's Mess during the early 1970s: (from left) Squadron Leader N.J. Hadfield, Wing Commanders R.W. Fretwell and B.F. Pollett, and Flying Officer H.C. Noble. (R.W. Fretwell)

Out of this record of considerable turbulence and fine-tuning had emerged the pattern which would prevail for the rest of the 1950s. As outlined in a press article during mid-1953, the preferred path was that pursued by the Diploma-level apprentices, for whom the two years study undertaken at MTC was divided into three stages: A (of six months) devoted to maths, physics, engineering and workshop practical; B (of twelve months) covering maths, English, physics, chemistry, electrical principles, electrical and radio engineering, and radio draughting; and C (of six months) in which they advanced their radio and electrical engineering and moved into the new field of industrial electronics. On leaving MTC, the apprentices were well versed in the theory and practice of radar and television.¹⁸ For the members of these Diploma courses, completion of the MTC portion was followed by a year at AGRS (renamed the RAAF School of Radio, or RADS, from December 1952) undertaking applied electronics, and a further year of practical work 'in the field' at a selected RAAF unit.

For those apprentices who were unable to assimilate the instruction involved in the first six months (Stage A) at MTC - and this was usually around 70 per cent

¹⁷ AA, CRS A705/1, file 208/88/5.

¹⁸ *RAF Quarterly*, July 1953, p. 303.

of each intake - the option remained of undertaking the modified course leading to a radio technician certificate.¹⁹ Although still entailing 18 months at the College, the training contained a greater amount of practical radio instruction than the Diploma course and much less academic content. It covered the various aspects of radio engineering along with industrial electronics, electrical machine shop practice, physics, mathematics and English expression. Completion at MTC was followed by only six months (later increased to eight) at Ballarat, and no subsequent qualifying period in the field was necessary since this was a requirement stipulated by MTC only in the case of its Diploma candidates.²⁰

Since the graduates of both types of courses were eventually remustered as radio technicians, the benefits of enduring the more demanding diploma-level course might not have been immediately apparent. The difference lay, however, in the utility to the service of the more highly-qualified ex-apprentice and their demonstrated capacity to advance to still further training which would result in their being commissioned. In February 1953, for example, ten former apprentices - all members of the first three intakes to RAS - were selected to undertake a Fellowship Diploma in Communications Engineering at MTC; the nine who survived the course to graduate in December 1954 all received pilot officer rank. These were but the first of a succession of courses which preceded the establishment of the Diploma Cadet Squadron at Froggnall (see Chapter 7) in 1961, by which time a total of 35 ex-apprentices had followed the Fellowship Diploma route to careers as officers.

At the same time that aspects of the course were being sorted out in the early years of the scheme, attention also had to be given to ensuring the daily regimen at RAS was bearable for both staff and apprentices. In the rush during the latter half of 1947 to prepare for the school's opening, attention was naturally focussed on meeting essentials such as sleeping, ablution, and dining areas, along with office space and classrooms. It was envisaged in planning that for its first year of existence a staff of only nine would suffice to manage an initial intake expected to number 40 apprentices, and when the student population had doubled in size in subsequent years the number of staff required was expected to rise to 15. On these figures there were sufficient vacant buildings at Froggnall to meet the RAS's needs, although some alterations would be necessary where the use envisaged varied from the original purpose. For example, initial efforts focussed on converting one building to serve as a recreation room for apprentices, and adapting part of the medical section to provide on-base married quarters for the officer commanding the school.²¹

Fairly quickly, however, other requirements began to emerge to meet the RAS's growing needs. By late 1948 the Air Board was asked to approve expenditure to upgrade four huts used as apprentice sleeping quarters. These were very basic structures of timber construction with fibro cement walls and skillion roofs, originally built for temporary wartime purposes. Since these were now required 'for some years to come', and to house students who were studying at

¹⁹ E.R. Hall, *A Saga of Achievement*, p. 274, asserts that after 1951 the composition of the two courses - diploma and modified - was decided on the basis of the preliminary training phase which followed each intake's arrival at RAS, without waiting on the results of the initial six months at MTC.

²⁰ AA, CRS A705/1, file 208/88/25.

²¹ AA, CRS A705/1, file 208/88/7.

night as well as sleeping in them, authority was sought to provide internal dado linings to improve their habitability.²² Barely six months later a further request followed for a fifth sleeping quarter to be upgraded too, and for a larger building to be converted to a recreation hut to supplement the original facility which had become overcrowded 'with the progressive increase in apprentice strength'.²³

Not just Frognall was affected by pressures to expand or upgrade buildings and facilities. Anticipating the special requirements which would be presented once apprentice intakes began arriving for training at Ballarat, in late 1949 the AGRS also began assessing the suitability of what it had available to cope with an additional student population expected to eventually total more than 70 young men at a time. To keep the apprentices segregated from adult trainees a group of six huts was set aside, five for use as sleeping quarters and the sixth for recreational activities. These also needed up-grading, in the form of internal lining and installation of slow combustion heating stoves, and additional latrine and ablution facilities had to be provided. The Air Board was asked to approve these works too.²⁴

Some of the requirements which arose at Frognall created notable difficulties, especially considering the physical constraints created by the base's peculiar environment. For instance, although the RAS curriculum placed heavy emphasis on sport and recreation activities for apprentices, this goal could not be fully met from within the confines of Frognall itself. Apart from a netted pitch which enabled cricket practice to be conducted, and an open-air basketball court, there were no sporting facilities such as playing fields available on-base - and no space on which these could be built. Not until early 1951 were plans in train to overcome this deficiency, at least in part, by constructing a gymnasium.²⁵

Of course, having the wider resources of a capital city near to hand provided a ready solution to the problem, and to this end civilian venues were hired on a regular basis. The availability of expert coaches and instructors moreover helped ensure that RAS enjoyed considerable success in competition with outside sports bodies. One example of the actual benefit which RAS derived from its location lay in its swimming record. To ensure that all apprentices were able to swim, as each intake arrived its members immediately commenced a course under a permanent instructor of the Royal Life Saving Society in the heated pool of the Melbourne City Baths. As a published account from the mid-1950s reported:

It is Frognall's proud boast that every apprentice leaves the school with a life-saving medallion of some sort. Frognall has held the junior and senior life-saving titles for Victoria for the past three years.²⁶

Another activity engaged in - less competitive but beneficial nonetheless - was First Aid classes conducted by an officer of the St. John's Ambulance Brigade, at which numbers of apprentices qualified for certificates.

²² Air Board Agendum No. 9110.

²³ Air Board Agendum No. 9423.

²⁴ Air Board Agendum No. 9806.

²⁵ Report by Flight Lieutenant J.N. Marr, OC RAS, on AA, CRS A705/1, file 208/88/18.

²⁶ *RAF Quarterly*, July 1953, p. 305.

In their off-duty hours apprentices were encouraged to take up various hobbies, if only reading. Workshops were provided in which they could build model aircraft, surfboards and other 'handicrafts'. Other popular activities were radio-making and photography. Pleasures were few and innocent, since there was little mischief that youths could get up to on a drawing rate of pay of only 3 shillings (30 cents) a week. Even affording cigarettes was difficult on this sort of pocket-money, and in any event apprentices were not granted a 'smoking pass' until they reached the age of 18 and unless they had written parental consent.

Concern over smoking was not purely a question of discipline given the state of Froggnall's buildings, a point which was potently emphasised after a member of No. 2 Intake was caught smoking in bed and duly charged. The officer commanding, Flight Lieutenant Sullivan - nicknamed 'Happy' by apprentices on account of his habitually dour demeanour - took the opportunity to deliver an appropriate homily to the offender:

Do you realise, Apprentice -----, that you could have woken up in the morning and there could have been thirteen charred bodies around you?²⁷

For off-base entertainment, there were Saturday night dances conducted by several local church organisations and the opportunity to attend a cinema in nearby Camberwell on alternate Friday evenings. The latter was still conducted as a parade, however, and although the cinema management had reduced the admission charge to 1 shilling and 3 pence (12 cents) a member of the 1949 intake recalls that even this was sometimes hard for apprentices to find on their low pay:

For the church dances, too, it would be a case of the roll being called. We'd answer our name then get onto the bus and be driven down to the dance. At about quarter to 11 it was onto the bus again and back to camp, then being marched to our quarters.²⁸

Most apprentices received an invitation in due course to spend a Saturday evening in a group of six at the Surry Hills home of the base's padre and his wife, enjoying Chaplain R.C. ('Bish') Russell's store of anecdotes and of course a delicious supper. Apart from such occasions the only other regular period of weekend leave allowed was on Sundays, from noon to 9 pm.

During mid-year term breaks from studies, the apprentices were taken on controlled holidays involving special hiking tours and the like, or else taken on visits to a range of industrial enterprises and institutions such as Ruwolts heavy engineering works, the Newport power station, RCA (radio) works, the Herald newspaper, the General Motors Holden car factory, the Commonwealth Aircraft Corporation and the Metropolitan Farm at Werribee. Only vacation periods of two weeks and four weeks, taken in May and over Christmas/New Year, provided them with the opportunity to visit their homes and families.

The weekday routine of apprentices revolved around the daily runs to and from classes at MTC (or RMIT as it became in 1960), to which apprentices wore

²⁷ Information of Wing Commander R.W. Fretwell, 13 November 1996.

²⁸ Information of Fretwell.

overalls, berets and boots. These journeys were undertaken in a Mack 100 passenger bus, described by one apprentice as 'a fairly massive sort of semi-trailer with canvas sides and a canvas top, no padding on the seats, and was pretty chilly in the winter time'.²⁹ Until the end of 1949 it was the RAAF's practice to return their charges to Froggnall for lunch, but then an arrangement was made for the apprentices to eat in the cafeteria at the Victorian Museum. With this heightened exposure to the public, the switch was made to wearing battledress uniform. Also with an awareness of the potential for misbehaviour, the precaution was taken of ensuring that an NCO was always on hand to supervise and accompany the bus movements to and from Froggnall.

With three nights a week taken up with compulsory study, and Mondays being 'panic night' before the OC's Tuesday morning inspection, apprentices found their time was fully committed. Says R.W. Fretwell, a member of No. 3 Intake:

I guess that we were kept pretty busy so that we didn't have terribly much time for grizzling about our conditions. Mind you, out in civvy street life was not as comfortable for most people as it is these days either.³⁰

He also recalls that in 1949 there was even a mild attempt by members of the senior intakes to subject the newcomers to what would later come to be known in service schools and training institutions as 'bastardisation':

This involved stripping a guy, giving him a coat of boot polish and throwing him in a cold bath. There were several fellows on my intake who were given that treatment, and I think the seniors' intention was to work their way through our group one at a time. Their success rate was not very good, though, because we were numerically superior to the two previous courses combined and some of our guys were comparatively big. It didn't take us long to retaliate.

The regimen at Froggnall was such that the contrast in lifestyle experienced when intakes arrived at AGRS was instantly noticed and appreciated. To quote Fretwell again:

We thought it was like being released from prison when we went to Ballarat and found that the reins were not quite so tight. No compulsory study, none of the extra duties we were rostered to do in the kitchen at Froggnall involving pot walloping and that sort of thing. It was like a holiday by comparison.

Despite what were plainly some negative aspects, within a few short years the RAS had nonetheless managed to create a surprisingly strong sense of separate identity. From mid-1948 the practice had begun of radio apprentices wearing light blue cap bands and triangular shoulder patches as distinctive dress markings,

²⁹ Information of Fretwell.

³⁰ Information of Fretwell.

matching those worn by their engineering colleagues at Forest Hill.³¹ By the end of 1949, too, the step had been taken of designing a unit badge for the RAS. This featured the lighted lamp of learning above an open book and two lightning flashes.³² Although it was approved by the Air Board in January 1950 and subsequently sent on to the College of Heralds in London for formal preparation by the Chester Herald, in the end the design which was finally sent to the King for approval in November 1950 was rather different and showed a flash of lightning surmounted by a torch.³³

By the early 1950s the School had put behind it the initial experience of disappointingly small apprentice intakes and was admitting an average of 30-35 trainees annually; in 1952 the intake was a very satisfactory 49. Included in the new courses from 1951 were members of the Royal Pakistan Air Force, again matching the practice adopted at Wagga; five entered with No. 5 Diploma Course in March 1951, and eight the following year.³⁴ While the sending of Pakistani trainees stopped within a couple of years, their place was taken from 1960 by members of the Royal New Zealand Air Force who made their impact felt from the outset. I.D. Guthrie, a member of the 14th Intake which graduated in August 1962, not only won the Apprentice of the Year award in Victoria (made by the Victorian Apprenticeship Commission) for 1961,³⁵ but became both the first member of a RAAF radio apprentice course to reach the rank of Warrant Officer Apprentice and the first RNZAF member to lead a RAAF radio apprentice graduation parade.³⁶

Not all the problems of the first few years had disappeared, however, least of all in the matter of the capacity of entrants to absorb the content of their academic course at MTC. In 1955, for example, a mathematics instructor at the College reported that of the 40 RAAF apprentices who had commenced in one particular class of diploma level mathematics, only three had clear passes. This problem of the low educational standard of apprentices at entry took a different turn when MTC instructors observed that, not only could many of the trainees not handle the level of mathematics required for diploma work, but 'in extreme cases some trainees either made little attempt to succeed in their studies or deliberately attempted to fail in order to gain release from the air force'.³⁷

Despite what this suggested about the overall standard being achieved in studies, it was notable that the best of RAS's students were frequently the best in the air force. Following the institution in 1957 of the Governor-General's Medal for the 'most outstanding RAAF Apprentice of the Year' - that is, from both Wagga and Froggnall, rather than just within Victoria - this award went to Froggnall apprentices R.T Orr in 1958 and P.B. Laird in 1967.³⁸

At the end of 1960 radio apprentice training underwent a major upheaval following an announcement earlier in the year by the Minister for Air, F.M.

³¹ E.R. Hall, *A Saga of Achievement*, p. 272.

³² Air Board Agendum No. 10009.

³³ Richard J. Cluley, *Unit Badges of the Royal Australian Air Force*, RAAF Association Foundation, South Yarra, Vic, 1990, p. 69.

³⁴ E.R. Hall, *A Saga of Achievement*, p. 274.

³⁵ *RAAF News*, June 1962, p. 5

³⁶ E.R. Hall, *A Saga of Achievement*, p. 276.

³⁷ Murray-Smith & Dare, *The Tech*, p. 286.

³⁸ E.R. Hall, *A Saga of Achievement*, p. 275.

Osborne, that the RAAF establishment at Ballarat would close and the School of Radio relocate to the Laverton base west of Melbourne, on the Geelong highway.³⁹ Also to be transferred to Laverton was the Radio Apprentice School, which actually made the move from Frogner in December that same year. RADS' move was carried out in April 1961, and on 1 May the two entities were amalgamated - the apprentice school reforming as a squadron within the school. RAAF buses were again used to daily transport apprentices over the 20 or so kilometres between Laverton base and RMIT.



The Duke of Edinburgh chats with Wing Commander E.R. Hall, CO of RADS, and Corporal Apprentice R. Dries in the Melbourne Town Hall in May 1968. Corporal Dries had earlier been presented with the award of RAAF Apprentice of the Year for 1967. (RAAF Museum, Pt Cook)

Accompanying this change in location was a restructuring of the course itself, with higher-level Diploma studies being detached into a separate stream entirely and carried out within a new unit known as the Diploma Cadet Squadron (see Chapter 7). Henceforth all youths selected for radio apprenticeships did a Radio and Electronics Technician Certificate course at RMIT, plus eight months at RADS. The latter phase entailed further instruction in airborne and ground radio communications - and radar equipment used in the RAAF - to provide practical consolidation of the academic theory gained at RMIT, and meant that the period of formal training still totalled three years. On completing study at RADS, apprentices received a RAAF graduation certificate and became aircraftmen, but were required to spend a further year at selected units gaining practical experience under

³⁹ *RAAF News*, February 1960, p. 1.

supervision. A fifth year of field employment entailed 'practical production work', and only then was an Apprentice Proficiency Certificate awarded.⁴⁰

By the time of the shift to Laverton, there had been some significant changes to the lifestyle of apprentices. For a start, pay was more generous - ranging in 1963 from £9/5/8 (\$18.58) for a first year apprentice to £11/18/8 (\$23.88) for one aged 18 in his third year. Local leave was also more liberal after the first eighteen months, extending beyond the previous Sunday period between noon and 10.30 pm and Saturday morning shopping once a month to include Friday evenings to midnight and Saturdays to midnight (with the start-point on the latter alternating between 8 am one week and 5 pm the next). Third year apprentices and those holding corporal rank enjoyed even greater freedom in the matter of leave.⁴¹

Despite what were undoubtedly improvements, the apprentice scheme as it applied to radio tradesmen continued to encounter some formidable problems in attracting and retaining suitable entrants. The wastage rate in Apprentice Squadron at Laverton was disturbingly high during the early 1960s, reaching 37 per cent for No. 16 Course which graduated in August 1964. A similar trend became apparent with No. 17 Course which started in January 1963, with five members out of 43 electing to seek their discharge during the first three months. So concerned was the RAAF over the position that in 1965 the decision was made to admit a second intake at the mid-year point. This plan foundered when only four suitable applicants could be found for the 24 places it had been hoped to fill - the result of candidates who were educationally qualified having already found employment or returned to their school studies. Attention was subsequently focussed on reducing the loss of apprentice numbers by other means, so that by the time No. 19 Course graduated in 1967 the rate was down to 23 per cent. This at least matched the comparable rate among adult training courses for radio mechanics also passing through RADS, which averaged 22 per cent.⁴²

While these were facts which seemed to indicate that the scheme - after 20 years of existence - still faced some significant problems, this was an impression which could be answered by pointing to the scale of what had been achieved in the same period. For example, up to the start of 1968 the scheme had produced 410 graduate radio apprentices, of whom 106 (or one-quarter) had been granted commissions. Within the latter officer group were no fewer than 20 squadron leaders.⁴³ Illustrative of the diverse way in which graduates were making their impact felt within the RAAF by this 20 year milestone was the achievement of A.T. Blyth, a member of 15th Intake who graduated in 1963, remustered to aircrew and topped the pilots course which graduated from the Applied Flying Training School at Pearce in August 1967.⁴⁴

What lay behind the problem of apprentice retention was unlikely to have been one single cause, but a combination of pressures arising from the nature and pace of the training and the close-knit environment in which this was conducted. One factor which was only reluctantly acknowledged by the RAAF was undoubtedly

⁴⁰ Pamphlet entitled 'Prospectus: RAAF Apprentice Scheme', May 1961, pp. 8-10, copy in RAAF Museum, Point Cook.

⁴¹ E.R. Hall, *A Saga of Achievement*, p. 277.

⁴² *Ibid.*, p. 278.

⁴³ *Ibid.*, p. 280.

⁴⁴ *RAAF News*, September 1967, p. 1.

the presence of 'bastardisation', or what could largely be described more simply as bullying. In January 1972 RADS found itself at the centre of a public scandal over an episode of this kind, involving a member of the year's new intake who sought his discharge the day after his arrival. Within days of the youth's request being acceded to, claims surfaced in the press that the individual concerned was alleging he had been mistreated by senior apprentices.⁴⁵



Aerial view of the new School of Radio building at Laverton the day after its official opening on 3 December 1974. The apprentice quarters were in the three storey block to the left of the main H-shaped building, while a number of the wartime huts which formerly housed the school are in evidence in the foreground. (RAAF Museum, Pt Cook)

That an incident of this kind arose at this time was not in itself surprising. Following a public outcry in 1969 over revelations of conduct of this kind at the Royal Military College, Duntroon (where the term bastardisation had originated), and a similar furore involving the Navy during April 1971, there was always the likelihood that heightened public awareness and scrutiny would produce allegations of this kind against the Air Force. In anticipation of this occurring, repeated warnings and requests for assurances had been passed accordingly to several RAAF units, including RADS. The real cause for surprise lay in the fact that controversy - when it perhaps inevitably came - should have involved RADS rather than RSTT, since anecdotal evidence indicates that such practices (called 'sproggng') were both worse and a far more entrenched feature of apprentice life at Wagga than they ever were at either Frogner or Laverton.

⁴⁵ Department of Air file 625/1/103, Pts 1 & 2, held by Department of Defence.

A court of inquiry which was convened found clear evidence that the complainant had indeed suffered harassment from senior apprentices, although only in very mild form and not until some days after he had actually requested discharge for unrelated reasons. The fact was that the seniors had not even returned to RADS from leave until the day before his discharge could be effected. It was indisputable, however, that before his departure he had been involved in an episode in the showers in which he and other new arrivals had been subjected to indignities. More horrifying was the discovery by the court that illegal 'indoctrination procedures' had continued for a week afterwards and involved innumerable activities far worse than those which had become public, including the physical assault of five first-year apprentices by second-year men. As a consequence of these findings, nine leading apprentices were charged and faced disciplinary action.

By the mid 1970s radio apprentice training was on the verge of another important change. In 1969 RMIT had replaced its Technician Certificate course with a two-year Trade Technician course which all RAAF radio apprentices undertook, followed by a further eight months training at RADS. This arrangement continued until 1975, when all radio trade apprentice training was focussed on Laverton and was undertaken solely by RAAF instructors. It was at this stage that the RMIT's long involvement in providing this form of training to RAAF personnel was brought to a close.

Part of the rationale to this change was that from the end of 1974 RADS finally had, for the first time, the sort of facilities which allowed the teaching of advanced technical training in the radio and electronics field. A new complex, costing \$4.5 million to construct and 'many hundreds of thousands of dollars more' to furnish and equip, was officially opened by the Air Officer Commanding Support Command, Air Vice-Marshal G.T. Newstead, on 3 December.⁴⁶ The availability of the ultra-modern main building, replacing the conglomeration of 69 sub-standard timber and galvanised iron huts and portions of two hangars which had been housing the school for 13 years, suddenly brought the RAAF into the forefront of teaching radio skills.

Within what was now a very large establishment, the Apprentice Squadron formed only a fairly small part of what was a constantly varying student population - probably no more than about 20 per cent of the trainee total of around 500. Although a distinct and recognisable group, both within the School and on the base, they were always outnumbered by adult trainees - even after the arrival of the new Technologist Apprentice intakes from the start of 1982 (see Chapter 8).

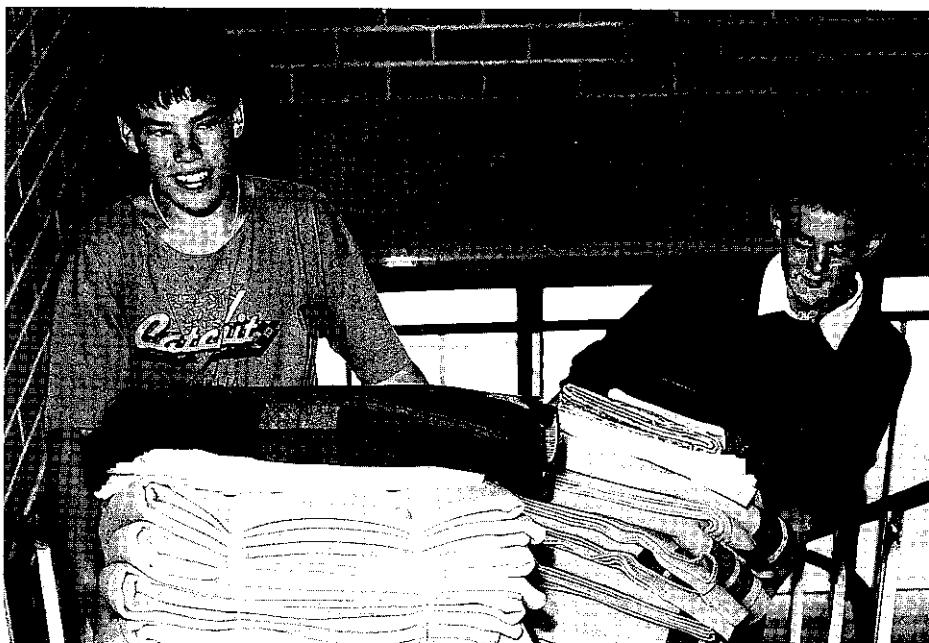
From the mid-1980s the make-up of the apprentice population underwent a further change with the arrival of the first females - initially two technologists in 1984, followed by the first trade apprentice the next year. As the warrant officer responsible for the general service training of apprentices at the time recalls:

The two female technologists were older, about 19, so they were more mature than the trade girl who was only aged 16. They all handled the situation very well indeed, but I guess the pressures would have been on

⁴⁶ *RAAF News*, December 1974, p. 4.

them as the few females in such a male environment, what with the swearing, joke-telling and normal sexist behaviour.⁴⁷

At times the actions of individuals continued to reflect disproportionately on the apprentices as a whole, for both good and bad. The detection in 1982 of a group engaged in stealing car parts was one case where the conduct of a few individuals had a serious impact on the standing of the entire senior course. For the most part, however, staff and students at RADS describe the place as operating like an extended family.



Members of the new apprentice intake at the School of Radio begin settling into the barrack block in January 1989. (CPE)

In other respects the state of affairs at RADS was less than idyllic, which showed up in the rate of study failures being experienced in the early 1980s. Figures available for Nos. 31-33 Courses passing through the School between January 1977 and November 1981 disclose that these had lost 30-40 per cent of their numbers before graduation. Not all those apprentices removed from training were totally lost to the RAAF, admittedly, since many were transferred to adult training courses and retained. But out of a total of 140 members in these intakes, 51 (or 36 per cent) were listed as failures and of these 39 had been discharged.

47 Information of Warrant Officer R. Lovett, 12 November 1996.



Radio apprentices receive a briefing during their training bivouac at Anglesea, on the coast, south of Geelong, in April 1990. Female students had been included in apprentice intakes since 1985. (CPE)



The CO of School of Radio, Wing Commander V.D. Robinson, presents a cane to Flight Sergeant Apprentice Wendy Jensen on her promotion as the first female Warrant Officer Apprentice in the RAAF in April 1990. (CPE)

As always, the underlying causes for such a position were many and varied. One particular problem experienced at the time arose from the physical deterioration which quickly set into the heating system of the RADS new building, caused by corrosion in the pipe-ducts sealed within the complex's concrete slab floor. Because of the difficulty in fixing the problem it was not unusual for staff members to find apprentices trying to study in their rooms at night huddled under blankets to keep warm. It was also in an attempt to turn around the situation regarding apprentice failures that steps were taken in 1982 to revise the syllabus, conduct pre-course remedial training in mathematics and increase the level of such help given to those found to be failing examinations.⁴⁸

Other changes to the emphasis enjoyed by the radio apprentice scheme also began to become apparent, most notably in the progressive reduction of the duration of courses. One former CO of the School in the early 1980s describes what was happening in the following terms:

Whereas adult trainees did all their induction training at Edinburgh [in South Australia] before they came here to do their trade course, apprentices came straight to Laverton and did all their military training spread throughout the three years they spent here. The apprentices were seen as long-term career NCO prospects, and in recognition of the fact that the RAAF expected them to be around for a long time a bit more was added to their training as well; they did a bit more in the area of digital electronics and radar, and they had about 10 per cent more time tacked onto their practical training. So in that sense they came out with a better, more rounded education than the adult trainees, and I think that the apprentices responded to that - they knew they were seen as a little bit special. Once the RAAF began to experience pressure on its manpower numbers, though, and the need turned to reducing the number of people under training and getting the people tied up in instructor positions back out to squadrons, all that difference started to disappear. This meant the 10 per cent of additional practical work and the other extras gradually got whittled away, to the point where at the end there was no practical difference in the training at all. You can imagine apprentices saying to themselves, 'Well I am not getting an extra training compared to the adult trainees. And I am spending three years on apprentice wages whereas they come in, do maybe 15 months, and are out getting full technician's pay. What's the point of being an apprentice?' Quite apart from that, within the whole population group from which we were looking to draw our apprentices things were becoming a lot more competitive. The government was encouraging young people to stay on at school till Year 12, so it was getting increasingly difficult to attract the people we wanted for apprentice training. It was in this period, from about mid-1984, that I recall there began to be discussion about whether or not the RAAF could justify keeping its scheme going. The talk wasn't serious at that stage, because it

48 Parliamentary Standing Committee on Public Works report on proposed construction of additional training and sleeping accommodation at RAAF Base Laverton, 1982, pp. 8-9.

was government policy that there should be apprenticeships, but once that requirement changed then it was only a matter of time.⁴⁹

As this observation foreshadowed, the scene was already set for the final stage of change described in Chapters 8 and 9.

⁴⁹ Information of Group Captain D.R. MacCarthy, 14 November 1996.

CHAPTER 6



JUNIOR TRAINEES: 1952-1959

Less than two months after the RAAF had formally begun training engineering and radio apprentices at the end of January 1948, moves were initiated to extend the concept to clerical trades as well. In March the Air Member for Supply and Equipment, Air Vice-Marshal G.J.W. Mackinolty, wrote to remind the Air Member for Personnel (Hewitt) that the idea of recruiting equipment assistants and clerks as apprentices had been discussed 12 months earlier, when the scheme was still under consideration. According to his recall:

It was agreed at the time that the Technical Trades had a very high priority, and that consideration regarding the addition of further musterings should be deferred until the training of Technical Apprentices was underway.

Since then, the shortage of equipment personnel had become 'extreme', and Mackinolty now felt compelled to suggest that steps be initiated to include non-technical trainees among the next batch of apprentice applicants.¹ Acting on AMSE's request, Hewitt brought a submission before the Air Board meeting on 3 September to propose that it approve, in principle, the introduction of apprentice training for a proportion of the personnel in equipment and administrative musterings. In support of this step Hewitt produced figures showing that the service was suffering acute shortages in the categories of Equipment Assistant, Clerk Stores and Clerk General. The rate of enlistment in these areas had fallen so low since the end of the war that the number of personnel actually available to fill positions was 50-60 per cent less than required. Indeed, matters had reached a stage where it was extremely difficult to maintain the 'paper' side of the air force's activities at a reasonable working level.²

Noting that the RAAF's apprentice scheme had been instituted to overcome similar deficiencies on the technical side, AMP made the point that for the engineering and radio musterings to be fully effective they had to be supported by equipment and administrative musterings trained to a comparable standard. To overcome the serious imbalance which had arisen, urgent and special measures were now needed - primarily, the introduction of an Administrative Apprentice Training Scheme along the same lines as that operating in the RAF. This was, Hewitt claimed, 'the best solution to the problem'.³

¹ Minute from AMSE to AMP dated 23 March 1948: AA, CRS A705/1, file 208/88/1.

² Air Board Agendum No. 8966.

³ AMP's submission dated 30 August 1948, on Air Board Agendum No. 8966.

Under the scheme proposed, candidates would be enlisted under the same basic terms as the existing apprentices. At some 'convenient' location - the GTS at Wagga was suggested as the most suitable - they would undergo a formal course lasting 16 months (six of which would be common to all musterings), followed by practical on-the-job training at selected units for a further eight months. On graduating they would be 'eligible' to enter the adult service at normal rates of pay and conditions, and obligated to serve for 12 years. Again the aim would be to fill at least 60 per cent of establishment vacancies by this means (the remainder coming from qualified adult applicants or adult trainees), necessitating an intake of 61 apprentices annually after making allowance for a 'wastage' rate of ten per cent.

The Air Board recommended the scheme to the Minister for Air, Arthur Drakeford, but a month later a minute came back from the minister's office stating that he was not prepared to approve it. Drakeford considered that apprentice training in the RAAF 'should be confined to highly technical key musterings', and that filling clerical positions should be done 'by the normal means of airmen recruitment'. Noting that the AMSE had recently visited England and looked at the RAF practice of using civilians as well as service personnel at stores depots, he also wanted to know the Air Board's views on whether such a policy might be adopted locally, either wholly or in part.⁴

Not until June 1949 was the Board ready to respond with its views on the practicability of substituting civilians for servicemen at stores depots. On 2 June Mackinolty provided his colleagues on the Board with a copy of the report of his visit to RAF maintenance establishments which noted the benefits in terms of cost economies and staffing stability that flowed from utilising non-service manning. He also drew attention, though, to the penalties associated with the practice, deriving from service requirements for posting flexibility and availability of staff outside normal working hours, and the frequently remote location of bases. Judged on this UK experience, he accordingly emphasised the need to safeguard service requirements such as mobility and training.⁵

Backed by AMSE's observations, the Board proceeded to advise Drakeford that greater use of civilian personnel in RAAF stores depots was a viable option only to a limited degree, because of the primary goal which the government had set for the RAAF of creating a nucleus force for war. While a small civilian element could, with advantage, be permanently employed in peacetime on such duties as stocktaking and stock location, the need to have the uniformed personnel who would, on mobilisation, become the equipment officers and NCOs of a force expanded fifteen-fold precluded the practice being seen as a proper solution. Instead, the Board advised, the AMP was in the process of drafting a re-statement of the case for the introduction of training for junior enlisted personnel in such duties.⁶

The revised scheme which Hewitt's successor, Air Vice-Marshal F.M. Bladin, tabled at the Board's meeting on 4 October varied only slightly from that originally presented. A training period of two years was still envisaged, although this now comprised nine months 'devoted to education, General Service and

⁴ Minute by A.S. Drakeford dated 1 October 1948, on Air Board Agendum No. 8966.

⁵ AMSE report dated 10 February 1949, bound with Agendum No. 8966.

⁶ Air Board minute of meeting on 21 June 1949, Supplement No. 1 to Agendum No. 8966.

mustering training', followed by 'a further 15 months productive work integrated with regular training periods at selected RAAF stations'. The main difference lay in how the scheme was described to the Minister for Air. In deference to the attitude previously taken by Drakeford, this time there was no reference to what was proposed as being a form of apprenticeship - now it was called a 'Junior Equipment and Administrative Training Scheme'.⁷

Despite this charade, Bladin was adamant that little had changed in the situation justifying the adoption of such a solution. In the year since the idea had been first mooted, the shortage of equipment assistants had been reduced to 32 per cent, but the deficiency in the number of stores clerks still stood at 55 per cent while that for general clerks had actually worsened to 69 per cent. What was not stated here was that the improvement in the first category had been achieved by remustering stores hands - a source of supply which, as one director in AMSE's branch advised, was not only 'rapidly becoming exhausted' but was non-renewable since 'very few (if any) new stores hands are being recruited'.⁸ In fact, so severe was the shortage of clerks that by the year's end, Bladin was seeking Board approval to send 20 RAAF personnel for tuition in typing and shorthand at a civilian business college as a special relief measure.⁹

Bladin offered two additional arguments for looking to some form of junior training to ease the problem. Firstly, he pointed out that 'there is too great a time lag between the age at which the average boy leaves school (15 years) and the minimum age at which he can enter the RAAF (18 years)'. This naturally meant that the bulk of the better type of potential candidates had been absorbed into careers with civilian employers. The only counter the RAAF had was to seek to attract these candidates soon after they left school - in the same way that numerous other organisations did, including the Commonwealth public service, the RAF, and even the Royal New Zealand Air Force.

Secondly, it had been noted that many unsuccessful applicants for RAAF engineering and radio apprenticeships 'were in fact very suitable for clerical and equipment musterings', and many had even expressed interest in these avenues of employment. The RAAF was, therefore, actually missing out on a valuable potential source of supply by not being able to offer training positions for a lower age group.

Despite the negative view he had earlier taken, this time the minister was persuaded. On 7 October 1949 Drakeford agreed to the scheme in principle, and called for detailed proposals to be developed and submitted for final approval before implementation. Still evidencing a degree of caution, however, he also requested brief comparative details of 'any like schemes which may be in operation in the RAF or other Forces of the British Empire'.¹⁰

The minister's requirements were duly met, though not until May 1950 - by which time there had been a change of government and T.W. White (a group captain in the wartime RAAF) was now holding the Air portfolio. In a submission presented by Bladin for the endorsement of his Air Board colleagues meeting on 5 May, it was pointed out that the proposed junior airman training scheme was along

⁷ Supplement No. 2 to Agendum No. 8966.

⁸ Minute by Wing Commander C.G. Cleary to AMSE dated 23 November 1948: AA, CRS A705/1, file 208/88/1.

⁹ Air Board Agendum No. 9976.

¹⁰ Drakeford's minute, bound with Agendum No. 8966.

similar lines to schemes which both the RAF and RNZAF had implemented. However, whereas trainees at the RAF school for administrative apprentices at St. Athans underwent 16 months of instruction followed by eight months 'productive training at units', these proportions were virtually reversed under the RAAF scheme.¹¹



A view of RAAF base Rathmines in 1953, showing the Airmen's Mess at right with the JEAT dining and social building beside it, and one of the JEAT accommodation huts partly visible behind that. Buildings in the distance (beyond the group of pine trees) were part of Rathmines township. The photograph was taken shortly after a very heavy storm, when the waters of Lake Macquarie rose sharply and lapped around the footings of the base buildings pictured. Although the water level has already partly receded, some damage to the dining hall's foundations is evident. The cement blocks in the foreground were formerly used to secure Catalina flying boats which operated from the base. (B.L. Owens)

¹¹ Bladin's submission dated 2 May 1950, Supplement No. 3 to Agendum No. 8966.

In refining the details of the scheme, some changes had also become necessary. For example, the proportion of the relevant musterings which the scheme was meant to fill was reduced from 60 to 50 per cent, and an equal proportion filled by adult entry. This was because of plans to re-form a women's branch of the service - the Women's Royal Australian Air Force (duly formed in November 1950) - whose members would be allotted to some of the available clerical vacancies. As a result, it had been estimated that the annual intake of junior trainees required was 54.

Another significant variation concerned the location of training. While it was considered 'desirable' that this ultimately be conducted at the former GTS (recently retitled 'RAAF Technical College'), there was not enough accommodation available at Wagga at present - nor would there be for some time. The solution proposed was to send the trainees to the RAAF station at Rathmines, New South Wales. Here a sub-unit of the GTS known as 'Detachment A' had been operating since September 1949, conducting basic fitting courses for intakes of adult trainees.¹² Occupying a picturesque location on the shores of Lake Macquarie, the base had formerly been home to No. 11 Squadron, a unit of the RAAF's maritime reconnaissance arm equipped with Catalina flying boats. These aircraft had been withdrawn from service in 1950, however, from which time the base's accommodation and other facilities were increasingly given over to educational activities.¹³

Bladin's proposals were duly recommended by the Air Board to the minister and gained White's approval on 3 August, subject to Treasury agreement. Once notification was received in March 1951 that details regarding pay, allowances, leave, and superannuation had been approved by the Treasurer, the Junior Equipment and Administrative Training (JEAT) scheme was finally up and running.¹⁴ When the three-man panel was constituted in November 1951 to select candidates for the 1952 intake of apprentices, its members were also tasked to choose the first JEAT course.

Just as had occurred with recruiting of apprentices, the initial reception of the JEAT scheme was not all that had been hoped for. The president of the selection board for the first intake, Wing Commander W.J. Cameron, referred in his report to the insufficient number of candidates to fill the 45 vacancies initially made available. Only 30 applicants had attended for interview, not all of whom were judged suitable. The possibility of a serious shortfall was avoided, however, through there being a surplus of suitable applicants for engineering apprenticeships, with some consequently failing to receive offers of positions. Since many of those rejected were assessed as suitable for clerical training, they were advised to reapply for entry under the JEAT scheme. A number had actually done so and were likely to gain enlistment, Cameron noted, 'and thereby fill the quota for the scheme'. While this was a disappointing start, he nonetheless predicted hopefully that as the scheme 'gets more widely known it will meet with a better response'.¹⁵

¹² AA, CRS A705/1, file 208/31/5402.

¹³ Alan Stephens, *Going Solo: The Royal Australian Air Force, 1946-1971*, Australian Government Publishing Service, Canberra, 1996, p. 400.

¹⁴ Minute by H.C. Newman, assistant secretary in Department of the Treasury, to Secretary of the Department of Air, dated 1 March 1951, bound with Agendum 8966.

¹⁵ Selection board report, undated, on AA, CRS A705/1, file 208/88/15 Pt 2.

In anticipation of the arrival of the first trainees under the JEAT scheme, another supplementary training establishment was raised at Rathmines on 1 October 1951 as an extension of the RAAF Technical College at Wagga. Known as 'Detachment C' (to distinguish it from Detachment A already there, and Detachment B functioning at Canberra), this was commanded locally by Squadron Leader H.L. Hoare - a 47-year-old Equipment Officer who had formerly been the manager of a finance company before joining the wartime RAAF in 1942 - but remained under the direct command of the CO of RAAF Technical College.

In January 1952 the 45 members of the first intake arrived to start training in one of the three musters of Clerk General, Clerk Equipment (formerly Clerk Stores) or Equipment Assistant. Flight Lieutenant C.A. Vardy, who arrived in December 1952 to become senior instructor and also act as the adjutant, felt he detected something of a feeling among 'the boys' that Rathmines was a 'bit of an outpost' but considered that the detachment became a very happy unit despite this.¹⁶ Members of the first two courses mostly concur, reflecting on the idyllic surroundings in which their training took place. The isolation of Rathmines was eased by weekly visits to the cinema at nearby Toronto, and participation in local events such as Anzac Day ceremonies in which 'JEATs' (as the trainees were duly known) provided the guard of honour, while the base's locale provided a most attractive setting with the barracks and mess-hall situated close by the shore of Lake Macquarie.

The proximity of the lake did, however, have some less fortunate consequences. As one member of the second course recalls, when the lake level rose dramatically following heavy rains in 1953 the water was soon lapping around the huts' foundations. At least this meant that any JEATs who wished to go fishing for a time need do nothing more than cast a line from the steps of their living quarters. The lake was the scene for a swimming tragedy in 1953, too, during a



At Wagga, members of JEAT courses experienced the same Spartan living condition as the Apprentices. This is the bedspace of one JEAT in 1955, complete with sagging bed-springs. (C.A. Makin)

¹⁶ Information of Wing Commander C.A. Vardy, 29 June 1996.

visit to the base by a party of Wagga apprentices. While using the camp's swimming pool (actually just a fenced-off area of the lake), one of the visitors dived in and suffered fatal neck injuries - thereby involving the JEATs in a service funeral for the victim at Newcastle.¹⁷

Once actually begun, the structure of the course for JEATs underwent still another change from that originally envisaged. A recruiting advertisement carried in the press during August 1952 reveals that not only had its duration been shortened from two years to just eighteen months but that this period was now equally divided between initial classroom instruction carried out at Rathmines and 'second-phase' practical training planned to be carried out on-the-job in units.¹⁸

Despite the hopes initially expressed of attracting suitable applicants in larger numbers, this proved not to be the case when the time came to select the second intake for entry in January 1953. The president of the panel which began its visits to all state capitals and Townsville on 6 October 1952, Wing Commander C.R. Taylor, again remarked on the small number of applicants for traineeships. This had inevitably meant that candidates who failed to gain selection for radio and engineering apprenticeships were once more diverted to the JEAT scheme in order to reach an intake level which eventually numbered only 36. While this practice was undesirable on several grounds, it was essential if the JEAT school was to be maintained at a reasonable training strength. For the same reason it was also necessary to accept all those assessed as suitable, irrespective of variations between the best candidates and those rated as barely passable. 'Such action...', Taylor commented, 'would normally be most undesirable from the overall Service viewpoint'.¹⁹

Detachment C remained at Rathmines until December 1953 when it was disbanded and absorbed back into its parent unit, the Technical College (since renamed again, this time as 'RAAF School of Technical Training' or RSTT). Detachment A had been similarly disbanded in July that same year, and Detachment B in September. The move itself gave little pleasure to those involved in carrying it out, especially the Clerks General of No. 2 Course who had just completed their classroom phase at Rathmines and were about to undergo their second-phase training at Wagga. These found themselves packing up the detachment and unpacking it in its new location amid some striking contrasts. As one member recalls, unlike his arrival at Rathmines at the beginning of the year when he had been greeted with 'clean accommodation all ready to receive us four to a room', at Wagga they were met with no preparation: 'The barracks we were allocated were filthy, we were placed 16 to a room and given broken beds.'²⁰

Things were not markedly better for the members of the new course (No. 3) who arrived in the January after the move. The much smaller intake of JEATs was accommodated in their own huts among those of the much larger population of Apprentices, and were somewhat dismayed to discover their presence was actually resented. Says one member of this group, 'I suspect it was principally because we were there for a shorter period, and were slightly better paid'.²¹ The financial

17 Information of Warrant Officer B.L. Owens, 28 June 1996.

18 *Age* (Melbourne), 5 August 1952, p. 4.

19 Selection board report dated 7 November 1952, AA, CRS A705/1, file 208/88/15 Pt 2.

20 Information of Wing Commander K.R. McMartin, 28 June 1996.

21 Information of Corporal (later Rev.) B.W. Green, 28 June 1996.

difference may well have been an issue, since under pay scales applying from 1952 all first-year Apprentices aged under 18 received the pre-decimal equivalent of only \$4.27 a week compared to the \$12.31 paid to a 17-year-old JEAT; however, a 16-year-old JEAT drew only \$7.53 and one not yet 16 received only \$4.03. Moreover, Apprentices received free uniforms throughout their period of training, whereas once JEATs reached the age of 17 they were expected to provide their own replacement uniform needs from an allowance of \$1.23 a week.

The staff from the former Rathmines detachment also noticed a distinct air of unwelcomeness about their reception at Wagga. Vardy confirms a belief that the RSTT 'didn't really want the JEATs there', and adds that this led to fears for the scheme's survival and a concern to remain separate enough to prevent it being swamped. Try though the trainees themselves might to emphasise their uniqueness in their new surrounds - even telling local girls they met that JEAT was an acronym for Jet Engineer and Aeronautical Trainees (or Technicians) - this fiction was hard to preserve when they shared the same accommodation as Apprentices and wore the same distinguishing blue triangle on their uniforms.

The transfer to Wagga inevitably meant that the JEAT scheme was effectively absorbed into the wider world of the Apprentices, even down to using the course names adopted by each new intake. This degree of integration was formalised in a reorganisation of RSTT from 1 March 1956 and the formation of 'Apprentice & Junior Trainee Squadron' under Squadron Leader R.W. Davy. The new set-up was not wholly to the liking of the JEAT intakes, who found that they endured the worst of the system of fagging which was in operation but, because their course lasted only a year, were denied the opportunity to 'dish it out' subsequently as a senior.²² Also, although the JEAT intake did their year basically with the new Apprentices, by the end of that single year they were expected to be ready to march out with third-year Apprentices on graduation - which meant that the drill instructors drove the JEATs 'pretty hard'.²³

These consequences of the JEATs' one-year presence at Wagga were not as momentous as some others. Most important was the problem arising from the youth of many JEATs on commencing their course, which meant that even on completion of their second-phase training 18 months after enlistment some were still under the age of 18 years. Not only did they have to wait around, in effect, for up to 12 months before legally they could be employed as airmen in an adult mustering but they also could not receive full adult pay before then. Until they reached 18 they were paid at 'Recruit, Minor' rate.

JEAT training was at least unusual in having a female instructor, in the person of Sergeant E.G. Sharpe, the senior instructor in shorthand and typing. In the overwhelmingly male community of Wagga in 1954 she was reportedly a 'great hit' with her students, one of whom recalls that: 'She was in her mid-30s, but to a bunch of randy 16-year-olds she seemed like an 18-year-old'.²⁴ This situation did not continue for long. When Sergeant Sharpe completed her term of engagement in the WRAAF and took her discharge in April 1955, the task of instructing No. 4 JEAT Course in shorthand and typing was taken over by Aircraftman C.H.

²² Information of Sergeant G.F. Peace, 30 June 1996.

²³ Information of Warrant Officer D.E. Lord, 29 June 1996.

²⁴ Information of Corporal R.C. Blunt, 28 June 1996.

('Chick') Golding, a graduate of No. 1 JEAT Course who had been posted back to RSTT as a Clerk General.



Members of No. 6 JEAT Course celebrated their graduation at the end of first-phase training in December 1957 with a dinner at a Wagga Hotel, joined by a few of their instructors. Since the average age of the course was only 16, the occasion was 'dry'. (W.J. Beaumont)

Once relocated to Wagga, the JEAT course continued to evolve. As a recruiting information brochure from June 1955 made clear, the 'educational and commercial training' carried out under the scheme with the aim of producing 'skilled administrators' had undergone further refinement. Now trainees were required to spend a year at RSTT, followed by a six-month posting to a unit. And whereas originally JEAT course members prepared for only three clerical musterings, from the fifth intake in 1956 a fourth mustering - Clerk Equipment Accounts - was added. This range of musterings covered by the scheme continued until 1959, when the whole intake was trained only as Clerks Equipment.

The decision to have solely Clerks Equipment for No. 8 JEAT Course was only announced in the first week after the intake had arrived at Wagga and came as a considerable disappointment to some entrants. Although each new batch of JEATs did not know for which mustering they would be trained when they arrived - this being sorted out subsequently based on aptitude tests - many had clear-cut personal preferences. For example, Noel Wainwright, a member of this course, recalls:

The vocational guidance people at the technical high school I attended in Sydney had been steering me towards commercial administration, so I wanted to be a Clerk General. In fact, I never felt entirely comfortable with

Clerk Equipment work in the RAAF, and over time this became an incentive for me to further my education with the aim of obtaining a commission.²⁵

In the event, the 1959 intake turned out to be the last recruited under the scheme - a fact which only became known informally to members of No. 8 Course already undergoing training about mid-way through the year.²⁶ The explanation which RAAF authorities gave for this decision was that 'JEAT training had been suspended for the time being ... [because] it was thought necessary to see what could be done with Adult courses and shorter training'.²⁷ The fiction that the scheme had been placed temporarily in limbo, rather than instantly and formally abolished, was preserved for a considerable period. For instance, unit history records of RSTT show that an annual establishment for 45 JEATs continued to be carried on the books throughout 1960-61, but without any recruitment being conducted to fill these vacancies.

The last that was actually heard of the scheme was a dinner held at Wagga on 1 July 1960 for the 21 graduates of No. 8 Course, who returned from periods of attachment to Stores Depots for final trade testing upon completion of their second-phase training. At this function the course members, with senior officers of RSTT and course instructors, heard Group Captain I. Yeaman (Senior Equipment Staff Officer at Support Command) speak in praise of the scheme and remark 'with a good deal of regret' at its passing.²⁸

Why this decision was made to let the JEAT scheme go quietly out of existence seems to be the subject of differing interpretations. According to one account, it resulted from conclusions having been drawn by senior RAAF management that 'the scheme had not attracted "personnel of the right calibre"; the wastage rate was high; and it was more economical to train adult recruits'.²⁹ If these were truly the relevant factors behind the scheme's abandonment this would be ironic, since taken individually each of these arguments are either demonstrably wrong or represent only a partial case or explanation.

So far as the complaint about the quality of trainees is concerned, it was pointed out that a number of these were 'failures' from the trade apprentice scheme (not just candidates diverted at the selection stage but members who had actually failed on course) and these could be expected to 'have had a reduced level of motivation and interest to succeed in such training'.³⁰ Close examination of the composition of JEAT courses discloses only five instances where 'drop-outs' from the Apprentice Scheme were re-enlisted as junior trainees; four of these individuals joined No. 7 Course and all graduated, so certainly cannot be said to have been failures. While oral evidence confirms that some JEATs were disappointed at not being given their first preference of a place in the Apprentice Scheme, it is clear that this aspect provides only part of the story.

²⁵ Interview with Group Captain N.K. Wainwright, 22 October 1996.

²⁶ Information of Leading Aircraftman R.M. Harvey, 30 June 1996.

²⁷ *The Apprentice Journal*, 1959-60, p. 38.

²⁸ Unit diary for Apprentice and Junior Trainee Squadron, RSTT, 1956-1960, held by RAAF Museum, Wagga.

²⁹ Sowter, Warren, unpublished thesis, *A History of the Royal Australian Air Force School of Technical Training*, Sydney College of Advanced Education, 1987, p. 43.

³⁰ *Ibid.*, p. 43.

At least one example exists of an applicant for an engineering apprenticeship having been 'conned' into becoming a JEAT and resenting it, with the result that he initially had no interest in the course and candidly admits to having 'played up' and 'acted the smart-arse'.³¹ What is interesting, however, is that the reverse process can be demonstrated to have applied, in the case of an applicant for a JEA traineeship having been selected in 1957 for an apprenticeship instead. In this instance, the youth found after six months that he could not handle the technical training and was prompted to ask for his original choice. He was accordingly employed as a 'gopher' for the rest of the year, until able to join No. 7 JEAT Course in January 1958.³²

Claims about the backgrounds of JEAT applicants can also be misleading. It appears to be generally true that entrants to the scheme came from less 'well-to-do' families, or the sector of Australian society which was finding things more difficult economically in the immediate post-war years.³³ One member of No. 5 JEAT Course also estimates that up to 65 per cent of his fellow trainees came from single-parent families or were orphans.³⁴ In such circumstances may well be found the explanation for the remarkable fact that even within the scheme's short lifespan there were five pairs of brothers. But in none of these aspects was the JEAT scheme any different to the Apprentice Scheme.

Other factors clearly also played a part in steering applicants towards this avenue of entry into a RAAF career, such as membership of organisations like the Scouts, School Cadet Corps and the Air Training Corps which served as recruiting grounds.³⁵ Even locale could be significant, as pointed out by a member of No. 8 Course who noted that no fewer than 36 youths from his high school at Inverell, New South Wales - then a town of about 8000 people - had entered the Air Force, including three as JEATs.³⁶ Here, too, the JEAT scheme was no different to the Apprentice scheme.

Coming from a depressed area or disadvantaged background was no indicator when it came to developing a determination to succeed. As with the Apprentices, many JEATs saw the scheme as an avenue towards raising themselves up in life. At least one member of No. 7 Course considers that the scheme gave its members 'more of a focus and a purpose, and aided them during the process of maturing and growing up, than occurred for general intakes'.³⁷ Yet another former JEAT observes that not only did the RAAF obtain through the scheme applicants who had greater motivation to achieve but also brought into the service many young men who would not have been attracted by normal adult training.³⁸

Detailed analysis of RAAF records reveal that assertions that JEAT intakes were subject to unacceptably high 'wastage' rates are simply false. In fact, the names are known of all but one of the 289 individuals believed to have been members of the eight JEAT courses, and of this group no fewer than 255 were

³¹ Information of Sergeant B.E. Cummings, 29 June 1996.

³² Information of Flight Sergeant C.F. Payne, 28 June 1996.

³³ Information of Wing Commander B.G. King, 29 June 1996.

³⁴ Information of Warrant Officer L.W. Doughty, 30 June 1996.

³⁵ Information of Sergeant G.F. Peace, 30 June 1996.

³⁶ Information of Corporal R.I. Blanch, 30 June 1996.

³⁷ Information of Squadron Leader M.L. Clark, 29 June 1996.

³⁸ Interview with Group Captain N.K. Wainwright, 22 October 1996.

graduates. On this evidence the discharge rate over the life of the scheme could not have been greater than 11.5 per cent, which was not significantly higher than the 10 per cent anticipated when it was originally set up. Of course, in some years the rate was markedly above this average - nearly 18 per cent for Nos. 2 and 5 Courses - which no doubt gave rise to the perception that a serious state had been reached, regardless of the fact that in other years (Nos. 4 and 8 Courses) the discharge rate was down to a very healthy five per cent.



In 1957 Corporal B.P. Hancock, a graduate of No. 2 JEAT Course, became the first member of Apprentice and Junior trainee Squadron at Wagga to receive a decoration. As a 19-year-old equipment clerk serving with the RAAF's No. 2 Airfield Construction Squadron in Malaya, he distinguished himself after an RAF Venom aircraft crashed into the sea a mile off-shore on 24 July 1956. Because of his experience of skin diving, he volunteered to search for the pilot's body in the muddy waters which were teeming with jellyfish and stingrays. He continued this work for two days until trained divers arrived from Singapore, and although unsuccessful in recovering the body he was able to retrieve much wreckage which ultimately proved valuable in determining the cause of the accident. For the courage and zeal displayed on this occasion he was awarded the British Empire Medal. (CPE)

Later writers possibly have been misled over this aspect by the way strength figures appearing in RSTT unit history records are framed for the period 1956-59. These figures show that for at least three of the years covered, the number of JEATs in residence at Wagga by mid-year had fallen dramatically from the levels at the start of the year - by 15 in 1956, six in 1957, and 13 in 1959. Far from this representing the removal of course failures, however, what it actually marks is the departure on posting each July of those JEATs from the previous year's intake who had remained at Wagga to complete second-phase training as Clerks General.

Far more likely to have been the main factor leading to the scheme's demise was the argument over the economics of putting teenage trainees through eighteen months of training when the same result could notionally be achieved with adult trainees undergoing a far shorter period of instruction. A case for abolition on these grounds could hardly have failed to point up the significant shortfall of numbers in intakes which developed very soon after the scheme's inception. On only three of the scheme's eight courses did the number of trainees reach or exceed 40, and for two the size of the intake was below 30. The outcome of this ongoing battle to obtain sufficient numbers was that by 1959 the scheme had taken in 20 per cent less trainees than the 360 who should have entered if all 45 annual places had been filled.

Compounding any sense that the scheme had failed to achieve its objectives would have been the disputing views which existed within the wider RAAF as to the true worth of graduate JEATs. Units to which these were posted were initially sceptical about the abilities of these young airmen and disinclined to make full use of their skills and specialist knowledge in areas such as Air Force Law and office organisation and administration. It was not uncommon, recalls one member of No. 4 Course, for JEATs to receive considerable 'razzing' from officers and NCOs because they were perceived as young 'know-all's'.³⁹

This was a perception bred of ignorance, of course, and a general lack of appreciation about what the scheme had to offer if given the chance. One measure of the latter attitude was evident to the JEATs themselves in their second-phase training, when they discovered that bases meant to provide them with practical experience had made only ad hoc arrangements for this vital element of their career preparation. A member of No. 3 Course, for instance, recalls that upon completion of his 12 months at Wagga he and other Clerks Equipment were sent to 82 Bomber Wing at Amberley for nine months, only to find that 'the RAAF system really didn't know what to do with us and we gained the distinct impression that things were being made up as they went along'.⁴⁰

Given such preconceptions, it naturally took time for the wider service to come to appreciate that graduates possessed genuine strength and depth in their area of competence. And in response to criticism that JEATs were no better, for all their long training, than adult trainees, one graduate pointedly remarks that:

Our fellows carried any number of junior administrative officers and adjutants in units, many of whom were failed aircrew. There was not much of an appreciation that administration was an area that needed more than a 'broken down pilot'. I consider that the RAAF got value for money in the scheme, even if it did not recognise it. The decision to end the scheme in the belief that it was uneconomical because the same quality of training could be done in twelve weeks with an adult trainee was quickly shown to be a mistake.⁴¹

³⁹ Information of Group Captain C.A. Makin, 30 June 1996.

⁴⁰ Information of Corporal B.W. Green, 28 June 1996.

⁴¹ Information of Squadron Leader C.H. Golding, 30 June 1996.

Undoubtedly, the RAAF felt the impact of the JEAT scheme in fields well beyond its original narrow focus. For a start, not all graduates stayed in clerical trades. Over subsequent years at least a dozen remustered as loadmasters, and others joined radio, physical training instructor, EDP [electronic data processing] operators or linguist categories. A significant proportion also joined the ranks of the RAAF's officer corps, beginning with R.J.W. Bailey - a graduate of No. 1 Course - who obtained a commission as early as 1957. Ultimately, no fewer than 50 former JEATs became officers, representing about 20 per cent of all graduates. Within individual courses, though, the proportion was much higher: for example, 12 of No. 3 Course's 44 graduates received commissions - a rate of nearly 28 per cent. Within the figure of 50 officers, there were two who became group captains - C.A. Makin (No. 4 Course) and N.K. Wainwright (No. 8) - 12 wing commanders and 26 squadron leaders. Six attained the status of commanding officer of a unit, an assignment which was extremely hard to achieve because there were so few appointments available to other than members of the General Duties Branch. This record was a considerable achievement for such a small group, and effectively dispels doubts about the JEAT scheme's overall value to the Air Force.



Clerks Equipment of No. 3 JEAT Course pictured while undergoing second-phase training with 82 Bomber Wing at Amberley in 1955. Although meant to provide important practical on-the-job experience for the recent graduates, too often the arrangements made appeared ad hoc. (B.W. Green)

Many of those JEATs who did well in their later careers have no hesitation in attributing their success to their initial training. A number of the group became senior non-commissioned officers at young ages - for example, Makin was promoted to sergeant three months after his 22nd birthday, and Wainwright also reached this same rank at age 23 - and these instances were by no means exceptional, even though in this period NCOs at this level were usually much older (and many still had Second World War experience). When the RAAF introduced a policy during the mid-1960s of streaming non-aircrew senior NCOs towards commissions, these men were well placed to make such a step up. Wainwright

recounts that it was when his thoughts turned towards this goal that he discovered his JEAT background had provided him with a strong advantage 'by virtue of having a stronger educational background'. Moreover, it was an advantage which he carried with him into a subsequent career in the defence industry field.

However the JEAT scheme is viewed in hindsight, its legacy unquestionably remained with the RAAF for a very long period indeed. Not until July 1993 did the last JEAT finally leave the service, in the person of Warrant Officer M.D. Moore (a member of No. 3 course). The 39.5 years which he had completed on his retirement was not even the longest period of service achieved by a graduate of the scheme. This was a distinction belonging to a member of No. 2 Course, Warrant Officer A.L. Millar, who completed more than 40 years in both the Permanent Air Force and the Active Reserve before retiring in April 1993.

CHAPTER 7

DIPLOMA AND ENGINEER CADETS: 1955-1986

On 25 March 1955 the Air Member for Personnel, Air Vice-Marshal F.R.W. Scherger, presented a submission to his colleagues on the Air Board pointing out the serious position which had developed regarding officer numbers in the RAAF's Technical Branch over the previous four years. Not only was there a sizeable deficiency against establishments (over 20 per cent in the case of non-radio categories), but the rate at which new appointments were being made was barely keeping ahead of departures from the Branch. Whereas the service had been relying on a process of recruiting qualified technicians directly from civilian life, obtaining technical graduates from the RAAF College, or selecting airmen for commissions, the stage had been reached - Scherger argued - where it was necessary 'to seek other sources from which we might find suitable persons for training as technical officers'.¹

The solution which the AMP proposed was to provide the RAAF's most able ex-apprentices with a course of full-time training that would fit them for commissioning. Scherger drew particular attention to the fact that from 1953 steps had been taken at the RSTT to identify apprentices already having the Intermediate Certificate. These had been formed into a special flight of 20-25 and given higher educational training (in conjunction with their normal training) which would qualify them for the New South Wales Leaving Certificate and thus admission to further university-type courses after graduation from Wagga. While results to date had been disappointing, he noted, with only three of the 1953 entrants having reached the standard sought, better results were expected in future - especially once sufficient RAAF Education Officers were available to press this program forward.

Meanwhile, in an effort to secure the best material available from the apprentice scheme, Scherger now recommended a two-pronged approach. Firstly, he wanted six places a year made available for ex-apprentices with the appropriate qualifications and personal capabilities to undertake study at the New South Wales University of Technology, leading to the award of a Bachelor of Engineering degree. Secondly, he proposed calling for applications from ex-RAAF apprentices, 'and from other apprentice-trained airmen in appropriate trades', for selection to undergo Diploma of Electrical or Mechanical Engineering courses at the MTC (or Royal Melbourne Technical College as it had become in 1954):

¹ Air Board Agendum No. 12483.

This would not be a recurring proposal and would be limited to 25 members who would be required to be not more than 23 years of age and unmarried at the time of commencement of the course. Again, they would be pre-selected for officer potential. The Diploma Course is a four-year full time course from Intermediate Certificate. It is believed that sufficient exemptions could be obtained to reduce this to a three-year full-time course, provided a special class is formed (which would require approximately 25 students, as indicated above).

Although AMP did not specifically allude to it, in fact what he was proposing was an extension of a scheme which had begun providing academically-trained radio officers for the Technical Branch since December 1954. In February 1953 ten airmen, many of them former radio apprentices, had been chosen to start No. 1 Fellowship Diploma Course in Communications Engineering at MTC; while engaged in their studies, course members were housed and administered by the Radio Apprentice School at Froggnall because of the proximity of that base from the College campus. Although one member of this group was suspended from training in May 1954, the remaining nine had gone on to finish the course and were subsequently commissioned as pilot officers. The success of this trial meant that No. 2 Fellowship Diploma Course had been similarly formed and was already undergoing training; following graduation, the members of this course also would be commissioned in February 1956.²

Once the AMP's scheme was approved by the Air Board, and (no less importantly) subsequently by the Treasury, it was duly implemented the following year - albeit on a somewhat smaller scale than had been originally envisaged. Although 30 ex-apprentices were 'pre-selected with a view to selecting 25' to attend RMIT, in the end only 11 actually started in No. 1 Engineering Diploma Course when this was formed at Laverton in February 1956. A similar position was reached at the New South Wales University of Technology at Kensington in Sydney, where just three ex-apprentices were selected to undertake the four-year degree course.

Because these measures had 'not been as fruitful as was hoped', in July 1956 Scherger brought a further proposal before the Air Board. Since it was confidently expected that the special flight at the RSTT would yield further numbers of current apprentices in training with the necessary educational standard to gain subsequent admission to RMIT, AMP now favoured sending a maximum of 12 of these in 1957 to begin an Associate Diploma course in either Mechanical or Electrical Engineering on the same terms as the 11 ex-apprentices already enrolled there. Moreover, this was planned to be a continuing program, and (as before) other airmen who were assessed as suitable and were accepted by RMIT as qualified might also apply to be included in it.³

In June 1958 Scherger's successor as AMP, Air Vice-Marshal A.L. Walters, was obliged to bring to the attention of the Air Board some changed circumstances relating to the various strands of engineering diploma training which were operating. The need for such a review had been precipitated by the action of RMIT

² E.R. Hall, *A Saga of Achievement: A story of the men and women who operated radio and radar systems for the RAAF over 50 years*, Bonall Publishing, Box Hill North, Vic, 1978, p. 274.

³ Air Board Agendum No. 12598.

in reducing the length of its Fellowship Diploma in Communications Engineering from two years to one, since this raised important issues over granting the status of cadet officer to the airmen undergoing these and the other courses during the period of their study.⁴

When these courses were first devised, it had been intended that members would retain their existing rank and mustering but enjoy the status of officer cadets in recognition of the expectation that they would be commissioned upon graduation. As Walters explained, since nearly all the members of these courses were airmen who had only recently completed apprenticeships, few had any idea of the responsibilities and requirements of commissioned rank - indeed, few had even had the chance to develop NCO qualities. Because the nature of their courses would keep students divorced from normal service duties and routine, there was considered to be a real risk that they would pass into the service academically well-qualified but poorly fitted in other aspects for their role as commissioned officers.

In the case of the first Fellowship Diploma course, its members had been given cadet status and admitted to the officers' mess at the beginning of their second year. Based on this practice, members of the three-year courses commenced at RMIT from 1956 were similarly granted such status during their final year only. Meanwhile, the airmen undertaking degrees at the University of Technology (renamed the University of New South Wales from 1958), were accorded this status from the outset of their three years of study, it being considered that they 'should be given virtually the same status as RAAF College cadets ... as their courses are almost parallel'. Even before the Fellowship Diploma students received cadet officer status, they had begun an organised program of indoctrination and training designed to prepare them for their future rank. This involved, in their first 12 months, lectures on such matters as Customs of the Service and Man Management, and during their second year - that is, while they actually carried cadet status - the training was continued to cover minor unit duties, leadership and parade ground activities.

The question which arose from RMIT's reduction of the length of the Fellowship Diploma Course was whether cadet status should be granted throughout the whole of new one-year course, and if so what change should be made to the arrangement affecting the other diploma level courses. Walters' recommendations were for the radio ex-apprentices doing Fellowship Diplomas to undergo a six-month period of indoctrination training and to receive cadet officer status only during the final six months of their course, while engineering ex-apprentices would continue to enjoy this status during their final year of study only. In fact, the Air Board made no decision on any of these matters since the AMP sought to withdraw the agendum and the Board agreed to his request. Nonetheless, the thinking evident in this document was illuminating and indicative of the way the RAAF was approaching the problem of preparing future officers for the Technical Branch.

In 1959 11 first-year engineering apprentices who held the Intermediate Certificate were posted from RSTT to the Radio Apprentice School to begin a four-year diploma course. This was an experimental arrangement, undertaken in the expectation that 'substantial economies would ensue in that these members would reach the associate diploma standard in four instead of six years'. This was a hope

⁴ Air Board Agendum No. 12748.

which was 'countered by high wastage', however, with seven of the eleven failing their first year of studies and only one surviving the course to eventually graduate.⁵

When the Radio Apprentice School transferred to Laverton in December 1960, not all the student elements under its administrative apron moved to the new location. Those members who were based at Froggnall while engaged in full-time diploma courses at RMIT stayed there to continue their studies as before, being joined by others who formerly had been based at Laverton and a batch of 14 apprentices who arrived straight from their graduation at Wagga. These various streams were united in what became known from February 1961 as 'Detachment A' of the Radio Apprentice School, with this element operating as a 'lodger unit' at Froggnall and depending upon Melbourne Telecommunication Unit (as the main user of the base) for support services.



Cadets of Detachment A of the School of Radio take part in a dining-in night at Froggnall in May 1961. Here Wing Commander W.T. Faint (third from left), CO of the Melbourne Telecommunications Unit with which Detachment A shared the Froggnall Base, is seated between Cadet Under Officer P. Duncan (on his right) and Senior Air Cadet D. Tidd. Such occasions were intended to assist in preparing Detachment members, most of whom were formerly airmen (many of them ex-Apprentices), for future careers as officers. In 1962 Detachment A separated from the School of Radio to become the Diploma Cadet Squadron. (D.A.E. Tidd)

At the same time as Detachment A came into existence, its 40 student members were all accorded the status of officer cadets. Not that this elevation was immediately apparent to the new arrivals from RSTT, one of whom described it as 'a bit of a backward step':

⁵ Appendix to Air Board Agendum No. 12911, and Supplement No. 1 to this agendum.

Having made it out of Wagga, we found we were back on the bottom rung of the ladder again. For a year we were made to wait on the meal tables for second and third year students, according to a roster system. We were told this was meant to give us an appreciation of what it would be like in an officers mess when we were commissioned, but we weren't that impressed.⁶

Although this new arrangement plainly presaged a new approach covering post-graduate and undergraduate trainees, it was some months before it was clear what these would actually be. Not until May 1961 was the new AMP, Air Vice-Marshal W.L. Hely, ready to bring proposals before the Air Board, and by this time the interim arrangement had already undergone further modification. After the RAS was absorbed into the structure of the School of Radio in May 1961, the Detachment became part of that organisation instead.⁷

At the Air Board's meeting on 12 May, Hely came ready to argue the case for the formation of a RAAF Technical Cadet Establishment based on a detailed plan which had been prepared. In essence, the new scheme was predicated on an assessment that the Technical Branch had an annual requirement to appoint eighteen new officers possessing technical diplomas in particular fields, but that existing arrangements for obtaining these through RAAF-sponsored training at RMIT needed to be rationalised to eliminate 'a number of serious defects' which had been found.⁸

Among the 'unsatisfactory features' of the previous arrangements enumerated by AMP were complaints that, while ex-apprentices formed the bulk of those sent by the RAAF on diploma training, recruitment under the apprenticeship scheme was still designed to attract youths who were principally suitable for training as airmen technicians and potential senior NCOs; not only was selection divorced from any consideration of officer potential, but the minimum educational requirements set for the scheme were not commensurate with training any of this group to the academic level desirable for prospective technical officers.

Other anomalies saw some students being trained and paid as apprentices while ex-apprentices and other airmen undergoing similar training were on adult rates of pay. The vexed issue of officer training was still unresolved, and questions had also been raised over the economy of existing arrangements which went beyond mere concern that it was taking the RAAF six years to train many of its technical officers to Associate Diploma level. The situation existed where engineering ex-apprentices were being trained to Associate Diploma level and then commissioned, but all radio apprentices who were academically qualified were being trained to the same level whether or not they were subsequently selected for the higher fellowship training which normally led to a commission in the radio field. Finally, there was dissatisfaction over the failure rate among RAAF diploma trainees, then running at about 40 per cent. While this compared favourably with the rate among civilian students on the same courses, it was still regarded as too high for a group which had been specially selected for this form of training and indicated that the RAAF candidates had a problem with low academic standards at the outset.

⁶ Information of Group Captain R.I. Gretton, 12 November 1996.

⁷ *RAAF News*, May 1963, p. 6.

⁸ Air Board Agendum No. 12911.

An attempt to overcome these various problems had been made in 1960 with the introduction of an interim arrangement. This provided for a special intake of diploma students recruited from candidates all assessed as having 'sound officer potential' and holding the Victorian Leaving Certificate or its equivalent. The members of this group were to be carefully supervised, given 'some measure of officer indoctrination', and their progress reported on at regular intervals. In conjunction with this plan, a review was also made of all RAAF airmen already holding at least an Associate Diploma qualification to consider whether these should not be commissioned.

As AMP also explained, even as the 1960 interim scheme was implemented it had been the intention to proceed towards introducing a 'centralised training establishment', hopefully during 1961. Only when it was realised that this objective could not be achieved within the proposed time-frame was it decided to extend the 1960 arrangements into the following year, but 'with certain modifications'. The variations adopted included granting the students officer cadet status, complete with distinguishing badges, and the provision of general service training along similar lines to the Officers' Initial Training Course.

While this was the arrangement upon which Detachment A at Froggnall was based, the aim was still to set the scheme on a more permanent basis. The ultimate object was to create a new training establishment for technical cadets which would operate at Point Cook as a wing of the Officer Training School. Students at this establishment would still receive their academic training from RMIT, and would undertake four-year Associate Diploma courses on campus as was already the case, but would be exposed more to the normal life of an operating RAAF base. Initially the plan had envisaged only a three-year course, but this intention had been forestalled by the RMIT's decision in 1960 to raise the entry standard for its three-year diploma courses to Matriculation level (Year 12) in some subjects. Since this would have had the effect of placing the new establishment in competition with the RAAF Academy for applicants, it had been decided to opt for a four-year course and accept candidates with the Victorian Leaving Certificate (Year 11).

Four years still represented a significant saving over the six years then entailed in obtaining a graduate with an associate diploma. Such a reduction could only be achieved, however, by completely separating the selection of cadets from the pool of ex-apprentices. It was expected that the bulk of diploma trainees would enter directly from secondary school, and, while suitable apprentices might still apply, they would have to do so in competition with these other applicants and their success in selection would not be 'a matter of course'. Because four years allowed ample time to provide general service and officer training, even with the students attending RMIT for most of their working time, it was proposed to grant them officer cadet status from the outset of their course.

A problem was identified, however, in locating the new establishment at Point Cook from the outset, since a substantial building program would be entailed. Although the base at Laverton had been considered as an alternative, this was ruled out of contention by the recent relocation there of the School of Radio and Radio Apprentice School. This left only Froggnall available as a temporary site, even though it was recognised as hardly suitable because of its sub-standard accommodation and study facilities. While accepting that Froggnall would have to serve in the short term, it was proposed nonetheless to have the new unit function as

a detachment of the OTS, with MTU providing only base services as already occurred for existing Detachment A of the Radio School.

To get the new establishment going at the start of 1962, the AMP proposed forming the student body from the 1960 and 1961 special intakes, together with any other RAAF diploma students undergoing a technical course at RMIT who met the age and other prescribed standards. This would exclude some in the latter category, who by virtue of their age or marital status could not reasonably be incorporated into the cadet body. These students would still be posted to Froggnall for administrative purposes and accorded the status of cadet officers, but they would be spared much of the general service training and what training they were required to do would be given independently from the direct entry cadets.

To achieve the desired number of annual graduates (18), it was planned to have intakes of 24 cadets. Thus, once the scheme reached maturity, it was expected that the cadet population would normally be around 80. Initially, however, the number of cadets would be less than 50, but even this lesser population would necessitate the assembly of a proper staff for the establishment. To an extent, Hely noted, increased staffing at Froggnall was needed to meet the needs of the existing diploma student detachment at Froggnall, whether or not the Board approved the scheme now being put to it. Nonetheless he pressed the case for forming the new cadet element from the beginning of 1962 as a matter of great importance to the RAAF.

While members of the Air Board were not disposed to reject the scheme which AMP had outlined, they were unwilling to support or approve his proposal without some further investigation. The Board therefore suggested that he appoint a working party to examine 'the requirement of the Technical Branch for officers by qualifications in the various categories', along with 'the results in the past and future prospects of meeting the requirement including the scheme proposed'. A five-member working party was formed a week later under the chairmanship of Group Captain D.W. Colquhoun, the Director-General of Personnel, and swiftly set to work.

The committee began by making a detailed analysis of all technical officer requirements, covering not just established posts but future expansion plans and likely wastage rates. This study took in not just AMTS's empire but the AMSE area, after the latter suggested that the Equipment Branch's requirements also be considered under the scheme. Noting that the Technical Branch had assessed its future need as being to have 40 per cent of its members holding diplomas, the working party concluded that this level was achievable 'only by organised training of serving members':

Present methods are unsatisfactory, and a service diploma scheme would produce sufficient numbers of properly motivated, thoroughly trained officers from whom a adequate return of service would be assured.

Similarly, the Equipment Branch's desired goal of having 15 per cent of its members with diplomas appeared unattainable unless it participated in the proposed diploma scheme.

Although the Colquhoun group's findings confirmed the direction in which AMP wanted to go all along, the process entailed in reaching this position took up

precious time. Not until 22 December 1961 was the working party ready to submit its detailed report - too late to enable anything to be implemented for the start of 1962 - and even then part of its findings seemed open to further modification, after a separate working party was appointed in the meantime to review in detail the requirements for tertiary educational qualifications in filling technical officer posts. In the event, AMP did not get back to the Air Board with a submission restating his earlier proposals until April 1963.⁹ By this time, though, the procedure was a mere formality, since in substance the scheme had been implemented six months earlier.

On the basis that having the officer cadet unit at Froggnall operating as a detachment of the School of Radio was administratively 'cumbersome', this arrangement had been dispensed with on 1 October 1962 when the detachment was disbanded and re-formed as a separate unit under the control of Headquarters Support Command.¹⁰ Known as the Diploma Cadet Squadron or DCS, the new unit was initially commanded by Squadron Leader E.R. Anscombe (who had been in charge since April that year) and had a staff of only six members.¹¹ Although the broad lines of this outfit had been apparent for several years before these crystallised, only now was it able to assume a position within the air force as an officer-producing institution on a par with the RAAF Academy. Even so, Froggnall was a training unit with a distinct difference in that its members really only resided there but received the bulk of their instruction elsewhere.



Cadets and their partners enjoy the Diploma Cadet Squadron's mid-year Ball held in Heidelberg Town Hall in 1969. (CPE)

⁹ Supplement No. 1 to Agendum No. 12911.

¹⁰ *RAAF News*, October 1962, p. 3, January–February 1963, p. 8.

Despite this peculiarity, Froggnall fairly quickly moved to make its impact felt. Its status and claim to a separate and special identity was confirmed in October 1964 when royal approval was granted to a unit badge which featured a torch and a scroll, symbolising learning and the diploma earned by graduates.¹² From a strength of 48 cadets in March 1963, the DCS steadily built up to more than 100 in 1966; by March 1969 numbers reached an all-time peak of 168 cadets.

The main role of the DCS was to administer, supervise, and provide general service training for Air Cadets attending full-time courses qualifying them for Associate Diplomas in Engineering (Mechanical, Electrical or Communication) at RMIT. Those accepted under the Diploma Training Scheme were mostly direct entry applicants and came straight from school. They had to be aged over 16 and under 20 years, a British or naturalised subject resident in Australia, single, and hold the Victorian fifth form (Leaving) certificate or equivalent from another state. In addition to these, however, was a group of serving airmen who had won approval to study under the Civil Schooling Scheme and were counted as Honorary Air Cadets. Because they were older (21-35), usually married with families, and often NCOs or even officers with extensive experience in the service, this latter group was spared many of the administrative and training requirements to which the others were subject.

When not pursuing their studies at KMIT, the direct entry cadets were given instruction in a range of service and military matters such as Administration, Ground Defence, Drill and Ceremonial, English, Public Speaking and Social Training.¹³ In addition, they were expected to participate in a range of other activities intended to build character and develop the leadership skills and physical fitness expected of young service officers. Sport predictably received a heavy emphasis, including rugby union, Australian Rules football, soccer, hockey, cricket, tennis, squash, volley ball, pistol shooting, sailing, rowing, water polo, swimming and athletics.

From the mid-1960s term breaks from study were used to put first-year cadets through week-long camp bivouacs held in locations outside Melbourne, such as among the sand dunes at Point Nepean (the eastern head of the Port Phillip Bay entrance) or in the Cathedral Ranges just south-east of the Eildon Reservoir. Here they learned map reading and compass marching, gained experience of living under field conditions and generally underwent a process of physical toughening. In later years adventure training was also conducted, involving such activities as canoeing on the Goulburn River, for the purpose of fostering qualities like initiative.

¹¹ E.R. Hall, *A Saga of Achievement*, p. 281.

¹² RAAF News, September 1965, p. 6.

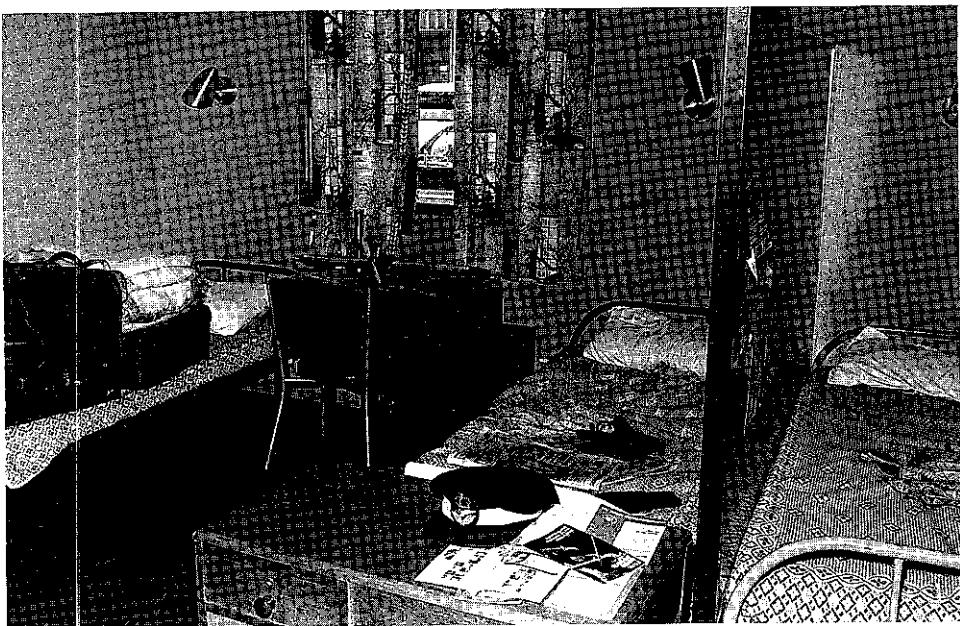
¹³ Recruitment brochure for Diploma Training Scheme dated February 1966, copy held by RAAF Museum, Pt. Cook.



Diploma Cadets in uniform were a distinctive sight on the RMIT campus. It was not until 1971 that dress regulations were relaxed to allow the wearing of civilian style attire, though the alternative of blazer, tie and slacks still ensured that they stood out amongst the rest of the student population. (CPE)



Catching the 8.30 am RAAF bus into RMIT was an inescapable part of the week-day routine for members of Diploma Cadet Squadron (later Engineer Cadet Squadron) at Frognerall. (CPE)



Until a new living block for Diploma Cadets at Frognall was completed in July 1971, enabling individuals to have single rooms, cadets shared quarters four to a room. Although adequate, this was a less than ideal arrangement for students engaged in concentrated and high-level courses requiring long hours of private study. (CPE)



Cadets relax in the Ante Room at Frognall. Spare time was often a rare commodity, since when not attending classes at RMIT during weekdays, their weekends were largely taken up with sport and instructional classes in military and general service subjects. (CPE)

To further their professional knowledge, and to give them exposure and familiarity with the life in the service which awaited them on graduation, cadets also undertook a series of visits to service and industrial establishments during each year of their course. These excursions took in not just RAAF units at nearby Laverton and Point Cook, such as the RAAF Academy and the Aircraft Research and Development Unit, but operational bases further afield such Amberley, Richmond, Williamtown and Edinburgh. Tours of civilian industrial enterprises around Melbourne at various times included the government-operated Aeronautical Research Laboratories and Government Aircraft Factories at Fishermans Bend, the General Motors Holden plant at Dandenong, the Shell Oil Company, Australian Paper Manufacturers, Trans Australia Airlines and various electronic industries. For some courses, the trip away included a tour of the Snowy Mountains Hydro-Electric Scheme.

Under such a regime the Squadron began to develop an impressive record of achievement in the academic field. For instance, for three successive years from 1962 cadets taking communications engineering succeeded in winning one of the two Sir Ernest Fisk Memorial Prizes awarded annually by the Institute of Radio Engineers of Australia for the most outstanding students in this category. These went to Air Cadets H.H. Detjen (1962), G.A. Twine (1963) and C.J. Knowles (1964). Twine added to this list by also winning the Kornot Prize (RMIT's outstanding engineering award) for 1964.¹⁴

In January 1965 Froggnall ceased to be a training centre exclusively for future officers of the Technical Branch. In that month it also became home for six cadets recruited directly from civilian life to begin a three-year associate diploma course in commerce subjects at RMIT, with the aim of taking up commissions in the Equipment Branch upon graduation. In recognition of the growing importance of the DCS, the CO's post was upgraded at this point to wing commander rank and additional members were posted to Froggnall's staff.¹⁵

As a result of this change to the DCS's composition, in the first half of 1968 the Equipment Branch received its first three commerce graduates under the Diploma Training Scheme.¹⁶ On 7 April 1971 Pilot Officer C.D. Conran became the first member of this branch to graduate with a Diploma in Business Studies. Although these were milestones which gave the program an apparent air of success, in reality there were some features which were distinctly less than satisfactory. Foremost among these was a very high failure rate which meant that only about one-third to a half of those cadets destined for the Equipment Branch were actually graduating, and usually taking longer to do so.

For instance, two members of the 1969 intake were lost during their first year at Froggnall and two more were required to repeat their first-year subjects; one of the remaining four failed outright the next year, which left only three to graduate - only one having done so in three years, the other two taking four. In 1970 all six members of the new intake failed their first-year subjects, and only two of these could be counted as having done so by margins narrow enough to justify repeating the year.¹⁷ Added to this were concerns over the teaching environment in this field

¹⁴ *RAAF News*, June 1965, p. 5.

¹⁵ *RAAF News*, March 1965, p. 5.

¹⁶ *RAAF News*, June 1968, p. 7.

¹⁷ Information of Group Captain G.W. Waters, 4 June 1996.

available through RMIT, where classes in business studies often ran to more than 100 students (compared with the small classes enjoyed by the engineers), and a perception that DCS was too heavily biased towards an engineering ethos anyway.¹⁸

The result of this situation was that during February 1971 a sub-unit of DCS called 'Detachment A' was formed at Toowoomba in Southern Queensland. The three students enlisted into this element undertook a course in business studies at the Queensland Institute of Technology, Darling Downs (retitled the Darling Downs Institute of Advanced Education in December 1971), while living at and being administered from the No. 7 Stores Depot at nearby North Drayton. Two of them were offered an exemption on first-year subjects, while the third (the son of the CO of 7SD) was already a student at the Institute who subsequently joined the RAAF. Under this arrangement the first class of the new detachment were enabled to complete the four-year diploma course in just three years.

At Christmas 1971 the two Froggnall cadets still pursuing courses in business studies at RMIT were offered the opportunity to transfer to Toowoomba the following year. Although under considerable pressure to agree, both ultimately said no. As one of them recalls:

The other guy was due to finish mid-year anyway, and I had only one subject to go as well as personal reasons for staying in the Melbourne area.¹⁹

As a consequence of their refusal to move, late 1972 saw the situation where there were two business studies components graduated in that year - the first comprising two graduates at Froggnall on 13 December, the second involving three graduates at Toowoomba on 15 December.

The maintenance of the cadet flight at Toowoomba as a detachment of DCS was an arrangement continued until 24 October 1973, when full functional control of these cadets was transferred to 7SD and all connection with Froggnall ended. Removal of the Toowoomba detachment from the DCS strength figures saw the number of cadets drop from 134 in February 1973 to 107 a year later, and for the rest of the 1970s the size of new intakes kept the squadron's starting strength each year averaging between 95 and 110. The number of graduates produced annually from a student pool of this size varied from the late 1960s until 1976 between 22 and 27, with only 1971 standing out as the exception with 35 graduates. Thereafter the number declined to around 15-17, which was the same level which prevailed up to 1968.²⁰

As these figures indicated, the failure rate among students undertaking engineering (not just those doing business studies) over the course of three years was also very high. This was a constant problem which the RAAF attempted to tackle in the early 1970s by posting two Education Officers onto the unit's small staff to provide coaching for individual cadets during night-time study periods. The RAAF also paid for visits to Froggnall by RMIT tutors - who were often the cadets'

¹⁸ Alan Stephens, *Going Solo*, p. 140.

¹⁹ Information of Group Captain G.W. Waters, 4 June 1996.

²⁰ 'Notes on the Development and Activities of Engineer Cadet Squadron' dated 5 September 1978, held by RAAF Historical Section.

daytime lecturers - to provide additional instruction.²¹ The success and practical usefulness of this program remained questionable, however, with at least one ex-cadet of this period remarking that its only observable result was to turn 'borderline failures into borderline passes'.

The reasons for the apparent inability of cadets to cope with their courses were several and complex. In large part, it had to do with too much pressure being placed on the cadets through competing demands. After being absent at RMIT all day, cadets found much of their weekends largely taken up with sport and general service training. This left little time for extra study for those who might be struggling in their courses, and practically none at all for relaxation. Moreover, during the week the daily routine for cadets entailed a 5.30 am start to provide time for compulsory physical training and drill before breakfast - a regime which often caused cadets to fall asleep in class, or even skip classes later in the day to catch up on their sleep in the RMIT canteen. A partial solution to this problem was found by limiting the service training imparted during a cadet's time at DCS to the basics necessary to go with being in uniform, with a fuller preparation left until after graduation when individuals were put through an officer training course.

Even with this change, the peculiar situation of cadets often presented them with special difficulties. For instance, the requirement to wear uniform on the RMIT campus was an onerous one during the early 1970s, when public protest at Australia's involvement in the Vietnam War was at its height. Popular feeling was often, even if unreasonably, directed against any service personnel encountered - a situation reportedly experienced by the AOC Support Command, Air Vice-Marshal J.F. Lush, when the tyres of his official car were let down by students at Melbourne University while he was attending a graduation ceremony. Although the DCS dress rules were relaxed, the slacks, blazer and tie which was the alternative to wearing uniform ensured that cadets remained conspicuous among the RMIT student crowd.²²

Wearing civilian clothing on campus was, moreover, treated as a special privilege which might be withdrawn as a disciplinary measure, as was discovered to the horror of a newly-arrived commanding officer in 1974:

When I saw the cadets going off to RMIT in civilian gear, all except for a few of them, I asked the WOD [Warrant Officer Disciplinary] what that was about. He replied, 'Oh, they've been naughty boys so they have to wear their uniform.' I was annoyed by this and said, 'Over my dead body! No-one wears their uniform as a penalty, they wear it because they're proud of it.' I ordered that everyone was to wear uniform. There was considerable muttering about that, I know, because some of the fellows used to like to hide their identity behind civvies.²³

Yet another cause for dissatisfaction was the poor physical environment which existed at Froggnall, stemming primarily from the sub-standard accommodation entailed by use of old wartime huts. Not until July 1971 were new

²¹ Information of Wing Commander L.H. Sullivan, 14 May 1996.

²² Information of Group Captain G.W. Waters, 4 June 1996.

²³ Information of Group Captain F.J. Wrigley, 14 November 1996.

living quarters completed at Froggnall, enabling at least a proportion of the cadets to have their own individual room instead of being accommodated four to a room. The poor accommodation set-up at Froggnall was emphasised when the Squadron received its first female cadet in 1974, with the then-CO recalling that:

Her arrival created some headaches, because she was the only one and the system wasn't geared for this. She had to live with the female staff of MTU, with whom we were still sharing the Froggnall site. As I recall she failed her first-year subjects.²⁴

The impact which the living situation had on cadets' performance was indicated by the fact that airmen students of the Squadron, who were usually married and lived out, enjoyed a consistently better record in their studies than cadets arriving straight from school. Even though airmen entrants often had only the equivalent of the Victorian Leaving Certificate (rather than the HSC possessed by most cadets coming direct from school) and were required to undertake a preliminary year before commencing their tertiary studies, they were less likely to repeat a year and thus graduated earlier.

Such was the low level to which DCS morale had fallen during the early 1970s that numbers of cadets sought their release from the RAAF through resignation. Because the service refused such applications in all except the most extraordinary of circumstances, several devised a novel avenue of obtaining their release by nominating as independent candidates at the 1972 general election. Unable to interfere with the exercise of legitimate political rights under existing provisions, the RAAF was obliged to give these individuals their discharge to enable them to stand for parliament. They therefore achieved their objective at no greater cost than the candidacy deposits which they lost when they were inevitably defeated at the polls. Naturally the RAAF acted to stem this form of leakage before future elections.

On 17 December 1976 the Melbourne Telecommunication Unit was disbanded and DCS became an independent unit with sole responsibility for all base service functions at Froggnall. On the same day the unit also underwent a change of title, being renamed Engineer Cadet Squadron. This was in recognition of the fact that since 1973, when the first four DCS students received RMIT degrees in communications engineering,²⁵ a significant proportion of the cadets were now undertaking degree-level studies rather than solely diplomas.

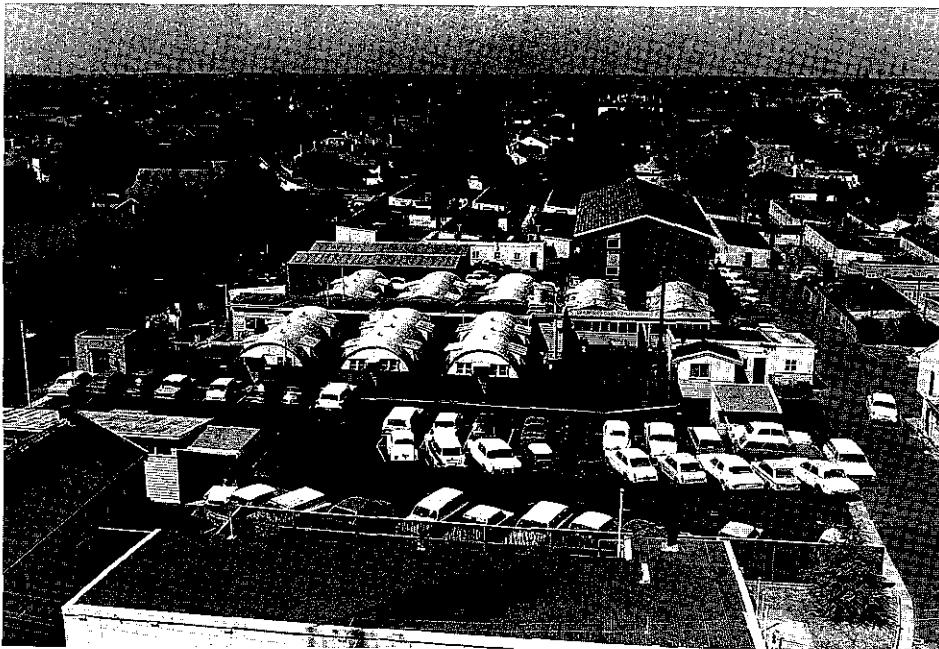
RAAF policy had been forced to change by the decision of RMIT to phase out engineering Diploma courses in favour of Degrees, itself an action which flowed from a decision by the Institution of Engineers Australia to discontinue recognition of Diploma courses completed after 1980.²⁶ To meet this change, RAAF cadets entering Froggnall with No. 22 Course in January 1977 would all be approved to continue on a degree course should they so desire, provided they had reached the necessary academic standard. Those graduating with degrees would be

²⁴ Information of Wrigley.

²⁵ *RAAF News*, June 1973, p. 3.

²⁶ Adrian R. Haas, *100 Years of Electrotechnology Education at RMIT*, Royal Melbourne Institute of Technology, Melbourne, 1990, p. 12.

commissioned by the RAAF in the rank of flying officer, while those obtaining diplomas were still commissioned as pilot officers.



This 1971 photograph, taken from the observation tower of the headquarters building, shows the collection of buildings - many of them dating from the Second World War - which crowded the southern end of the site at Froggnall, all conveniently screened from view from the main entrance on Mont Albert Road by the old mansion's imposing edifice. (CPE)

Within the next few years cadets at Froggnall were undertaking degrees or diplomas in chemical and aeronautical engineering, as well as the previous areas of study in mechanical, communications and electronic engineering. Moreover these studies were being conducted at various colleges of Advanced Education, such as the Swinburne College of Technology and the Caulfield and Footscray Institutes of Technology, as well as RMIT.

Considering the pressure placed on the available space at Froggnall, the ECS was fortunate to be the sole occupant of the base from 1976 at least until 1979, when a second unit was moved there and placed under its administrative apron. This element, known as the Aeronautical Information Service, existed to provide the maps, charts and other documents needed by all RAAF aircrew in their day-to-day flying activities. Although only small, its presence did nothing to ease the pressure on available space being felt at Froggnall.

The resurrection in 1979 of an annual Squadron magazine (reportedly after an absence of more than a decade) provided the then-CO, Wing Commander K.R. Wilkins, with an opportunity to reflect on some aspects of the peculiar conditions under which the DCS operated.²⁷ He was particularly moved to comment on the

²⁷ *ECS Journal*, 1979, p. 3.

growing academic workload being placed upon the cadets, observing that this factor - when combined with recent changes in the curriculum - meant that they faced 'ever increasing pressure' which reduced 'the training periods previously available for general service and sport training'. The staff, he noted, also faced unusual demands which stemmed from the fact that the DCS was 'a unique unit':

Situated within an affluent suburb in Melbourne, administering about 150 cadets who disappear daily between 8 am and 5.30 pm, ... in such circumstances it would be easy to forget our role. Furthermore the 1940 temporary buildings in which we work and the lack of modern facilities could also lead to a lack of enthusiasm among less dedicated personnel.



This 1978 view of the cadet's dining room at Froggnall illustrates the aging standard of buildings which housed much of the Engineer Cadet Squadron. (CPE)

The poor standard of Froggnall's physical environment was a theme which Wilkins further amplified in his remarks. Recalling visits which, as CO, he had paid to other service academic institutions within Australia - specifically Point Cook, Duntroon and Jervis Bay - he could not help but notice the contrast:

Whilst being proudly shown around these establishments with their excellent buildings, modern facilities and superb sporting areas, I never cease to wonder at the benign neglect that 'Froggnall' has suffered over the past twenty years, where engineering cadets live in temporary accommodation, share open room facilities with other airmen, have no sporting facilities and live on a base where the majority of buildings are of 1940 ... construction. Why the discrepancy between 'Froggnall' and the other establishments?

Wilkins could only voice his suspicion that the difference lay in the 'lasting interest' which graduates of other service colleges maintained in their 'alma mater', and which meant that they were willing to actively work to 'support and influence proposed changes and improvements'. It was an attitude which he urged DCS graduates to adopt with regard to Frognall, assuring them that little had changed significantly since they had passed through the place:

Therefore, my plea to all 'Frognall' graduates is to cast their minds back to their difficult days of study, to remember the lack of overall facilities [there] in their time ... and give more than a cursory thought to the present requirements of 'Frognall' when they are required to comment [upon] or recommend changes to RAAF training facilities, at not only 'Frognall' but other engineering training establishments.

After all, Wilkins pointed out, there was more to ECS than simply the 100-year-old mansion which most people recognised as Frognall. The base was actually a small but highly efficient RAAF unit, a fact which had achieved recognition when it won the Hawker Siddeley Trophy in 1977.²⁸ He accordingly invited his readers to visit Frognall, in the expectation that - apart from rekindling nostalgic memories for graduates - for others 'a visit will provide some knowledge of a comparatively little known RAAF establishment whose role in the RAAF will become increasingly important with the continuing expansion of scientific and technological horizons'.

A factor in the situation which went unrecognised in Wilkins' comments was, of course, that the location of ECS at Frognall was - for RAAF planners - still only a temporary solution. In such circumstances any hope he may have held of influencing change for the better at Frognall evidently went largely unrealised. Little more than two years later a published article on the base referred to the continued existence of precisely the same problems, in particular that:

Unfortunately, the most pleasant gardens and impressive Headquarters building are something of a facade, as they give no hint of the old wartime structures that take up much of the ground space. Like so many other units, we do our best with what is available ...²⁹

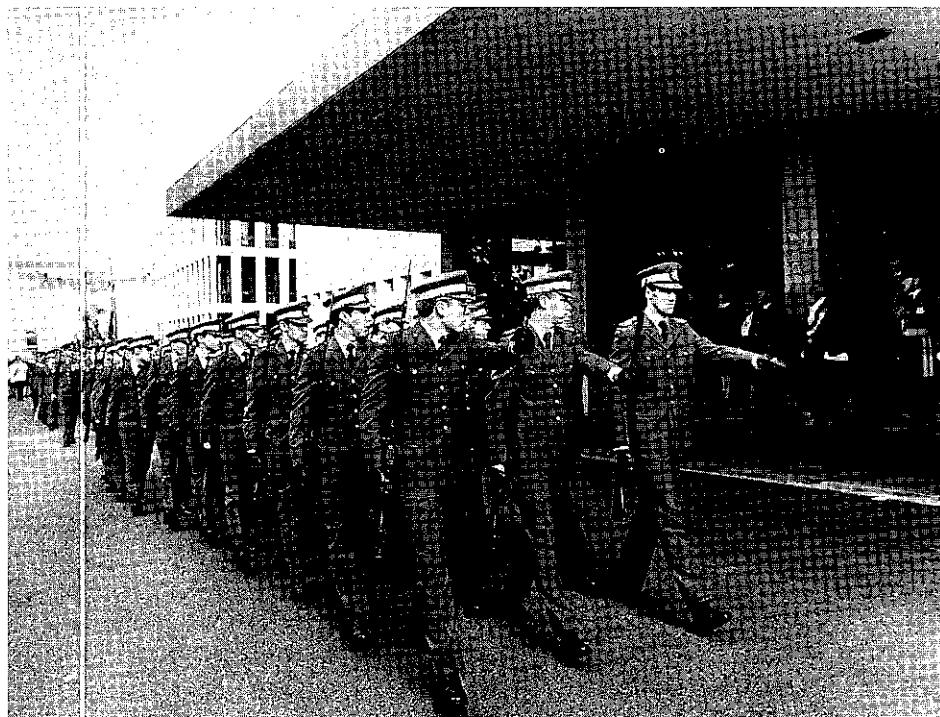
By this time, however, another factor had entered the equation in the form of the projected opening of an Australian Defence Force Academy (ADFA) at Canberra to handle the undergraduate training of all junior officers for each of the three services. As the article observed, once ADFA began functioning there was very likely to be 'another change in occupants at Frognall'.

Until the new Academy was in operation, however, the position which had been reached in regard to the space limitations at Frognall meant that the RAAF faced some serious problems in the meantime. For instance, the need to expand engineer cadet training within the RAAF had been identified during the first half of 1981. With Frognall already at saturation point dealing with a cadet population

²⁸ This trophy, awarded annually to the most efficient unit or base in the RAAF, had not previously gone to a training unit.

²⁹ *RAAF News*, March 1982, p. 5.

which early in 1982 stood at 148 (comprising 134 direct entrants and fourteen airmen who were studying under the Civil Schooling Scheme), there was no question of increasing numbers there.



Cadets give 'eyes left' to the Mayor of Camberwell and their CO on the saluting dais in front of the Civic Centre on 22 September 1984, after Freedom of Entry to the City of Camberwell was granted to the RAAF base at Froggnall. Barely eighteen months later the Engineer Cadet Squadron ended its existence upon the opening of the Australian Defence Force Academy and the Froggnall base was closed. (RAAF Museum, Pt Cook)

The solution adopted was to create a new detachment of the ECS at the RAAF base at Pearce, Western Australia, on 5 January 1982. The role of this sub-unit, 'Detachment A' as it was called, was identical to Froggnall. Cadets were administered by the RAAF while they studied for bachelor degrees in Communications/Electronics Engineering awarded by the Western Australian Institute of Technology (WAIT). In addition, general service training was conducted during the periods in which formal classes were not held at the WAIT.

A significant milestone was reached on 12 December 1985, when the detachment at Pearce held its own separate graduation ceremony for fifteen cadets. On the same day - on the other side of the Australian continent - the Air Officer Commanding Support Command, Air Vice-Marshal P.J. Scully, reviewed the similar ceremony held at Froggnall for the remaining 39 members of No. 27 Engineering Course who had completed their studies at RMIT.³⁰ The final graduation at Froggnall was an occasion tinged with nostalgia, its sadness emphasised by drizzling rain which fell intermittently during the day and prevented the garden party which traditionally followed the parade from going ahead.

The members of 28, 29 and 30 engineer cadet intakes who were still part-way through their courses were to continue their studies from Point Cook, at the new School of Air Force Studies (SAFS) which was a sub-unit within RAAF College, or as before at WAIT (known from January 1987 as the Curtin University of Technology) as Detachment A of SAFS. When SAFS was itself disbanded in 1987, the element in the west became Detachment A of RAAF College. With the graduation of the last of the ex-ECS courses in December 1992 future intakes of RAAF engineer students would attend the new ADFA.

Although often regarded as nothing more than a temporary expedient throughout its 25-year existence as the home to diploma cadet courses, Froggnall (along with Pearce for the last four years) had nonetheless managed to turn out 540 graduate officers for the RAAF.³¹ The impact of the scheme begun 30 years earlier was also plainly evident in the service's officer corps: six of the RAAF's 31 air commodores at the start of 1993 were DCS graduates, two of whom within the next few years would rise to air vice-marshal rank.³²

With the departure of the cadets, in February 1986 the Camberwell City Council took the step of formally revoking the Freedom of Entry granted to Froggnall only 18 months earlier. Although councillors understood the reasons for the new arrangements, they nonetheless expressed 'profound regret' at the change and declared as 'unfortunate' the fact that the 'long and close association' between the base and local community had come to an end.³³ By March 1986 ECS had effectively ceased to exist and the base closed down, and a short time later the Froggnall property was sold by the Commonwealth.

³⁰ Programs for graduation ceremonies of No. 27 Engineering Course at both Froggnall and Pearce, held by RAAF Historical Section.

³¹ *RAAF News*, January-February 1986, p. 1.

³² AVM D.A.E. Tidd was promoted in April 1993 and AVM E.M. Weller in December 1995; both were, of course, also ex-apprentices.

³³ Letter from Mayor of Camberwell to AOC Support Command, 10 February 1986, held by RAAF Museum, Pt. Cook.

CHAPTER 8

TECHNOLOGIST APPRENTICES: 1982-1993

By the late 1970s the RAAF was grappling with the problem of coping with the higher technology associated with advanced aircraft and weapon types, such as the Harpoon missile-carrying P3C Orion and the New Tactical Fighter (the role for which the F/A-18 Hornet was chosen in 1981), which were either entering or scheduled to enter into service. With concerns being expressed over whether the Engineer Branch would be capable of meeting the service's requirements in forthcoming years, questioning gazes also began to be cast over the efficacy of existing arrangements in the RAAF for training technical ground staff.

A study produced in 1975 by a two-man team led by an education officer, Wing Commander R.S.J. Kinder, had already offered a highly critical view of the value of the apprenticeship scheme, based on its costs when compared with adult training. This report might have been sufficient to end the scheme there and then, but for the fact that its conclusions were challenged by the Director of Technical Plans, Group Captain G. Grantham, who was himself an ex-apprentice.

Grantham instinctively felt that Kinder's findings did not represent the full story. In his words he recalls:

I saw Kinder's cost benefit analysis as a pretty superficial and cursory attack on the apprenticeship scheme. Not only had he failed to take account of intangibles, he had assumed that adult trainees were equivalent to apprentices all the way through their service - which simply wasn't true. There seemed to be a fairly concerted effort underway to denigrate the apprenticeship scheme at that time, including such things as cutting back its duration in an attempt to make it more attractive to youths. Of course, it was part of my charter to keep the technical training side of things up to scratch, and I wasn't convinced that more adult trainees were necessarily the answer. Looking at the problem from a technical point of view, it seemed obvious that we had to try something different.¹

In 1977 he accordingly directed a recently-joined member of his staff, Wing Commander L.C. Watts (also an ex-apprentice) to undertake another comparative review of the apprentice and adult training schemes.

The report which Watts submitted in September 1978 effectively came up with opposite conclusions to Kinder. By amortising the costs of apprentice training over the service life of the scheme's graduates, he was able to demonstrate that

¹ Information of Group Captain G. Grantham, 3 April 1997.

historically the RAAF had received excellent value for money. This was actually a view of the situation which was itself seriously flawed, as Watts himself later acknowledged by observing that:

The figures I had to work with were only for the early intakes. We couldn't be as sure of the position with later intakes though, because the first apprentices on nine-year enlistment terms were only then coming up for their initial re-engagement. We just didn't know whether that picture would endure. As it happened, Kinder's conclusion was validated, because when the figures became known we found that the retention rate did indeed fall from that point.²

Even while defending the scheme in the matter of costs, Watts felt obliged to acknowledge the strength of Kinder's arguments in other respects. Apart from the long periods of service rendered by graduates, he had noted that roughly a third of all engineer officers then in the RAAF were ex-apprentices. He realised, though, that this proportion had already peaked in the early 1960s and was in sharp decline, due largely to the role of the Diploma or Engineer Cadet Scheme in providing tertiary educated graduates from direct entry students. Other changes on the national education scene flowing from the election of the Whitlam Labor government in 1972 - chiefly the fact that secondary students were now increasingly being encouraged to complete Year 12 with a view to going on to university - meant that the RAAF was rarely attracting as apprentices those youths with the potential for higher-level training.³

More than this, however, Watts became convinced that the apprentice scheme was not serving the same function for the RAAF as it had in the 1950s, having effectively become the equivalent of a boy entrants scheme rather than a source of highly skilled tradesmen. Once the trade training provided at RSTT was considered against the technical needs of the modern service, it was obvious that many skills taught were no longer directly relevant and were often not even used regularly. On this basis it could be argued that the RAAF was over-training its apprentices, in the process creating expectations which served merely to fuel feelings of dissatisfaction among personnel.

Although Watts sensed that a drastic shake-up of the RAAF's trade structure was in order, both in terms of training and categorisation, he concluded that the data upon which to base such a radical step was not then available - and probably would not be for another decade. The interim solution which he proposed was the introduction of a new trade group of highly trained systems technicians (or systechs). These would be NCOs with a minimum rank of sergeant who were capable of operating as a diagnostic supervisor across trade boundaries and coordinating the work of the specialist tradesmen actually engaged in maintaining advanced aircraft, avionic and ground electronic systems.

Personnel with the abilities and qualities required for the new upgraded technical stream were, Watts noted, already present in abundance within the RAAF. The service would be able, therefore, to get systechs initially and for three or four

² Information of Wing Commander L.C. Watts, 20 March 1997.

³ Information of Watts, 13 March 1997.

years afterwards by - in his words - simply 'fishing in the pond that we had'. Eventually, though, a new source of supply or avenue of entry to the systech stream would have to be found, and it was this need which prompted him to consider a revision of the current apprentice scheme.⁴ This was an untried approach, as Watts freely admitted more than 20 years later:

There was no model or precedent for what we wanted to do that we could draw on, so the concept was entirely my own. By about February 1979 the battle was on to have the main elements of my report accepted and implemented.⁵

At this critical juncture Grantham retired suddenly for health reasons,⁶ and his place was taken by Group Captain R.A. Kee. Kee also proved to be a supporter of the concept, with the result that the proposal was brought to the attention of the CAS, Air Marshal N.P. McNamara, in July 1979. With the endorsement of the chief, work on developing the scheme began in earnest. In March 1980 detailed proposals for both the introduction of systechs and a revised form of apprentice training were discussed with CAS by the Chief of Air Force Personnel (CAFP), Air Vice-Marshall H.K. Parker, and the Chief of Air Force Technical Services (CAFTS), Air Vice-Marshall R. Noble. This discussion resulted in agreement that a staff paper would be jointly prepared by CAFP and CAFTS for CAS's further consideration, this document being duly submitted at the end of June 1980 and approved by CAS on 2 July.⁷

In essence, the scheme envisaged that systechs required sub-professional training at Certificate of Technology (COT) level obtainable through the national TAFE (Technical and Further Education) system, combined with technician level training. This would provide them with a deeper and broader foundation of knowledge and skill than current trade technicians, and enable them to provide an interface between technicians and engineers within the air force. Because experienced systechs would be 'highly suitable for commissioning', they were also expected to eventually help overcome the RAAF's shortage of engineers and problems with experience levels.

To meet the immediate need for systechs, it was proposed to remuster up to 45 selected technicians after training them to COT level under civil schooling provisions. The first batch was expected to enter training at TAFE colleges in 1981, with new intakes undertaking similar training each year until 1987. While these measures would ensure the new stream was brought into being quickly, the longer-term requirement for a source of supply of the new systechs was to be met through changes to the apprenticeship scheme.

After examining the option of converting all apprentice training to COT level, it had been considered preferable to add a new stream called Technologist Apprentices to the existing trade apprentice courses passing through Wagga and Laverton. The first option would have caused a major decrease in apprentice

⁴ Information of Watts, 20 March 1997.

⁵ Information of Watts, 13 March 1997.

⁶ *RAAF News*, January/February 1979, p. 4.

⁷ Minute by AVMs Parker and Noble dated 26 June 1980, on Department of Defence file DM/40/4/15.

numbers at RSTT, because of the smaller output of graduates needed to subsequently provide the number of systechs in the aircraft field required annually. Such a course, it was recognised:

... could be unacceptable considering current political emphasis on increasing apprenticeship opportunities. Moreover, a compensatory increase would be required in Adult Trainee numbers and this would exacerbate current recruiting problems.⁸

Adopting the second option was actually thought likely to improve overall technical recruiting levels. This was because COT training would require a higher educational level of entrants (minimum of Year 11, with Year 12 preferred), a standard which would normally exclude the existing 16-year-old trade apprentice applicants. Thus the new form of training was expected to appeal to a new segment of the recruiting market while retaining all existing avenues. As against this advantage, the second option was recognised as more expensive, by virtue of involving additional training and accommodation facilities as well as instructional and support staff at RSTT and RADS.

Under the scheme devised for the new Technologist Apprentices (or Techapps) it was planned to have recruits aged 16-21 undertake a three-year course at either RSTT or RADS. This would entail 18 months of full-time theoretical study to qualify for either a Certificate of Technology (Aircraft Engineering) issued by RMIT or a Certificate of Technology (Electrical/Electronic) from the Footscray Technical College, followed by a further 18 months of specialised trade training. Those apprentices at RSTT would train for one of five categories of fitter - airframe, armament, electrical, engine or instrument - while those attending RADS would train as either air or ground radio technicians.

Upon successfully completing their course techapps would graduate as a LAC and were required to undertake a year of on-the-job training at a RAAF unit or depot before receiving their trade proficiency certificate. They must then complete a further year of field employment before being awarded their COT. After at least a further two years, they would be eligible for selection for a six-month course conducted in-service by the RAAF, covering supervision and management, problem solving techniques and advanced systems, after which they would be remustered as Sergeant Systech.

Although this plan was aimed primarily at meeting a clear-cut service need, it also helped the RAAF to address another significant problem being experienced over civilian recognition of the qualifications of technical personnel on departing from the service. After 1968 many technicians leaving the ADF had been finding difficulty in having their qualifications recognised if they applied for technical or drafting officer positions in the Australian Public Service, because the 'in-house' courses they had completed in the armed forces did not equate to a New South Wales certificate. Although the problem could be overcome by the person concerned sitting and passing an eligibility test, this arrangement was by no means satisfactory to those affected - not least because such an approach did not secure recognition beyond the APS. The situation had led to a number of complaints being

⁸ Parker and Noble minute.

made to the Defence Forces Ombudsman, particularly by ex-RAAF telecommunication technicians who felt they were especially disadvantaged in obtaining civilian employment. The RAAF's new stream of para-professional level engineering courses, introduced in association with Victorian TAFE authorities, would help defuse this growing problem since they provided personnel with qualifications which carried clear recognition for studies completed.⁹

The goal for the introduction of the new Techapp scheme was set at January 1982, just 18 months from the time the approval of CAS was obtained. This timing was to prove barely adequate to finalise key details such as shaping courses and securing accreditation, since the conduct of training at Wagga and Laverton presented some special problems. Because Techapps at RADS would be physically located in reasonable proximity to the Footscray Technical College (FTC) campus, providing for their training was relatively straightforward. They would attend the FTC for the bulk of their instruction, fulfil the FTC's syllabus and receive a COT awarded directly by the College. Electrical/Mechanical Techapps, however, were in a very different position. Since RSTT was geographically far removed from Melbourne the training carried out at Wagga could only count towards a qualification from RMIT if the latter body was satisfied that its content and standards were the same or equivalent to those applying on its own campus.

To achieve the difficult task of devising a course which met RMIT requirements, steps were immediately taken in July 1980 to set up a training design team. Headed by an education officer, Squadron Leader G.A.R. Tooth, this body was initially established in the Directorate of Training in Canberra but by early 1981 had relocated to Wagga and sent several members to Laverton. Aided by members of the RSTT staff, especially the chief instructor, Wing Commander W.J. Watson, Tooth's team settled aspects such as training objectives, core competency skills and examination standards - the whole time with RMIT maintaining a quality audit of their activities.

In the view of RSTT's commanding officer during 1981, the success of this collaboration owed a great deal to the personalities involved:

Watson was tall and carried himself like a Grenadier Guard; he looked like the perfectionist he was, but for all that he was also a lateral thinker. Tooth, on the other hand, was laid back and laconic, the perfect soothing influence whenever there was a crisis. The two complemented each other very well. They both knew they were engaged in something which was really important to the future of the RAAF. I don't consider either got the acknowledgment they deserved for what they did.¹⁰

So successful was the team in satisfying RMIT requirements regarding the course's standards that RSTT was granted the concession of setting its own examinations and marking these internally. Although RMIT continued to double-check exam results to ensure standardised scoring with its own courses, in effect RSTT was operating like an autonomous college. That RMIT was happy to award a

⁹ Adrian R. Haas, *Para-Professional Engineering Education in Australia*, Australian Institute of Engineering Associations, Hobart, 1986, p. 41.

¹⁰ Information of Group Captain A.W. Skimin, 14 March 1997.

testamur document for a course conducted wholly by the RAAF at Wagga was the ultimate tribute to the scale of the team's achievement in what was, by any measure, a ground-breaking enterprise.

Although preparations also quickly went ahead to promote the new scheme, here matters did not proceed so smoothly when actual recruiting began in March 1981. Indeed, on this score there was initially serious concerns that the RAAF had a disaster on its hands. The planning target set for the first intake was 158, but by the start of June - just a month before the advertised closing date - only 34 applications had been received, even after a publicity campaign costing \$38,000. Understandably some thought was given to cancelling the scheme, but this was ruled out as an acceptable option. Instead a further \$20,000 was devoted to advertising and the closing date for applications was extended to mid-August.

Commenting on this situation on 9 June, one member of the Directorate of Training drew attention to the fact that applications for the long standing trade apprenticeship scheme were 'well ahead for this time of year'. This provided, he wrote, 'a glimmer of hope ... that people are confused between the two schemes and the overall numbers interested will balance.' If this had occurred, then the better quality candidates for the trade apprenticeships should be selectable for the new scheme. To this end he had drafted a letter to be sent or handed to all trade apprentice applicants, detailing the differences between the two schemes and highlighting the advantages of the Techapp for those qualified and suitable to apply.¹¹

Despite such remedial measures, the situation did not markedly improve. In September the new CAFP (Air Vice-Marshal R.E. Trebilco) drew attention in the CAS Advisory Committee to the poor response which calls for applicants in the media had received. On the indications to date, he warned, the courses due to commence the following January would be only 30 per cent filled. The reasons for the lack of response were, he declared, unknown at that stage but were being investigated.¹²

Extensive efforts were indeed made to establish what had gone wrong. The answers were found to exist on a number of fronts, the most obvious being the RAAF's own failings in providing sufficient information in a timely fashion. Recruiting centres in the states complained that the introduction of the Techapp scheme had been haphazard, with details on a range of matters filtering to career counsellors only bit by bit. Information brochures which were professionally prepared by an advertising agency had been delayed by the RAAF changing details or updating factual material at the last moment, while revised recruiting films had also been issued too late to be effective. The result had been, as one centre bluntly observed, that the entire campaign had been 'sketchy' from the outset.

There were, however, other problems which were not so readily apparent. For example, when the senior recruiting officer in Brisbane enquired with the South East Queensland Electricity Board (SEQEB) about that organisation's experience with COT training in private industry, he came away from the discussion in no doubt that difficulty in attracting sufficient applicants for such schemes was by no

¹¹ Minute by Wing Commander T.F. McKeand, T2-AF, 9 June 1981, on Department of Defence file DM/40/4/15.

¹² Record of proceedings of CASAC No. 23/81, 7 September 1981, p. 185; RHS.

means unusual. Even SEQEB was having trouble competing due to the heavy demand for such people, though it was promising financial incentives far superior to those offered by the RAAF; for instance, SEQEB salaries during training were almost double the RAAF range of \$6,867-9,271.¹³

The upshot of these teething problems was that when the first Techapp courses duly began in 1982, they did so with only 30 entrants at Wagga and 20 at Laverton. Compounding the sense of disappointment over the poor public response to what the RAAF saw as a major new and important innovation was the embarrassment which these low intake numbers created when it came to arguing the need for costly new facilities. During 1981 the RAAF had raised bids for additional training and sleeping accommodation costing \$7.6 million at Wagga and \$5.6 million at Laverton. Both these proposals were partly predicated on the increased demand expected to be created by the new intakes of Techapps at the two bases, since once three courses were running concurrently the trainee population at Wagga was anticipated to rise by up to 250 and that at Laverton by up to 150.

In November 1981 these construction proposals were dealt with in federal parliament and referred to the Standing Committee on Public Works for consideration. Both bases were visited by committee members early in 1982, at which stage the plans could only be explained and defended on the planning projections, since the actual numbers of the first intake were, as noted, well down on these figures. Fortunately the committee was prepared to endorse both proposals on the evidence presented to it.¹⁴

Notwithstanding expectations that the mistakes of the first recruitment campaign would be overcome and not repeated, in fact there continued to be problems in securing sufficient numbers in succeeding years as well. In 1983, the enlistment target set for Techapps the next year was for an intake of about 100, two-thirds of whom would specialise in electrical/mechanical trades while the remainder went to radio. The number of applicants found to be suitable by the selection board for radio training actually exceeded by four the precise target of 30 places, but for the other category totalled only 59 instead of the 66 wanted. Given this situation the board had no hesitation in recommending that all the radio applicants be accepted, 'based on the assumption of non-acceptances of some applicants and that the RAD [radio] mustering is still grossly undermanned', but it was notable that the shortfall in the aircraft engineering side was a situation which had to be borne.¹⁵

The same situation applied the following year, too, when the selection panel for the 1985 intake found itself able to recommend 34 suitable applicants for the 35 radio places but only 37 for the 66 electrical/mechanical vacancies to be filled. The only consolation to be had was that it was noticed that an increasing proportion of applicants for Techapp places had a Year 12 education, rather than the minimum requirement of Year 11.¹⁶ The next year again the problem was still in evidence, with the interview board for the 1986 intake finding itself confronted with a

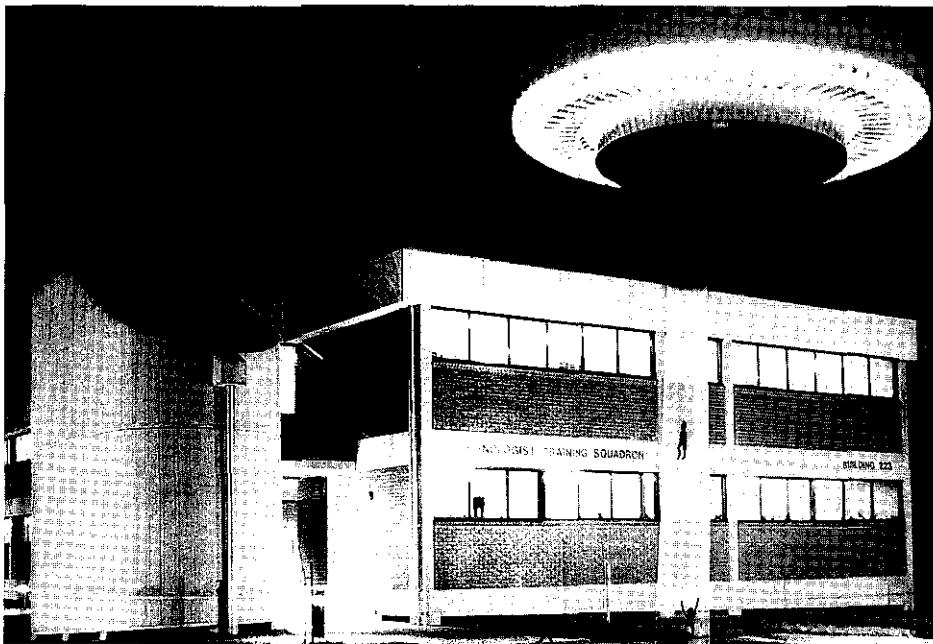
¹³ Minute by Squadron Leader A.M. Wise, 10 August 1981, on Department of Defence file DM/40/4/15.

¹⁴ Parliamentary Standing Committee on Public Works reports, PP No. 1/1982 (dealing with Laverton), p. 3, and PP No. 100/1982 (dealing with Wagga), pp. 8, 10.

¹⁵ Department of Defence file AF84/512 Pt 1.

¹⁶ Department of Defence file AF84/512 Pt 1.

significant shortfall - even though the enlistment target had been dropped to only 45 engineering and 25 radio Techapps. After interviewing 72 candidates the board was able to recommend only 26 for each.¹⁷



This doctored photo of the Technologist Training Squadron building at Wagga (the flying saucer at top right and figures 'beaming' up or down are obvious additions) offers a humorous view of the image which Techapps had of themselves. In fact, the RAAF went to considerable pains to minimise unrealistic expectations within the wider service regarding the scheme, which ironically was never sufficiently popular with applicants to ensure that the elaborate facility at Wagga was properly utilised. (CPE)

Not surprisingly, the problem experienced in Techapp recruitment prompted people to seek the reasons why. In October 1984 the chairman of the board involved in selecting the 1985 intake urged particular attention to be paid to the information brochure provided to candidates, complaining that many applicants and their parents were being misled by the use of the term 'apprentice' to describe trainees undergoing the Certificate of Technology course:

The effect is two-fold: higher qualified personnel will not apply for 'apprenticeships' or lesser qualified personnel do not appreciate the theory content of the course and are expecting practical orientated training.

Another difficulty had been encountered in the limited understanding which applicants had of the actual courses on offer, with many applying for specific

¹⁷ Department of Defence file AF84/512 Pt 2.

musterings without realising that the actual allocation or 'streaming' was a process which occurred at a point well after entry, based on the service's needs and the particular aptitude shown by individuals.¹⁸

That these observations went to the heart of the problem was not universally agreed, especially when it came to altering the name of the course to avoid or minimise the use of the word 'apprentice' in connection with it. This aspect had already been canvassed early in 1984, when the Director of Air Force Recruiting reported advice he received from the advertising agency engaged to devise publicity material in support of the RAAF's recruiting campaign that the term was a negative factor, being 'a hangover from the early industrial era ... [which] caused gross misperceptions in the minds of parents, peer groups and potential recruits':

Since the research by the Agency, I have taken steps to delete the word 'apprentice' from the advertising without evading any facts in the text about the type of training required ... Essentially, applicants who apply and are considered suitable for the COT [Certificate of Technology] training have Year 12 school results and have aspirations above the trade apprenticeships. I believe, therefore, that a title of 'Certificate of Technology Scheme' would more aptly reflect the aspirations of the applicants and assist promotion.

Others were not convinced. The Directorate of Training pointed out the long and honourable history of apprenticeships and the fact that the institution 'still remains the traditional method of training junior tradesmen'. Moreover, it was argued:

The Victorian Industry Training Commission which is responsible for all industrial training in Victoria, and with whom the RAAF is currently negotiating apprenticeship recognition status, is firmly committed to maintaining the title apprenticeship for junior tradesmen training within Victoria. In particular, the civilian counterparts of the RAAF COT apprentices are also called apprentices together with other tradesmen under training.

The response from the Directorate of Technical Plans was more blunt:

The scheme is and was intended to be an apprenticeship scheme. While COT apprentices now undergo a course leading to a Certificate of Technology, they are nevertheless apprentices in a trade and are required to undertake basically the same trade training as other apprentices. Furthermore, they graduate as AC [Aircraftman] level tradesmen in the same manner as trade apprentices and are required to obtain further practical experience before completing their apprenticeship.

Debate over the issue at this time was effectively ended when a conference of senior recruiting officers held in Canberra at the end of March 1984 was firmly told that there was no need to change or delete the term apprenticeship from the title

¹⁸ Department of Defence file AF84/512 Pt 1.

of the COT scheme. 'There were many standards of Apprenticeships', the chairman stated, 'and this was generally accepted within the civilian community'.

The situation noted by successive selection boards was not even the full extent of the problem, however. Though the panel might assess a number of applicants as suitable, not all these chose to take up the place offered to them. For example, the 34 applicants for radio TechApp training recommended in 1983 translated into an actual intake for No. 3 Course in January 1984 of only 27, and the situation was the same for the next intake when only 29 out of 34 selected entered training at Laverton in January 1985. Of course, by the time the pressures of the course itself had worked their effect, these numbers were reduced still further. For instance, No. 3 Apprentice Radio Technician (Technologist) Course graduated in December 1986 with a final strength of only 17.¹⁹ The position was no different at RSTT.

The consequence of such a situation was simply that the RAAF never derived from the scheme the numbers which it needed or had expected. At Wagga, for example, only the third intake finishing up in 1986 had produced a number of graduates even approaching the level originally envisaged for the scheme (44); the first two intakes had passed out 29 and 33 strong, while the fourth numbered only 26. Thereafter the size of the graduating class fell to below 20 for the next five years - in 1992 it was only ten! By the time all apprentice training in the RAAF was wound up, a total of only 378 graduates had been produced from the ten intakes recruited under the Technologist scheme - 149 from Laverton,²⁰ and 229 from Wagga.²¹

Other consequences flowed from the problem of class size. For instance, because of limited numbers the trades made available to members of the first intake midway through their course were restricted to Airframe Fitter and Instrument Fitter at Wagga, and Radio Technician (Air) at Laverton. For the second intake Electrical Fitter was added at RSTT, but expansion into the other listed trades was expected to occur only progressively.²² By the time No. 4 Course was streamed into specialist training the choice was again down to two trades (airframes or electrical), and although Engine Fitter was offered for the first time to members of No. 5 Course in mid-1987 the choice of trades was still confined to two (either engines or electrical). Thereafter, while the trades on offer in any particular year continued to change, the range of choice remained at just two. Ultimately, the Armament Fitter mustering was never introduced.

In mid 1985, with No. 3 Techapp Course at Laverton preparing to stream to their specialist trade training, the question was asked of Support Command by RADS whether any members of that intake were required to undergo training as radio technicians (ground). From the school's perspective, numbers had to be sufficient to justify running a separate ground systems course. 'Apprentices cannot be integrated into an adult Radio Technician (Ground) course, and too small a number as a separate course represents inefficient use of training resources'. Unless

¹⁹ Unit diary for School of Radio; RHS, microfilm roll No. 372.

²⁰ Information of Warrant Officer R. Lovett, 13 November 1996.

²¹ Course details on display at RAAF Museum, Wagga.

²² Department of Defence file AF84/512 Pt 2.

specific advice to the contrary was received, the school intended to stream all members of No. 3 Course to the Radio Technician (Air) mustering.²³

The question of which trades would be on offer in any one year, or even if there would be a choice, was sometimes the subject of heated debate. In 1987 the RAAF's decision not to offer any choice to intakes, but to stream each Techapp course exclusively to a single trade which would change from year to year, was strongly resisted by the trainees themselves. Adding to the confusion was an error by RSTT staff, who had misread the relevant schedule and wrongly advised the members of Nos. 5 and 6 Courses as to whether they were to be streamed towards instruments or electrical. This aspect was, however, irrelevant to the complaint of the students that there should have been a choice between what was inelegantly dubbed 'black hand' (airframes, engines) or 'queer' trades (electrical, instruments). They won their point and were subsequently given such a choice.²⁴

Far from this incident forming any indication of incipient rebellion, Techapp trainees seem to have been remarkably aware and tolerant of the evolving nature of the course upon which they were embarked. As two members of No. 2 Course, writing in the Apprentices' magazine in 1985, pointedly observed:

Of course, as with any new training scheme, problems of organisation, communication and efficiency occur - this course is no exception. Given time, these problems will be solved, and the RAAF will have the benefit of tradesmen who possess a useful understanding of advanced-level aircraft technology.²⁵

Group Captain R.A. Kee, who took over the command of RSTT at the same time as the first Techapp intake arrived in 1982, testifies to the noticeably different spirit which the new breed of apprentices brought to Wagga:

What particularly impressed me was the way they were so enthusiastic about achieving top results in everything they did - be it sport, study or dress and bearing. They worked twelve to fourteen hours a day, often going back to classrooms after dinner to use the computers, just to stay in front and to get that academic recognition. The bonding within the group was great; there was a real sense of elitism, an awareness of being members of a select band.²⁶

A similar spirit of distinctiveness was in evidence among the Radio Techapps at Laverton too, with the CO of RADS in 1982 recalling that:

There was a slight difference in their uniform and we put them in separate accommodation. In part this was administrative recognition of the fact that the technologists were usually significantly older than the trade apprentices, and a bit more mature. For that reason they also used the airmen's club rather than the trade apprentice recreation and mess facilities.

²³ Department of Defence file AF84/512 Pt 2.

²⁴ Department of Defence file AF84/512 Pt 2.

²⁵ RSTT, *Apprentice Journal*, 1984-85, p. 23.

²⁶ Information of Air Commodore R.A. Kee, 8 February 1997.

The other consideration was the fact that the technologists were following a completely different lifestyle. Whereas the trade apprentices did all their training here, the technologists received their academic training in at Footscray and only did drill and a few military things at Laverton. They were basically on the bus to Footscray and back every day.²⁷

Inevitably, the different status of the techapps was to produce a degree of animosity between themselves and the trade apprentices, both at Laverton and Wagga. Kee acknowledges that such a situation existed at RSTT, fuelled in part by the granting of special privileges to the older group of techapps and also differences in pay:

The privileges were only domestic things like curfew limits in the barracks, things like that, and of course the fact that a technologist would turn 18 a year or two sooner than a trade apprentice and so be entitled to have a drink in the airmen's mess. The ruckuses that resulted were usually just hi-jinks, raids between blocks, that sort of thing, never anything serious.

The pay differential was justified because the technologists were coming in older and going out later than the trade apprentices. The system had to compensate them somehow for the fact that they were picking up airmen's pay later in their career, or recruitment would have suffered. But the perception of privilege didn't help relations between the two groups.²⁸

A sense of suspicion or resentment of this new breed of apprentice was not confined to Wagga or Laverton either, but extended out into the wider air force. Trainees on second-year familiarisation visits to the RAAF's high-technology units (mostly at Amberley, Edinburgh or Williamtown, where the F-111s, P-3Cs and F/A-18s were based) may have been puzzled but amused at being quizzed 'about what a Techapp really was',²⁹ but there was often more than mere curiosity to such questioning. As Kee comments:

The introduction of the systems technicians had produced a lot of bad feeling out in units, especially among flight sergeants or warrant officers in charge of sections. Whereas these guys had been used to running their own shows, suddenly they found they had these sergeant systechs between themselves and their troops. Many of them felt they were being displaced and got their hackles up. Consequently we had the systems technicians being derisively dubbed 'super techs', and they definitely weren't liked. We certainly didn't want the technologist apprentices being labelled in this way, so went out of our way to ensure that they weren't seen as some sort of 'super apprentice'. There was a concerted effort made by Wing Commander Les Watts to educate the old and bold about where systechs fitted in, and at RSTT we were always at pains to emphasise that the our trainees were apprentices

²⁷ Information of Group Captain D.R. MacCarthy, 14 November 1996.

²⁸ Information of Air Commodore Kee, 8 February 1997.

²⁹ RAAF STT, *Apprentice Journal*, 1988-89, p. 31.

doing a specially structured course, but would still not be qualified until they got out into the field and gained hands-on experience.³⁰

Within just a few years of the scheme's inception, its shape began to feel the influence of other developments taking place in the civilian sector. As with the trade apprentice scheme, for example, the RAAF found itself under increasing pressure to admit female students as techapps. This change duly occurred in January 1985, when No. 4 Radio TechApp Course at Laverton included two female trainees - a year before this development took place in trade apprentice courses at both Laverton and Wagga. The change came slightly later to techapp courses at Wagga, but by 1988 No. 7 Techapp Course also had a female member.



A Technologist Apprentice from the Radio School at Laverton receives instruction at the Footscray Technical College in 1983. (CPE)

In 1985, too, the RAAF found itself confronted with changes which were occurring to the structure of Certificate of Technology courses offered by Footscray Technical College (by now called the Footscray College of TAFE), and all other TAFE colleges. In particular, a decision had been made to rationalise all electrical/electronics courses and replace them with a Basic Electronics Certificate (BEC), which was an introductory course that allowed streaming to various other TAFE certificates - including the COT (Electronics) undertaken by Techapps at the RAAF's School of Radio. Although this change had been implemented at Footscray in mid-1984, the impact on RAAF's students at

the college had thus far been minimal. However, Radio Techapp intakes from 1986 would be taught the new BEC, and the RAAF hurriedly began to address the ramifications for its students in terms of syllabus content and study load. One outcome of the change was a decision to teach more of the BEC course at Laverton in 1986, using Footscray College instructors.³¹ In 1988 the course undertaken by Radio Techapps was upgraded to an Associate Diploma in Engineering (Electronics), taught at what became Western Metropolitan College of TAFE.

³⁰ Information of Air Commodore Kee, 8 February 1997.

³¹ Department of Defence file AF84/512 Pt 2.

The constantly changing nature of the civilian courses to which the RAAF had linked itself, combined with concerns as to whether such courses were strictly meeting its needs, and a growing confidence that the RAAF was no less capable of providing para-professional training of recognised standing, within a few years prompted yet another major change. During 1990, the staff of Technologist Training Squadron at RSTT Wagga began the work of developing the curriculum and other details for a RAAF Associate Diploma in Aerospace Engineering Systems. The details of this course were duly submitted to the Victorian State Training Board and resulted in the Squadron being recognised as 'a centre of excellence' for tertiary level training.³² As an accredited non-TAFE provider of education, from 1992 RSTT was empowered to award the Associate Diploma of Engineering (Aerospace Systems) in its own right.³³

The members of No. 10 Technologist Apprentice intake, who entered RSTT in 1991 and were appropriately dubbed the 'Lemmings', duly formed the first Associate Diploma course. When they graduated in 1993 they did so as specialists in either avionics or aircraft systems. They thus came to form a unique link between the old apprenticeship scheme and the reshaped RAAF technical area following the drastic trade restructure described in the next chapter.

³² Letter of commendation from AOC Training Command, Air Commodore K.R. Blakers, dated 28 February 1991: held by RAAF Museum, Wagga.

³³ *RAAF News*, August 1993, p. 17.

TECHNICAL RESTRUCTURING OF THE RAAF

By the late 1980s, the need identified by Wing Commander L.C. Watts more than a decade earlier for a complete overhaul of the RAAF's technical trade structure had changed from being 'highly desirable' to 'imperative'. Increasing pressure on the size of Australia's annual defence budget had created a climate in which a whole range of past practices had come in for sustained and intense scrutiny, with the aim of achieving and maintaining maximum savings in terms of manpower and efficiency. No area seemed immune from this questioning, and inevitably the way the RAAF employed its technical manpower became one such focus of attention.

A study carried out within the Engineering Division of Air Force Office during 1988, into the service's avionic trade structure, had concluded that improved productivity could result from the progressive introduction of an Avionic Technician mustering accompanied by changes to work practices and trade training. The impact of this recommendation proved to be quite profound, once it was realised that progress towards multi-skilling within the aerospace industry generally was indicating that similar changes within the RAAF's mechanical trades could also be beneficial.

Questions began to be asked whether the use of lesser skilled mechanical musterings might not both broaden the recruiting base for technical trades and reduce the demand for highly trained fitters and technicians by relieving them of their more mundane tasks, and whether improvement in system reliability over recent years had so far been taken fully into account in terms of training and employment. Instances also came to mind where work practices within the RAAF were so restrictive that full benefit could not be derived from current trade training. Changes in technology, and in personnel retention patterns since the existing mustering structure was created, were recognised as having thrown up additional sound reasons for making a thorough review of both work practices and the RAAF's trade structure.

On 27 November 1989 Air Commodore D.A.E. Tidd, the Director-General of Aircraft Engineering, brought into being a four-man working party to conduct such a review. Heading the team was Watts, who - despite having left the permanent air force in August 1981 - was still serving in the Reserve. The task assigned to his group was to be carried out in two phases: the first being to examine the effectiveness and productivity of the existing trade structure; the second, to present proposals for change.

The report of the first stage of the review was submitted by Watts' working party on 2 April 1990. This concluded that the trade structure then in use by the RAAF was 'indeed seriously deficient':

It lacks the flexibility necessary to cope effectively with a wide band of technology levels and tasks of different levels of complexity, and inhibits the achievement of optimum productivity from the aircraft technical workforce. Indeed, so deficient is it, that a broad consensus of opinion at all technology levels indicates that a revised trade structure, combined with personnel management initiatives aimed at improving average experience levels, could yield a 20 per cent gain in productivity; amounting to a saving of 1048 posts.¹

Having confirmed a need for the anticipated restructure, Watts and his colleagues turned their attention to the second part of their brief. The report the working party submitted in July outlined their findings in respect of aircraft trades only, however, noting that a follow-on study appeared to be needed for ground radio trades.

The approach adopted by Watts' team towards the question of restructuring entailed giving consideration to activities of the same type which had occurred in other organisations. This led, he reported, to the working party becoming 'at once ... aware of another deficiency of the extant trade structure':

Civil award restructuring in areas such as the Aerospace Industry has reached a stage where the RAAF can expect to soon lose its existing civil trade recognition. The three-trade structure now being adopted for civil aircraft maintenance is significantly different to the extant RAAF structure and former RAAF personnel will soon only be able to gain employment at the lowest skill level while they complete TAFE conversion training. This has significant implications in terms of morale and recruitment.

Based on their understanding of the forms of restructuring carried on in overseas air forces, civil airlines and commercial industries, the working party also proposed a three-trade structure similar to that being adopted in airlines. This entailed combining the existing RAAF musterings of electrical, instrument, armament (part) and avionic systems into a single Avionic Trade, while the airframe, engine, armament (part) and aircraft systems musterings would form an Aircraft Trade. The existing mustering of Aircraft Structural Fitter would form a third trade. Within each trade there would be a number of skill levels - five for both the Avionic and Aircraft trades (mechanic, fitter, technician, advanced technician and systems technician), while only two (fitter and advanced fitter) were proposed for the Aircraft Structures trade.

The working party report went on to stress that the benefits of this proposed new structure could not be realised without a significant change in the existing approach to training:

¹ Second report of Trade Restructure Working Party, dated 12 July 1990, see Executive Summary, p. iv.

The concept of training straight through to the fitter/technician level is extremely wasteful and results in many personnel being grossly over-trained for their early employment. We propose that this system be replaced by one in which there are two entry systems: Mechanic and Technician.

The initial training envisaged under these arrangements entailed courses of between 20 and 42 weeks only, with later training being conducted using distance learning at base training centres to a far greater extent, in preference to further courses at RSTT.²

These were proposals which held major ramifications for the existing apprenticeship schemes. While the new Technician category could, it was observed, conveniently absorb the Techapp stream, there was really no place for their trade counterparts under this plan. This fact was acknowledged by the working party, which commented:

We also note concern that the Trade Apprentice Scheme is now out of step with developments in society which are encouraging more students to continue their secondary schooling beyond Year 10. This is resulting in increasing difficulty in the recruiting field and, should the proposed trade structure result in a sufficient level of recruiting to render that avenue of entry unnecessary, the Trade Apprentice Scheme should be abandoned. If necessary for political purposes, the Technician Entry Stream could be called an Apprentice Scheme.³

While Watts and his colleagues had identified the ground radio trades as an area requiring further study, it noted the case that would exist under the rest of the restructure package for moving ground training away from RADS at Laverton:

With the introduction of the Avionic Trade, the RADS trainee population will decrease by about 50 per cent and the facility will be grossly under-utilised. A distribution of ground training between RAAFSTT [or RSTT] and 1AD [No. 1 Aircraft Depot] could be an option, as could a complete move to RAAFSTT. As a consequence of our proposed changes in training, the peak student population at RAAFSTT is expected to decline by about 200, and there is expected to be excess theory classrooms. Thus, a complete move to RAAFSTT at moderate cost could also be possible.⁴

This second report of the working party was a blueprint for the most remarkable and fundamental adjustment to the way the RAAF maintained its aircraft since the Second World War. Notwithstanding its radical program, the climate into which the document was injected within the Defence bureaucracy had never been so favourably inclined towards far-reaching change. When considered before the CAS Advisory Committee on 11 October 1990, there was surprisingly little opposition or resistance to the scheme. Perhaps this had much to do with the strong personal

² *Ibid.*, Executive Summary, p. v.

³ *Ibid.*, Executive Summary, p. vi.

⁴ *Ibid.*, Executive Summary, p. viii.

support provided by the then CAS, Air Marshal R.G. Funnell, who arrived at the meeting declaring that he found the proposals 'very exciting' and making clear that he had already made up his mind in favour of them.⁵

Having initiated the enquiry which produced the plan for the restructuring exercise, Air Commodore Tidd now found himself placed in charge of its implementation as chairman of what was called the Technical Trade Restructure Steering Group. A project team, headed once more by Watts, was created in December 1990 and reported to Tidd as the process began of informing the entire service of what was afoot and how the new arrangements were intended to work.⁶

In the course of the next few years practically all the major changes foreshadowed in Watts' second report came into effect. Hastening the adoption of these proposals were other developments occurring elsewhere within the Department of Defence, most importantly the Force Structure Review initiated in May 1990 and completed in May 1991, and a report into the opening up of defence support activities to commercial competition which the government commissioned from an independent consultant and tabled in parliament in October 1990.⁷ The latter study gave rise to what became known as the Commercial Support Program.

In line with these various initiatives, a major rationalisation of training within the Australian Defence Force (ADF) was conducted on a joint service basis, aimed at reducing the number of mainly single-service schools throughout the country (about 200) and making significantly greater use of commercial support and civilian staff in technical areas. This program would see not just the Air Force closing down its apprentice schools, but technical trade training (other than for air technical trades) in the Royal Australian Navy was also to be consolidated at HMAS *Cerberus* in Victoria and the base at HMAS *Nirimba* put up for disposal. The Army, having relocated its apprentice school from Balcombe to Bonegilla outside Wodonga, Victoria, in 1983, was already in the process of converting this facility into an Army School of TAFE. While motor vehicle trade training for the RAAF would combine with that for the Army at Bonegilla, all ADF aviation-related trade training would be conducted at the RAAF base at Wagga.⁸ The training previously carried out at the School of Radio was also scheduled to be transferred to Wagga.⁹

Accordingly, the last apprentice graduation at Laverton was held on 8 December 1992, followed by a similar ceremony at RSTT on Monday, 29 March 1993, at which the reviewing officer was the then-senior serving ex-apprentice, Air Commodore Tidd. The latter occasion coincided with a large-scale reunion of some 1600 former apprentices, with family and friends, who gathered at Wagga during the preceding weekend to mark both the 45th anniversary of the apprenticeship scheme's birth and its demise. Activities conducted over the weekend included a Freedom of the City of Wagga march (with the apprentice 'old-boys' taking part, in their respective intakes), a dinner dance at the Kyeamba-Smith showgrounds hall, an ecumenical church service in the Basic hangar at which the sermon was given by

⁵ Information of Wing Commander L.C. Watts, 20 March 1997.

⁶ Directorate of Technical Trade Restructure, Synopsis of Questions/Answers Supplement, May 1991.

⁷ A.K. Wrigley, 'The Defence Force and the Community: A Partnership in Australia's Defence'.

⁸ Defence Public Relations pamphlet, 'Defence Update', No. 2, May 1991, p. 19.

⁹ George Odgers, *Air Force Australia*, p. 220.

C.W.E. Rush, an ex-RAAF Anglican chaplain who was also a current Wagga alderman, and nostalgic tours of the base.¹⁰

The mood at the reunion was, understandably, highly critical of the scheme's termination. As one participant later wrote:

In a decision that can probably never be justified by the Federal Government, defence spending cuts eventually reached out to end what was readily described as the best military training program of its kind in the world. 'The government got it wrong,' was a common reaction among members attending the weekend's massive family get together.¹¹



Members of No. 12 Intake (Wombats) take part in the Freedom of the City of Wagga march on Saturday 27 March 1993. Leading this group along Bayliss street was George Stirzaker, the Warrant Office Disciplinary at RSTT in 1958-60. (D.C. Hersey)

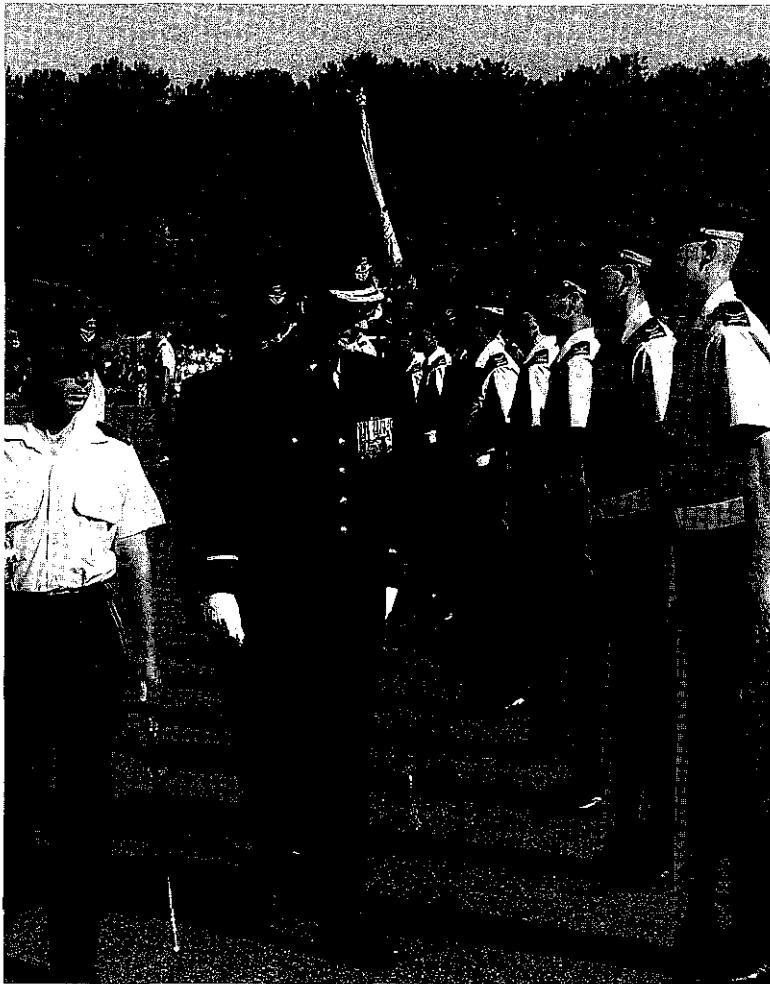
The same sentiment was vigorously expressed during the Sunday church sermon, with the preacher decrying the action of officers in Canberra who had done away with something they knew nothing about. The moment was well remembered by Air Commodore Tidd, who was sitting in the congregation:

I felt like crawling into a hole and burying myself, such was the emotion. It hadn't been an easy matter deciding whether or not to do away with the apprenticeship scheme, and I often still wonder whether we did the right thing. That's in my heart only, because in my head I know that the air force did the right thing. But if you ask ten people their opinion I expect you'd end up with five on this side and five on the other.¹²

¹⁰ *RAAF News*, August 1993, p. 16.

¹¹ Flight Lieutenant A.J. Nicholls (grad. 1956) writing in *Valley Times* (Ipswich), 21 April 1993.

¹² Information of Air Vice-Marshal D.A.E. Tidd, 19 September 1996.



On 29 March 1993 Air Commodore Don Tidd, himself a graduate of No. 10 Course (Rosebuds) in 1958, took the final apprentice graduation parade at RSTT for members of No. 46 Trade Apprentice Course (Sprogs) and No. 10 Technologist Apprentice Course (Lemmings). (D.C. Hersey)

With that, the era of apprentice training in the RAAF passed into history. Technical and trade training for RAAF personnel continues to be conducted at Wagga, but these days under a partnering agreement with the New South Wales TAFE system which since October 1994 has seen instruction in aerospace disciplines for all three services of the ADF provided by civilian contractors.¹³ By a neat twist the oversight of this arrangement has been the task of C.E. Bradford, a retired air commodore and graduate of No. 12 Apprentice Intake, in his capacity as assistant director of the Forest Hill campus of the Riverina Institute of TAFE.¹⁴

¹³ Department of Defence brochure, 'Air Force 1994', p.18; information of Air Commodore C.E. Bradford, 14 April 1997.

¹⁴ *RAAF News*, May 1995, p. 3.

And has the drastic change brought about through restructuring been vindicated? To an extent it is too early to judge, since implementation of the Force Structure Review proposals was expected to take fully ten years to complete. There have undoubtedly been manpower savings achieved in the RAAF specifically from the technical trades restructure, though on the available figures these have been nowhere near those originally anticipated. For instance, an internal departmental review made by the Inspector-General Division identified a reduction of only 97 positions by February 1995 - a level still well short of that likely to produce the target of a 20 per cent saving in the aircraft engineering field and 10-15 per cent in the non-aircraft engineering trades.¹⁵

One who has no doubts about the correctness of the course that was pursued is Watts, who finally stepped out of the process in which he had played such a prominent part in July 1993. Acknowledging the problems that accompanied the restructure's implementation, he explains the cause of these in the following terms:

The greatest difficulty experienced was the Air Force's own unwillingness to be ruthless in dealing with dissent. Even though the system had the ultimate power to *direct* compliance, the system was reluctant to use it. This allowed entrenched interests, such as the armament empire, to resist and to slow things down. The result has been that the RAAF didn't get all the benefits that it should have.¹⁶

The ultimate argument in favour of the course adopted - the 'bottom line', as it were - was the simple fact that the RAAF could not have continued indefinitely with the system as it was. The shift experienced in the support and maintenance of high-capability air forces generally had been too fundamental to allow of that solution remaining an option. As though to emphasise that judgement came the decision taken in Britain in the same period, but quite independently of the debate occurring in Australia, to end in 1993 the apprenticeship scheme operated by the Royal Air Force at Halton and Cosford since the 1920s (and which itself served as the model for the RAAF's scheme). In that service, too, apprenticeships have been replaced by professional training courses undertaken after satisfactory completion of recruit training.¹⁷

On this evidence the technical restructure of the RAAF was an important step which was long overdue. Put bluntly, the apprenticeship scheme had plainly outlived its usefulness. Even longtime supporters of the scheme, who valued its past contribution and achievement but could objectively recognise its shortcomings, agreed with that assessment. For example, Arthur Skimin - one of a select band of ex-apprentices who achieved commissioned rank and returned to command at Forest Hill (and whose admiration for the apprenticeship scheme played no small part in persuading the RAAF to sponsor the writing of this history) - acknowledges the failure of RSTT to keep abreast of the evolving needs of the service in terms of technical training or to maintain its relevance to meeting that requirement.

¹⁵ Department of Defence (Inspector-General Division), *Air Force Training Sub-Program: program evaluation*, DoD, Canberra, July 1995, p. 2G-3.

¹⁶ Information of Watts, 20 March 1997.

¹⁷ Congdon, Philip, *Per Ardua Ad Astra: A Handbook of the Royal Air Force*, 2nd Edition, Airlife Publishing, Shrewsbury, UK, 1994, p. 35.

As the critique of a sympathetic observer with exposure to RSTT and the aircraft engineering domain over a long period and in various capacities, Skimin's analysis offers a useful summary assessment deserving of citation at length:

I think the problems can be traced back to the early 1960s, when several of the RAAF's leading education officers began to pick up on the latest thinking in the RAF and US Air Force concerning task/training analysis. They did extensive survey and analysis of graduates of the RAAF technical training system, with the aim of identifying the relevance of training to the actual job. The principal outcomes of their work was to highlight, *even then*, that many of the skills being taught (at significant cost) were never used or only used infrequently, while some essential core skills required or expected of graduates were either not being taught or were inadequately covered in the basic technical training. In short, what we were teaching to both the apprentice and adult training streams was not always the skills required by operational units - the training system's principal clients and stakeholders. A separate but related outcome to the skills analysis was the adoption of the 'systems' approach to training, the aim of which was to provide an ongoing evaluation process based on client feedback. When all these ideas began to be introduced and acted on, there was a lot of resistance from unenthusiastic 'black hand' engineers who were inclined to stay in their comfort zones.

The result was that technical training during the 1960s and 1970s seemed to lose its way. Graduating apprentices were difficult to effectively integrate into real work situations within units. This was particularly true of the RSTT product; on the surface RADS graduates seemed to fare much better. The simple fact was that non-radio apprentices going out into the service did not have the essential core competency skills required to support the new and emerging technologies being acquired by the RAAF.

As a consequence, work loads and the cost of unit training (both field and on-the-job) increased. At the same time, client feed-back to the school was deficient - in some cases non-existent. RSTT was perceived by some as a 'juggernaut' out of step with the needs of the organisation, *and it was*. All too often the feed-back received by RSTT was interpreted as negative criticism. Staff attitudes there became defensive and inwards-focussed, and their response was that field training would fix any deficiencies in the graduate's preparation.

It would be fair to say that RSTT instructional staff were, generally, themselves products of the obsolete technologies. Moreover, they were technicians not qualified technology teachers. They generally lacked real depth of experience in training evaluation and development methods. Similarly, they lacked the ability to translate concepts and principles from the obsolete technologies to make their teaching relevant to the training objectives/graduation requirements needed to satisfy user needs.

The fault lay not wholly with RSTT by any means. Throughout the Air Force training evaluation and planning was fragmented, and seemed to lack cohesion or objectivity. The focus tended to be on short-term rather than medium- to long-term objectives, or unit requirements. I suspect this came from the process being driven very much by established cultures at the staff level.

Annual reporting and periodic reviews were undertaken primarily by engineer types, not professional educationalists. Invariably they looked at the training arrangements as they understood them from the past, and in many cases the individual's technical knowledge and vision of future needs were out of date. In short, the RAAF was not concentrating effectively on the operational units' current (or likely future) needs.

At RSTT, training evaluation tended to be limited to statistical analysis of student throughput and pass-fail figures. There was an attempt to get away from this approach in the late 1970s/early 1980s, but all the time the RSTT training system seemed to be scrambling to accommodate constantly changing requirements being imposed by Air Force Office. The Personnel Division in Canberra had a view of the training organisation as a tap to be turned on and off, often month-to-month and sometimes week-to-week, to meet changing manning/staffing needs.

To meet the numbers demanded by Air Force Office in the various trade categories, RSTT was obliged to constantly re-schedule training programmes and to 'stream' students to courses for which they either lacked motivation or were only marginally suited in educational and physiological terms. Naturally poor academic performance and failure rates, and at times individual student attitudes and conduct, reflected this situation. 'Streaming' was simply a numbers game through which students could be assigned to technical courses solely to obtain a statistical outcome for the manning staff. Apart from the problems and frustrations caused to students, it often created problems in the scheduling of appropriately qualified instructional staff and training facilities.

Essentially, by the late 1970s the whole system of technical trade training was haemorrhaging and in need of urgent transfusion. Substantial change was required if graduate apprentices and the technical structure generally were going to be able to effectively support the new and emerging technologies of the 1980s and beyond. The systems entailed in aircraft like the F-111, F/A-18 and Chinook helicopters demanded multi-skilling and cross-training, none of which was available from the existing trade structure. What we had was based predominantly on the technologies developed in the Second World War and the immediate post-war period, which remained with the RAAF well into the 1960s.

Under the existing system, the time taken in man hours and the costs entailed in completing technical tasks were extending. There was a constant risk of declining work and safety standards (including airworthiness standards), ultimately leading to the loss of operational assignability of aircraft or systems, or an increase in the level of technical defects and incidence of equipment malfunction. These were fundamental problems that persisted into the early 1980s. Initiatives were taken in an attempt to fix the situation, among them the allocation of a range of obsolete aircraft and equipment for conversion to training aids. There was, however, still no thought being given to developing effective integration strategies, so it was overlooked that these new training aids themselves represented obsolete technologies, and concepts and principles that could not be readily translated to modern or future systems. In some instances the additional training aids simply became liabilities on RSTT. By this stage it would be true to say that the system was going backwards.

All this represented a 'missed' opportunity situation at RSTT, and in part it was this that gave rise to the review process carried out by Les Watts and Don Tidd, and other related initiatives. These provided the basis for substantial structural change in the RAAF technical trade categories and re-engineering of technical training objectives, the abolition of the outdated apprentice training system and, finally, the outsourcing (through the CSP program) of the whole of the training functions to NSW TAFE. The ultimate cost and effectiveness of this approach remains to be established.¹⁸

While some might wish to debate the foregoing analysis, either individual aspects or its total thrust, the events which have unfolded thus far during the 1990s speak for themselves. The story of the way the RAAF trained its technical ground staff since 1945 is, however, far from being a wholly negative one or a picture of unalloyed gloom. On one front it was from the outset a remarkable and enduring success story. The point is forcefully and appropriately acknowledged by Air Vice-Marshal Tidd, now retired, who observed that:

A lot of apprentices served for a long number of years - perhaps driven by the old superannuation system that was replaced, but that is irrelevant. The point is that the Air Force ended up with a group of well trained and well motivated people who were prepared to serve on and work under some pretty horrendous circumstances at times. The spirit which developed among intakes of apprentices was something almost unique in the RAAF. They provided a solid core for the service, of a kind I am not sure we will see in the future.¹⁹

Others also comment on this aspect, pointing out that, while the output of apprentices has always been dwarfed within the RAAF by the number of adult trainees produced annually, the latter rarely emerged from their courses with the

¹⁸ Notes to author provided by Group Captain A.W. Skimin, 15 March 1997.

¹⁹ Information of Air Vice-Marshall Tidd, 19 September 1996.

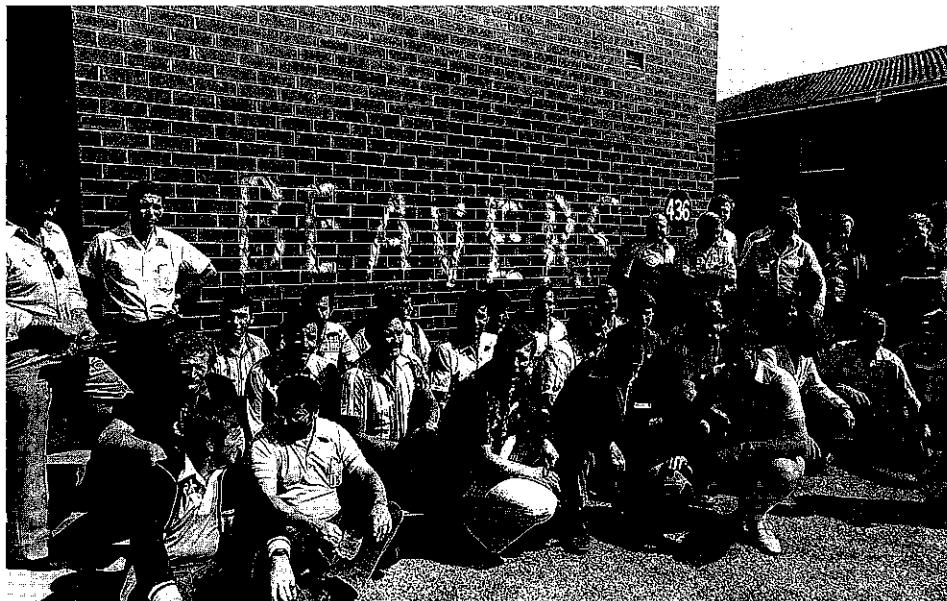
same strong degree of group identity or personal bonds between members. The duration of training was invariably too short to effect such a transformation, being a matter of months rather than years, and an initial six-year enlistment was more commonly (though by no means invariably) the extent of an individual adult trainee's commitment to the service.

The links and contacts between apprentices, on the other hand, have remained long after the years spent at Wagga, Froggnall or Laverton - often extending beyond separation from the service as well. A pattern of regular reunions has been common among many intakes, bringing together members of particular trade musterings within intakes or members living in particular states or regions. Many reunions have taken the form of a nostalgic return to Forest Hill, most memorably the large-scale gatherings held at five-year intervals since 1988. So close knit have some intakes remained that in March 1996 the members of one group - the 12th (Wombats) - contrived to have their mascot, a Wombat figurine nicknamed 'Wally', taken into space on board the US space shuttle *Atlantis*.²⁰

The number of graduates produced during the 45-year lifespan of the apprentice scheme has been put at 4,668 engineer²¹ and 1,105 radio tradesmen, along with 378 technologists - a grand total of 6,151. With large numbers of ex-apprentices still serving, the RAAF can count on deriving the benefits of its investment in the nation's youth for many years to come.

20 *RAAF News*, September 1996, p. 18.

21 This figure is stated by *RAAF News*, August 1993, p. 16, to be the 'total graduates of the scheme' but is taken by Alan Stephens in *Going Solo: The Royal Australian Air Force, 1946-1971*, Australian Government Publishing Service, Canberra, 1996, p. 135, to refer solely to non-radio trade apprentices.



Wagga has been the focus for many reunions of ex-apprentices over the years. In 1980 50 members of No. 15 Intake (Beavers) travelled from as far away as Malaysia and New Zealand, as well as all Australian States, for various functions including a tour of RSTT. During the latter, the visitors came across their course name still adorning the barrack block on which it had been daubed at graduation 17 years earlier. Asked whether he minded the photo being published, the then-CO replied, 'Go ahead, we might get some more money for maintenance'. (D.C. Hersey)

APPENDIX 1

ENGINEERING TRADE APPRENTICES

1st Intake (Anzacs)	O'Callaghan, B.J.	Fogwill, W.V.
	O'Callaghan, R.B.	Grantham, G.
8 December 1950	Pepper, H.A.	Hare, B.J.M.
	Philip, J.D.	Hargan, N.
Anfruns, K.J.	Price, F.G.	Herbert, F.W.
Bowles, W.H.	Redman, J.H.	Jackson, G.S.
Brown, F.L.	Semken, G.P.	Jaques, L.R.
Bryce, W.C.	Small, J.E.	Kearns, J.D.
Buchanan, D.M.	Talbot, G.W.	Keys, N.S.J.
Bushell, E.J.	Taylor, E.E.	McAlpine, J.S.
Caelli, J.R.	Thomson, J.I.	MacPherson, N.F.
Carswell, I.T.	Wilson, D.J.	Marshall, R.J.
Collett, C.E.	Withers, W.R.	Miscampbell, J.H.
Cooper, S.D.		Mostran, A.E.
Crisp, K.E.	2nd Intake	Nicol, C.J.
Croaker, S.H.	(Rainbows)	Payne, J.T.
Duckling, A.A.		Pearman, L.B.
Dwyer, R.K.	8 June 1951	Pearson, W.G.
Edmunds, D.C.	Allan, D.J.	Piggott, R.G.
Fiedler, D.L.	Allan, D.M.W.	Rigby, J.
Fordyce, J.	Arentz, K.	Robertson, J.J.
Forrest, A.E.	Blakers, G.J.	Rumball, D.D.
Gangell, L.H.	Bone, A.N.	Skinner, M.A.
Gregory, W.C.	Bovell, J.E.	Smallman, E.J.
Hackfath, N.O.	Bryant, K.L.	Stansfield, E.J.
Harding, G.L.	Buffham, J.F.	Steele, W.K.
Harvey, R.G.	Bulluss, W.H.	Stewart, F.C.
Homer, G.H.	Cairns, B.J.	Thomas, W.H.
Kerr, D.S.	Coote, W.F.	Thompson, J.F.
Kirkland, D.C.	Crossling, F.H.	Watson, R.W.
Lawler, P.J.	Crimmins, R.J.	3rd Intake
McKenna, E.A.	Cummins, A.M.	(Sunbeams)
McKenzie-Trout, S.V.	Czislowski, A.S.	
McLeod, D.J.	Davies, B.	7 December 1951
McNally, C.P.	Deeble, W.	
Mathews, T.R.	Dennerley, P.	Abblitt, J.A.
Moore, D.E.	Dunsdon, B.E.	Anderssen, R.D.
Morris, N.J.	Faux, R.F.	Bailey, K.W.
Mullins, G.A.		

Bain, A.J.	Lewin, F.E.	4th Intake (Dewdrops)
Bampton, A.J.	L'Huillier, D.J.	
Bartram, J.R.	Lindsay, M.A.	
Benson, L.G.	Lucas, C.F.	
Blair, G.J.	McDonough, E.C.	
Boyden, I.R.	McKay, C.G.	
Boyes, R.J.	McKay, G.	
Brooke, B.R.	McKenzie, D.J.	
Burns, G.L.	McKinnon, R.L.	
Burton, G.A.	McNaughton, I.K.	
Callaghan, R.C.	Manion, K.	
Campbell, B.S.	Matters, R.D.	
Cantle, K.B.	Mears, P.	
Casement, R.	Miller, J.L.	
Chaplin, G.R.	Mitchell, T.L.	
Chesterfield, J.M.	Montgomery, P.R.	
Coleman, D.G.	Moore, B.E.	
Constable, C.E.	Morgan, H.V.	
Crossley, R.H.	Newman, B.C.	
Denning, D.J.	O'Donough, E.C.	
Derrick, D.M.	Patfield, M.	
Dohnt, V.B.	Petersen, S.R.	
Dolan, J.	Pitt, A.	
Downie, R.W.	Preece, V.J.	
Dunn, J.E.	Quinert, P.G.	
Eastwood, R.	Ramstadius, C.R.	
French, G.M.	Roddom, K.M.	
Friend, R.A.	Rose, R.G.	
Gamble, L.R.	Rutherford, E.T.	
Gibson, P.M.	Scott, J.D.	
Ginman, P.	Simpson, L.	
Grinham, L.J.	Simpson, L.H.	
Grover, D.R.	Skuthorpe, J.B.	
Harrington, W.R.	Smith, I.	
Heynatz, M.J.	Stevens, B.O.	
Hollis, W.A.	Thorpe, L.E.	
Horne, D.E.	Trutwein, B.S.	
Howden, M.J.	Wallace, F.J.	
Hughes, B.P.	Ward, G.C.	
Hunter, I.W.	Watford, A.W.	
Huntly, M.E.	White, G.C.	
Huntly, P.J.	Williams, R.C.	
Johnson, D.J.	Wittman, M.F.	
Kee, R.A.	Wynne, B.H.	
Kidson, G.L.		
Kronberger, N.H.		
Leeden, J.W.		
Lembke, B.J.		

Hooper, G.L.	Tribe, J.W.	Grey, A.P.
Hughes, R.D.	Trimble, J.O.	Haydock, J.G.
Hutchescon, B.F.	Tudor, D.D.	Henry, G.A.
Ingate, B.T.	White, G.W.	Herriott, B.
Ingersole, K.V.	Williams, J.S.	Hill, R.P.
Ireland, J.C.	Windsor, N.E.	Hinds, J.R.P.
Jarrott, J.T.	Wood, K.C.	Hohnke, R.E.
King, C.R.	Woodbury, S.P.	Hollis, C.R.
King, J.C.	Wooler, S.M.	Howes, B.
King, R.K.		Hurst, J.R.
Kubale, J.A.	5th Intake	Idres, M.T. (PAK)
Lawrence, P.L.	(Buttercups)	Ireland, O.D.
Leighton, A.R.		Kay, I.R.S.
Lennon, B.J.	11 December 1953	Kemp, J.D.
McBay, J.F.	Alldis, J.E.	Khurshid, A. (PAK)
McColl, R.M.	Anait, U. (PAK)	Khurshid, S.H. (PAK)
MacDonald, J.W.	Arnold, G.V.	Killeen, R.A.
McLaren, F.	Ashe, J.	King, R.G.
McNamara, R.K.	Baldwin, A.	Larsen, R.D.
Marsden, A.F.	Barnard, K.E.	Latif, A. (PAK)
Mayne, J.F.	Bashir (PAK)	Lavender, I.W.
Mayo, T.T.	Battams, D.G.	Lawrence, B.D.
Meek, F.W.	Beatty, C.G.	Lewis, A.J.
Metcraft, D.	Bell, J.	Lewis, T.V.W.
Moller, W.P.	Blair, G.W.	Long, C.A.
Moore, D.G.	Blakers, B.E.	Loudon, L.I.
Morrell, D.A.	Blakers, V.A.	McCarthy, D.E.
Morrison, G.T.	Bradshaw, R.G.	McCracken, A.P.
Mutter, D.T.	Byrnes, K.F.	McIntosh, T.A.
North, J.	Caelli, N.N.	McLeod, D.A.
O'Grady, T.S.	Campbell, I.W.	Mabbs, A.R.
Palmer, D.M.	Campbell, K.E.	Malone, G.T.
Peake, L.B.	Carr, B.W.	Maqbool, M. (PAK)
Pritchett, A.W.	Carter, B.A.	Maqsood, A. (PAK)
Raymond, R.G.	Chapman, A.F.	Martin, R.J.
Rennie, A.	Cook, K.F.	Mir, M.A. (PAK)
Roche, J.H.	Cragg, G.H.	Mitchell, B.J.
Saunders, J.C.	Currall, B.P.	Mitchell, I.G.
Sherrin, R.R.	Daley, M.J.	Morland, J.A.
Silvester, J.E.	Dollisson, V.F.	Morris, F.J.
Skimin, A.W.	Dunn, P.	Mortimer, R.C.
Smith, K.C.	Early, I.K.	Murphy, B.K.
Smith, N.R.	Fisk, G.B.	Murphy, P.J.
Staats, J.B.	Foyle, J.E.	Nawab, S.A. (PAK)
Stratton, K.P.	Francis, R.J.	Neely, K.E.
Straughair, B.H.	Gillis, B.F.	O'Bree, I.G.
Thompson, R.C.	Gray, P.F.	Page, H.E.
Tilley, K.A.		Patterson, M.J.

Penno, R.M.	Boaden, R.A.	Kearton, R.H.
Perkins, R.A.	Booth, D.J.	Kebblewhite, A.D.
Picknell, T.G.	Butt, M.Y. (PAK)	Keehn, C.W.
Pollock, B.N.	Carney, R.W.	Khan, A.S. (PAK)
Powles, K.R.	Chatterley, E.W.	Khan, I.A. (PAK)
Preece, C.D.	Clarke, A.E.P.	Khan, M.N. (PAK)
Pritchett, E.K.	Cook, N.A.	Kibria, A.B.G. (PAK)
Punchon, N.C.P.	Cooper, J.A.W.	Layton, J.W.
Qamar, R. (PAK)	Crail, K.J.	Lennon, J.F.
Qureshi, R.A. (PAK)	Crottey, L.J.	Lyme, J.W.
Rabone, G.J.	Dawson, A.T.	McAloney, W.S.
Razaq, A. (PAK)	De Friskbom, R.J.	McClelland, T.J.
Richards, R.K.	Dean, D.J.	McCredie, J.C.
Rizvi, S.M. (PAK)	Denford, G.	McHugh, P.G.L.
Sadiq, M. (PAK)	Dick, D.J.	McLeod, C.J.
Saeed, A. (PAK)	Dollisson, P.J.	Marrinon, J.
Saleh, M. (PAK)	Dunne, H.C.	Martin, J.
Shakoor, H. (PAK)	Eagles, J.T.	Maskiell, P.B.
Sharman, R.J.	Ellem, N.A.	Melmeth, S.W.
Shaw, L.F.	Ellis, B.J.	Melvin, D.
Slyney, N.	Ellis, S.J.	Metcalf, E.E.
Smith, T.J.	Faqir, M. (PAK)	Mewells, I.V.L.
Starr, M.J.	Garrad, W.L.	Minchin, G.A.
Stead, N.G.	Glen, R.	Mirza, A.H. (PAK)
Stilborn, R.A.	Godwin, C.M.	Moloney, B.C.
Styles, R.L.	Guerin, W.A.	Montgomery, L.R.
Twemlow, R.H.	Hague, P.J.	Moore, T.J.
Webber, K.R.	Hall, D.E.	Moore, W.D.
West, B.G.	Halpin, F.J.	Morrow, R.M.
Wilkinson, K.A.	Harding, D.V.	Murcutt, D.R.
Williams, E.T.	Harrison, L.J.	Murphy, R.J.
Williams, I.S. (PAK)	Heap, C.A.	Mustafa, S.M.S.
Woodbridge, A.N.	Heath, S.J.	(PAK)
Wright, A.F.E.	Henry, R.H.	North, J.V.
Zaffar, I.K. (PAK)	Hiern, R.A.	Northey, G.A.
6th Intake (Pansies)		
10 December 1954		
Ahmed, I. (PAK)	Hodgkinson, M.J.	O'Neill, K.
Ahmend, A.U. (PAK)	Holloway, B.R.	Parkin, K.J.
Armstrong, W.R.	Hudson, R.L.	Petersen, C.
Ashley, P.W.	Hunter, D.	Poustie, W.L.
Asimus, C.J.	Hyland, J.W.	Pridmore, R.C.
Barton, F.J.	Iqtadar, A.K. (PAK)	Purves, T.R.
Bettson, S.	Islam, M.N. (PAK)	Qureshi, M.A. (PAK)
Bickle, M.D.	Jackson, R.J.	Rahman, M.A. (PAK)
	Johnson, K.H.	Rath, J.F.
	Johnson, M.A.	Rice, L.J.
	Johnston, I.A.	Ryan, N.W.
	Kean, B.R.	Saunders, L.T.
		Sharkey, A.J.

Skipworth, I.S.	Campbell, J.W.	Langby, B.
Snell, B.H.	Cann, W.J.	Littlewood, J.H.
Spurrier, J.V.	Chalker, W.B.	Lukey, D.G.
Stallebrass, W.N.	Clarke, B.C.	McAllister, R.A.
Steward, M.	Clewer, L.S.	McCann, D.M.
Strange, B.A.	Cooper, B.H.	McCartney, B.P.
Sutherland, J.R.	Cooper, G.J.	McGee, T.J.
Swannell, F.J.	Courtney, B.W.	McKenna, E.B.
Thompson, N.R.	Croucher, R.M.	McLeod, N.J.
Thompson, R.C.	Crowle, V.	McNaught, J.A.
Tully, D.S.	Devery, H.E.	Mansell, G.A.
Usher, T.R.	Duke, B.J.	Marriner, J.J.
Von Harten, J.B.	Eggins, B.C.	Martin, J.J.
Wacker, K.J.	Ezzy, R.F.	Melton, I.D.
Walker, C.M.	Fairley, I.J.D.	Moore, E.E.
Wallace, H.K.	Fallon, B.T.A.	Moores, R.C.
Wallis, F.E.	Fenton, E.K.	Morrow, M.G.
Ward, R.W.	Finnegan, A.J.	Murphy, W.F.
Warwick, R.W.	Fixter, S.B.	O'Keeffe, T.E.
Watson, N.J.	Fortescue, F.L.	O'Leary, J.R.
Weeks, D.G.	Frost, K.J.	O'May, N.D.
Williams, K.J.	Gannell, J.E.I.	Palmer, R.J.
Wilson, J.F.	Garcia, R.D.	Pappin, W.G.
Wilson, P.J.	Godwin, A.D.	Peter, P.J.
Winsor, F.	Goss, L.J.	Ploog, L.R.
Wisseman, G.F.	Gretton, T.C.	Polsen, T.J.
Woods, A.J.	Grimmond, T.D.	Priest, A.W.
Woolmer, J.N.	Guy, N.	Quinlan, J.G.
Wootten, C.F.	Guyatt, J.T.	Raston, R.L.
Wylie, K.J.	Haaren, D.A.	Rattenbury, R.J.
Zaidi, S.S.Q. (PAK)	Henderson, K.G.	Ruddick, G.L.
7th Intake (Daffodils)		
9 December 1955		
Addison, R.J.	Henson, P.J.T.	Sard, W.R.G.
Agapow, P.	Hickman, E.W.	Schipps, A.G.
Arden, W.L.	Hill, G.W.	Scott, D.R.
Arnold, J.I.G.	Holder, J.L.	Seymour, J.
Bannerman, R.E.	Hollingworth, J.R.	Sheahan, B.A.
Barry, D.J.W.	Holt, L.R.	Skinner, R.E.
Beresford, K.N.	Horgan, H.L.	Smith, G.J.
Betts, R.P.	Hughes, C.R.	Smooker, B.F.
Bicker, A.E.C.	Humphreys, R.J.	Shepherdson, D.E.
Blyth, R.J.	Hurley, B.M.	Tandy, M.P.
Bournes, R.S.	Ingate, L.P.	Thomas, J.E.
Burton, N.J.	Jaigivdar, G.R. (PAK)	Thomson, D.N.
	Jenkins, N.H.	Wall, L.A.
	Jones, D.A.	Walters, D.J.
	Khan, M. (PAK)	Waterfield, R.A.
	Knight, J.S.	Wells, G.S.
	Knight, L.A.	West, A.L.

Wilde, E.W.	Gallagher, P.L.	Perry, A.J.
Wilson, A.E.	Garrett, E.R.E.	Pike, W.J.
Wood, B.J.	Garrett, R.W.	Pointon, D.C.
Wood, R.A.	Gent, G.R.	Rielly, R.J.
Wynn, C.W.	Gibbon, A.J.	Rose, P.L.
Young, A.J.	Gieffen, G.C.	Sapwell, L.G.
Young, D.W.	Gilbert, N.G.	Scrace, M.
	Gillard, J.E.	Scutts, T.H.
8th Intake (Mangoes)	Gleeson, M.	Simpson, L.J.
	Guy, D.W.	Smith, I.A.T.
7 December 1956	Hamilton, W.A.	Smith, J.M.
	Harwood, T.W.	Smith, P.G.
Balfour, C.	Heins, W.M.	Squire, N.
Barnwell, R.J.	Hobbs, A.J.	Spink, J.
Barrett, T.M.	Hodge, P.H.	Stapleton, K.T.
Bayfield, N.R.	Horth, E.E.	Stevenson, R.J.
Beck, R.J.	Jacka, B.G.	Stott, D.K.
Belton, W.J.	Jensen, D.G.	Taylor, B.
Berry, B.B.	Kay, H.B.	Vormister, C.J.
Best, J.A.	Keeton, G.M.	Ward, K.F.
Biggs, B.H.	Lambie, R.	Ward, R.J.
Billett, M.A.	Lewis, M.J.	Ward, R.T.
Black, W.M.	McCallum, G.J.	Wark, R.M.
Bowden, M.F.	McCallum, M.G.	Watson, P.D.C.
Boyd, D.J.	MacDonald, R.E.F.	Wilkins, A.S.
Broadbent, G.A.	McDougal, M.J.	Williams, B.M.
Brooks, T.N.	McEvoy, M.J.	Wright, K.J.
Bunn, L.	McGuigan, R.J.	Wythe, A.R.
Carlyon, T.A.	McKay, T.J.	
Caust, M.D.	MacKenzie, R.W.	9th Intake (Donuts)
Cavanagh, A.B.	Malone, P.P.	
Cawthorn, R.B.	Melbourne, I.J.	6 December 1957
Coleman, J.R.	Merritt, W.H.	
Coops, W.	Middlebrook, J.	Addison, W.L.
Creswell, G.A.	Monkhouse, J.H.	Allison, J.
Cox, J.L.	Morris, J.R.	Armstrong, L.J.
Cuthbert, M.P.	Morrissey, R.W.	Armstrong, T.G.
Davies, K.A.	Morrow, G.D.	Atkins, R.G.
Dawson, R.J.	Mudge, P.S.	Bastin, G.V.
Dennett, C.F.	Nancarrow, F.R.	Bedford, W.G.
Denovan, R.K.	Nicholls, A.J.	Bell, A.H.W.
Dodds, D.H.	Nixon, P.H.	Bertram, I.D.
Donnelly, P.J.	North, W.F.	Bidmeade, D.A.
Downton, W.F.	O'Connell, J.D.	Brinsmead, R.A.
Etheridge, D.	Oehme, R.J.	Brinton, G.I.
Fiddes, J.A.	Ostila, K.T.	Bubeck, P.J.
Foreman, R.H.	Patterson, D.G.	Canning, G.W.
Gahan, G.L.M.	Payne, E.R.	Carpenter, T.W.

Carter, B.R.	Phillips, C.J.	Bickle, G.M.
Carty, N.	Pinkerton, T.J.	Bigg, R.J.
Clark, B.	Pryor, W.A.	Bohr, C.J.
Clunne, N.G.	Richardson, J.A.	Briscoe, J.H.G.
Connolly, P.W.	Ridgewell, Z.W.	Brown, E.
Cook, C.D.M.	Riske, A.	Buckley, D.
Copland, L.W.	Rose, M.R.	Byng, N.C.
Cox, H.H.	Sainsbury, G.A.	Cornish, D.R.
Dettmann, I.C.	Sheppard, P.	Daly, J.P.
Dibley, D.W.	Snell, N.P.	Dargan, B.G.
Duke, N.J.	Spring, A.C.	Debnam, R.R.
Fincham, J.A.	Sylvester, K.L.	De Courcy, E.
Flack, S.H.	Tardner, J.E.	Dicker, L.S.
Fletcher, M.	Tarlton-Rayment, M.S.	Drummond, D.J.
Flint, M.R.	Telfer, D.S.	Duncan, P.I.
Fuller, D.	Thorp, R.W.	Dyer, B.A.
Funk, M.F.	Trafford, A.H.	Eales, G.F.
Gentle, L.G.	Tupson, W.F.	Ferguson, J.C.
Gill, M.L.	Tye, J.G.	Fischer, K.G.
Greig, C.R.	Wallace, A.R.	Fisk, E.K.
Haines, J.W.	Wallace, M.	Garrett, R.J.
Handyside, G.A.	Wallis, G.H.	Gilham, K.C.
Hannam, A.J.	White, D.R.	Gordon, L.J.
Harvey, G.J.	Williams, B.J.	Griggs, D.W.
Hasler, D.J.	Williams, N.E.	Hall, R.J.
Henderson, W.J.	Williams, V.E.	Halloran, J.W.
Hodgson, R.P.	Wilson, G.C.A.	Hartfield, R.A.
Horne, G.C.	Window, A.D.	Hartshorn, C.R.
Hulbert, J.L.	Wishart, D.C.	Hawkins, B.J.
Hutchins, J.D.	Woodhouse, W.D.	Heward, L.J.
Jamieson, P.D.	Workman, R.S.	Hutchinson, R.L.
Johnson, J.G.	Wootton, C.R.	Huxtable, H.J.
Jones, K.J.	Wray, D.J.A.	James, S.W.
Kerr, D.C.	10th Intake (Rosebuds)	
Lynch, L.	5 December 1958	
McMillan, M.J.	Adams, P.C.	Keanalley, R.R.
McQueen, C.	Allwood, J.M.	Kellow, B.L.
Marrinon, K.P.	Arneson, E.L.	Kerr, K.B.
Martin, D.K.	Baff, T.L.	Leach, W.B.
Maslin, R.	Banks, A.W.	Ledingham, B.G.
Muldoon, I.G.	Bell, G.	Leo, G.T.
Murray, A.R.	Bennett, R.C.	LeRay-Meyer, N.
Nicholson, G.A.	Bentley, P.W.	Loudon, T.D.
Noble, E.G.		McKeand, D.E.
Norton, B.L.		McLeish, I.M.
Old, G.A.		McLintock, J.R.
Patterson, R.B.		McLoughlin, R.T.
Perry, G.V.K.		McMahon, J.R.
		McPherson, D.G.
		Marks, G.R.

Martin, O.A.	11th Intake	Handley, J.V.
Martin, T.C.	(Tadpoles)	Harris, K.L.
Martyn-Jones, P.G.		Henkel, O.V.
Meizer, A.J.	4 December 1959	Hodge, P.J.
Mercer, J.C.		Holt, B.C.
Miller, R.R.	Abbott, M.T.	Honey, W.F.
Morcom, R.M.	Angus, D.J.	Jacobs, L.E.
Morgan, C.D.	Antonio, E.J.	Jacobson, I.G.
Murrell, D.T.	Balhatchet, J.W.	Jonasson, N.F.
Nash, B.R.	Bates, P.E.	Jones, O.H.
Neale, J.R.	Bedson, J.R.	Kane, K.E.
Neill, A.R.	Berridge, R.A.	Kent, B.
Noble, T.J.	Bland, G.L.	Kenworthy, R.J.
Olsson, R.W.	Bolin, R.	Kinna, M.G.
Patterson, D.S.	Borm, M.E.	Kirk, K.R.
Peacock, D.W.	Bowden, R.J.	Lane, G.B.
Perceval, R.L.	Burton, K.T.	Louat, D.H.
Pratt, K.A.	Cain, L.B.	Lynam, D.J.
Pringle, B.	Carroll, C.J.	McCarthy, G.
Raison, B.K.	Chalker, M.N.	McGregor, Robert J.
Ray, J.	Chandler, E.R.	McGregor, Rodney J.
Reddacliff, R.W.	Chapman, C.J.	McNelley, R.L.
Reilly, K.J.	Codrington, G.L.	Maloney, D.
Riches, R.H.	Connolly, R.J.	Martin, G.J.
Rooney, A.W.	Coombs, B.H.	Mountstephen, J.W.
Rowe, G.H.	Cooper, D.J.	Murphy, B.J.
Ryan, E.	Cottrell, E.A.	Newton, R.L.
Scoble, R.M.	Cranswick, T.J.	Overall, B.W.
Sharpe, M.R.	Crawford-Ferguson,	Paton, K.B.
Simpson, B.A.	C.A.	Penna, D.B.
Sinclair, P.J.	Crossley, B.J.	Percival, G.R.
Stockham, P.J.	Daly, K.S.	Perry, R.A.R.
Stratford, G.	Denley, I.F.	Pheasant, G.
Stringer, K.A.	Dinnerville, K.B.L.	Philip, A.
Swan, R.J.	Doidge, B.A.	Preece, R.M.
Tidd, D.A.E.	Dolan, P.J.	Prewer, H.A.
Trott, H.J.	Downs, C.J.	Reid, A.W.S.
Tuncks, P.T.	Duncan, C.	Richards, B.
Twiss, P.A.	Ellison, B.J.	Rosendale, D.J.
Van Reeken, G.J.	Fenton, S.J.	Ross, B.L.
Walker, S.E.	Ferguson, I.R.	Russell, P.
Webley, V.J.	Fitzgerald, J.E.	St.John, R.J.
Wennagel, P.J.	Furze, R.J.	Sharrick, L.L.
West, I.W.	Gargosky, H.J.	Smith, R.C.
Wisseman, E.J.	Gibson, M.D.	Stagg, D.J.
Woolley, N.F.	Graham, W.B.	Stainer, D.L.
	Gwin, D.M.	Stewart, D.W.
	Hadley, A.S.	Suraski, J.E.

Turner, R.	Hall, W.N.	Stone, K.R.
Waters, D.H.	Harding, R.A.	Stuart-Sutherland,
Weiss, W.K.	Haxell, M.J.	A.R.
Wilson, E.J.	Haywood, R.E.	Sydes, L.F.
Wood, P.T.	Herron, R.	Tasker, N.C.
	Hersey, D.C.	Thompson, C.J.
12th Intake (Wombats)	Hobby, A.H.	Tickner, P.
	Hodgson, G.J.	Valom, B.
	Holmes, K.J.	Watson, B.
9 December 1960	Horsburgh, A.B.	Watts, R.E.
	Humphries, B.L.	Weir, R.
Affleck, W.R.	Hurford, B.W.	Weller, E.M.
Barrett, M.G.	Jaques, F.E.	Whately, D.B.M.
Benton, R.J.	Jones, P.R.	Whitchurch, A.W.
Bower, A.R.	Karpys, T.M.	White, E.J.
Bradford, C.E.	Keast, D.G.	Widgery, B.
Bridge, W.R.	Kropman, P.J.	Wilson, T.C.A.
Broderick, B.J.	Lapins, A.	Wood, C.D.
Brooker, M.E.M.	Large, K.G.	Worner, H.J.
Brown, R.W.	Larter, P.J.	Wren, C.
Bryksy, L.V.	Leaney, B.W.	
Bushell, G.J.	Lenghaus, W.	13th Intake (Oysters)
Butler, L.E.	Lenox, D.	
Caldwell, R.W.	Locke, P.B.	8 December 1961
Cant, R.W.	Locke, W.R.	
Clayton, I.D.	McCracken, A.H.	Baldwin, K.W.
Coad, A.S.	MacDonald, C.W.	Bawcombe, B.J.
Crawley, B.W.	MacIntyre, J.C.	Bleakley, L.D.
Crowe, B.A.	McLoughlin, G.W.	Boileau, L.J.
Crust, W.O.	Mackie, L.S.	Broom, D.H.
Cupit, T.W.	March, D.J.	Bucknell, D.G.
Cupitt, P.G.	Mascord, F.A.	Bucktin, B.A.
Dambergs, M.C.	Massicks, R.W.	Burns, A.R.
Darch, B.L.	Mattiuzzi, R.	Burzacott, R.G.
Dean, G.A.	Maxey-Fisher, R.	Butler, M.J.
Dodd, R.E.	Mercer, C.E.	Butler, P.D.
Donkin, R.H.	Moore, K.J.	Bywaters, N.C.
Eames, G.B.	Reeks, A.G.	Cook, D.J.
Edwards, A.C.	Riches, J.E.	Corcoran, K.D.
Eller, S.G.	Rowe, J.	Cornell, E.G.
Featherston, K.M.	Ryan, R.J.	Crowther, H.R.
Firns, E.G.	Sanderson, R.K.	Davis, R.T.
Franks, K.G.	Schmidt, G.R.	Dawson, T.Y.
Garraway, R.A.	Schirrmeyer, K.H.	Deaves, S.R.C.
Gracey, J.	Sheil, P.M.	Dick, B.J.
Gretton, R.I.	Smith, E.	Doyle, K.P.
Griffin, K.V.	Stein, L.D.	Durie, K.A.
Hahn, A.L.F.		Fisher, G.D.

Fitzgerald, D.G.	Stewart, G.	Cottrell, R.V.
Franks, J.A.	Stockwell, J.W.	Curtis, W.J.
Gray, I.J.	Swanson, R.R.	Dalgleish, P.R.
Greaves, A.E.	Targett, R.M.	Delatorre, A.P.
Green, J.E.	Tehan, M.J.	Dettmann, B.C.
Gumbrell, R.S.	Thuel, P.H.	Dorward, G.G.
Haines, K.C.	Tisdel, P.F.	Duncan, R.A.
Hall, J.M.	Tracy, P.M.	Eivers, J.T.
Hancock, W.N.	Waghorn, D.K.	Erhardt, E.R.
Harris, D.J.	Wallace, G.B.	Evans, D.S.
Harrison, R.T.	Walsh, K.N.	Everett, A.M.
Hind, A.J.	Watts, L.C.	Feutrill, J.E.
Holsken, H.H.	Wiffler, A.R.	Finn, M.J.
Horder, R.E.	Wilkes, R.D.	Fischer, P.W.
Howie, F.V.S.	Williams, P.E.	Fitzpatrick, J.
Kendall, R.G.	Winchester, P.L.	Fuller, A.J.
Kilah, R.A.	Windsor, A.P.	Fuller, B.I.
Klasups, P.	Wright, D.R.T.	Gee, R.F.
Lanham, J.A.N.	Wright, M.J.G.	George, S.A.
Lawler, R.E.	Wright, R.L.	Godman, P.W.
Leahy, J.B.	Ziebel, R.J.	Goodsir, J.E.
Lee, F.C.		Graham, J.R.
Leo, D.K.	14th Intake (Tulips)	Grierson, R.C.
Lovell, B.M.		Hampton, B.G.
McCann, J.J.	14 December 1962	Hatswell, J.R.
McGowan, J.A.		Hayes, A.P.
Martin, J.A.	Adamson, A.B.	Hayne, L.J.
Martin, N.H.	Andrews, C.G.	Hocking, R.D.
Meier, I.G.	Bauchop, G.J.	Hogg, R.J.
Milton, R.G.	Benton, R.J. (NZ)	Holland, M.L.
Minchin, B.E.	Blagg, E.D.	Inch, J.W.
Montgomery, N.	Bonnor, F.J.	Jenkinson, C.J.
Mueller, J.E.	Bonnyman, C.	Johnson, I.T.
Murray, A.G.	Boyd, R.G.	Johnston, R.
Neatherway, J.	Boyd, T.M.	Jones, A.A.
Northover, R.G.	Boyle, T.B.	Kelly, A.J.
Palma, S.	Brophy, I.F.	Kelly, M.E.
Petersen, J.R.	Brown, N.F.	Killalea, F.M.
Pickering, G.G.	Burford, P.J.	Leo, R.J.
Power, W.J.	Cairns, I.H.	Lewis, R.G.
Reading, W.W.	Carpenter, L.S.	McBain, P.
Rolls, B.W.	Cecchin, J.L.	McCann, N.J.
Roy, K.G.	Chitty, W.C.	McCreadie, W.
Ruming, R.H.	Clarke, D.C.	McDougall, J.W.
Sankey, F.M.G.	Clarkson, J.W.	Magner, M.
Schwartz, R.I.	Conway, R.T.	Matthes, R.L.
Shoobridge, W.R.	Cook, T.G.	Mattiazzi, R.L.
Smith, E.R.	Coombe, B.K.	Mayer, T.J. (NZ)

Mitchell, A.R.	Wruck, M.J.	Hersant, H.E.
Moffat, D.R.	Young, G.J.	Hollingworth, P.
Monkhouse, G.R.		Hood, R.J.
Morrison, G.D.	15th Intake (Beavers)	Irvine, J.M.
Morrison, J.B. (NZ)		Janco, M.
Muggleton, R.A.	13 December 1963	Jazownik, D.L.
Mustard, J.J.		Johnston, G.R.
Neilson, B.S.	Adams, F.C.	Joyce, P.J. (NZ)
Nisbet, P. (NZ)	Argeat, F.W.	Keanalley, A.A.
Nolan, P.G.	Ashton, R.J.	Kleyn, T.J.
Page, A.	Ashworth, P.G.	Knight, R.G.
Pickard, W.J.	Attwood, A.W.	Knowler, B.F.
Poyner, B.R.	Berryman, M.J.	Koger, R.P.
Rae, J.S.	Blythe, A.T.	Lee, D.Y.
Rankin, F.J.	Bond, R.G.	Little, W.F.
Rees, D.L.	Bone, J.Q.	Loibl, K.J.
Reynolds, V.J. (NZ)	Booth, P.L.	Lyon, A.D. (NZ)
Roberts, G.A.	Brown, P.R.	McDonald, A.C.
Robinson, P.L.	Butcher, I.K.	MacNeill, D.R.
Rogers, L.S.	Byers, G.V.	Maksymczuk, P.
Russell, A.R.	Caesar, D.J.	Moreton, N.R.
Russell, L.A.	Camp, B.C.	Morton, T.J.
Ryan, M.	Cansick, G.L.	Murphy, A.P.
Scott, B.J.	Carlton, R.M.	Opie, J.E.
Selman, C.W.	Churchin, W.M.	Paterson, R.A.
Seward, J.H. (NZ)	Clark, D.R.	Peacock, G.J.
Shillitoe, R.G.	Comber, D.J. (NZ)	Ramsay, R.D.
Skinner, H.J.	Cottrell, W.L.	Rhoades, R.D.
Smith, J.W.	Court, D.R. (NZ)	Robb, L.C.K.
Spalding, J.	Cowling, D.H.	Rouse, F.J.
Stanley, L.F.	Cross, R.A. (NZ)	Row, K.L.
Stehr, R.J.	Dickson, W.E.	Rowe, R.A.
Sweetman, M.J.	Donald, B.	Ruming, G.J.
Taylor, R.J.	Donelan, R.G.	Ryan, A.M.
Todd, B.H.	Duncan, J.G.	Ryan, D.L.
Traves, M.K.	Esposito, K.J.	Sargent, A.J.
Tubman, M.N.	Every, K.R.	Simpson, B.T.
Van Der Woude, H.G.	Forknall, A.H.	Springfield, I.J.
Walker, P.R.	Gordon, D.J.	Stone, R.L.
Wall, C.J.	Gorrie, M.J.	Stringfellow, D.
Wattus, J.T.	Gould, D.J.	Tarrant, R.R.
Weller, S.J.	Greaves, G.	Tullberg, D.
West, S.D.	Grimshaw, F.	Unicomb, G.E.
Whitmore, T.J.	Gurney, K.W.	Vandenberg, W.D.
Wildish, P.R.	Hardwick, F.	Vanderheld, W.B.
Williams, J.T.	Harvey, J.W.	Vernay, R.
Wilson, R.A.	Henry, F.B.M.	Waters, B.N.
Winter, J.D.	Herron, J.K.	Watson, G.A.

Webb-Wagg, K.	Fankhauser, L.W.	Sillars, B.W.
West, J.R.	Gauld, D.M.	Smith, B.F.
Whawell, G.D.	Glover, G.R.	Smith, J.E.
Wilkes, W.N.	Gould, W.	Smith, J.M.
Wilkinson, J.F.	Gray-Moffatt, B.	Spark, B.R.
Wills, R.M.	Hall, C.F.	Stielow, G.J.
Wilson, R.B.	Hender, G.L.	Stocks, G.J.
Window, R.J.	Henson, J.A.	Storey, G.V.
Worner, D.C.	Hill, B.	Straub, T.
Worthington, B.	Hill, M.E.	Talbot, D.A.
16th Intake (Arabs)	Hillebrand, D.B.	Terakes, M.
3 July 1964	Hodge, J.W.	Tidd, R.G.
Akaczonek, J.	Hollingdale, G.P.	Trapp, W.B.
Balboni, P.J.	Jarvis, G.R.	Tulimowski, E.
Baldwin, V.R.	Jeans, K.W.	Uhlmann, A.A.
Ball, N.R.	Johnson, M.	Vale, T.
Bayliss, K.W.	Johnson, R.	Van Egdom, R.
Bennett, R.C.	Jones, R.D.	Van Gilst, E.
Berry, G.R.	Kidcaff, P.F.	Vandenberge, W.B.
Bishop, W.D.	McKinnon, M.	Walsh, B.R.
Bojko, M.	McLeod, J.I.	Walsh, L.R.
Borbas, G.J.	Maher, G.K.	Ward, M.C. (NZ)
Boyd, W.I.	Matthew, J.	Ward, R.E.
Bracegirdle, P.M.	Merchant, A.J.	Weaver, R.L.
Brackin, R.J.	Milevskiy, R.S.	Whetter, B.H.
Bradley, S.J.	Miller, J.S.	White, G.L.
Brook, S.F.	Mitchell, J.W.	Williams, W.N.
Broome, L.J.	Moore, W.R.	Woodward, D.
Bryant, G.	Morris, R.J.	Wright, B.A.
Butwell, D.P.	Morton, C.A.	Wuoti, T.J.
Carroll, B.F.	Moy, D.G.	
Cashman, K.A.	Nedwich, R.J.	17th Intake (Lizards)
Clark, G.J.	Noble, W.N.	2 July 1965
Cleaver, A.D. (NZ)	Offord, F.W.	Arthur, A.J.
Clive, R.J.	Packer, P.R.	Atkin, J.L.
Cooke, O.P.	Parke, D.L.	Bailey, I.L.
Davies, J.A.	Peters, N.D.	Barber, D.G.
Davis, M.J.	Pimm, R.W.	Bennett, M.J.
De Jong, P.	Powell, R.E.	Bennetts, K.M.
Dean, D.	Randall, C.W.	Betteridge, H.C.
Dempsey, D.G. (NZ)	Reid, L.F.	Bevan, A.J.
Donnelly, K.J.	Rennie, N.W. (NZ)	Bidgood, T.E.
Eaton, P.	Renshaw, R.I.	Bircham, B.K.
Foster, G.	Robertson, V.	Bognar, E.S.
Fox, A.F.	Rush, L.J.	Boyden, A.C.
	Shaw, P.	Bradley, B.W.
	Shoemark, R.E.	
	Shung, J.N.	

Brighton, J.R.	Kulkiewicz, L.	Saunders, R.J.
Brown, D.R.	Lancaster, R.J.	Schutz, A.J.
Byrne, P.F.	Lee, R.J.	Senini, I.
Byrnes, A.E.	Leggett, A.T.	Sigston, W.J.
Cash, R.J.	Lingard, W.	Smith, G.R.
Chugg, R.L.	Lunguntan, T.R.	Smith, H.K.
Clarke, N.T.	Lyzun, P.G.	Snodgrass, E.R.
Cockburn, A.R.	McGrath, M.T.	Stanley, M.S.
Cole, J.W.	McGuire, N.R.	Starr, I.K.
Cook, K.H.	MacPherson, R.S.	Steel, W.R.
Copelin, R.G.	Maidment, A.J.	Steinberger, P.D.
Cottrell, R.J.	Manning, R.W.	Stevens, G.E.
Coxon, R.L.	Marshall, J.R.	Stone, K.E.
Crawford, A.W.	Marshall, R.L.	Streatfield, D.K.
Curgenven, R.D.	Martin, G.P.	Strugnall, E.A.
Davies, G.D.	Matthews, T.C. (NZ)	Tilley, P.V.
Dawkins, J.R.	Medhurst, M.P.	Todd, D.J.
Dippel, N.R.	Meyer, D.P.	Triggell, O.
Downing, D.M.	Miles, C.J.	Trimmer, K.R.
Dunbar, A.J.	Millard, K.P.	Van Der Vegt, A.N.
Fellowes, A.G.	Munt, W.R.	Wallis, R.D.
Fraser, I.J. (NZ)	Nebauer, J.D.	Weller, E.P.
Fraser, J.E.	Neesham, P.O.	Williams, H.J.
French, B.F.	Nelson, K.A.	Williams, I.C.
George, J.R.	Nichols, R.J.	Williams, R.C.
Gordon, M.S.	Nissen, A.G.	Witney, L.W.
Green, R.W.	Norton, R.M.	Worrall, P.H.
Guy, V.A. (NZ)	O'Brien, P.W.R.	Wright, A.J.
Hagen, J.F.G.	O'Brien, T.W.	
Hall, G.I.	O'Donovan, P.B.	18th Intake (Leghorns)
Hatchman, B.J.	Orrock, B.T.	
Hatchman, G.E.	Owston, J.M.	1 July 1966
Haw, R.J.	Passmore, G.J.	
Hemsworth, R.C.	Patterson, B.R.	
Henry, J.D.D.	Peatey, G.B.	
Hewitson, P.M.	Porter, J.W.	
Hill, B.M. (NZ)	Pendergast, D.J.M.	
Hind, I.R.	Raby, R.A.	
Honan, B.R.	Rawling, R.J.	
Huckett, J.M.	Riemann, J.T.	
Hulse, L.	Richardson, E.S.	
Ireland, R.G.	Richardson, R.L.	
Jackson, M.J.	Rigden, D.W.B.	
Jardine, B.J. (NZ)	Roberts, G.C.	
Jimmieson, D.S.	Roberts, T.W.	
Johnston, C.	Robertson, G.W.	
Johnston, G.D.	Robinson, D.	
Jones, R.	Royal, R.F.	

Bullough, J.W.	Jamieson, M.S.	Ronalds, A.V.
Caesar, R.C.	Jarosinski, S.J.	Roots, W.T.
Cameron, R.J.	Jensen, M.H.	Rowe, A.W.H.
Castle, G.A.	Johnston, R.B.	Rumpf, D.R.
Castle, L.B.	Jones, S.J.	Rutland, J.
Cawse, I.R.	Joyce, R.B.	Sewell, N.J.
Cox, L.N.	Kelly, A.J.	Simon, G.D.
Croker, W.R.	Kershaw, K.	Smith, N.J.
Davis, K.H.	Kirkwood-Ryan, K.A.	Smith, R.J.
Day, D.G.	Komoder, H.S.	Soster, I.
De Boer, D.	Krop, R.	Spinaze, J.E.
Deegan, J.A.R.	Langston, S.M.	Samusew, P.M.
Dennis, K.L.	Langton, D.J.	Starkey, A.J.
Dennis, R.J.	Lee, R.J.	Stuart, I.C.
Duckworth, R.J.	Lucht, T.C.	Sugars, T.L.
Duffield, C.W.	Lyndon, J.T.	Suosaari, L.I.
Dunbavan, A.T.	McGill, J.M.	Thompson, A.J.
Duncombe, G.A.	McIntyre, P.J.	Tobin, M.J.
Dunn, A.P.	McKay, B.L.	Trichlin, H.E.
Edwards, R.A. (NZ)	McKenna, R.J.	Turner, Neville C.
Edwards, R.J.	McKennay, R.C.	Turner, Norman C.
Eiternick, L.A.H.	Macklin, D.W.	Viner, R.G.
Elliott, D.J.	Manaszcuk, M.T.	Waddington, T.J.
Freeman, D.J.	Matena, B.P. (NZ)	Walker, M.D.
Fry, I.R.	Moffatt, N.	Walker, N.H.
Gallagher, P.	Morris, W.W.	Walters, B.J.
Gallagher, P.P.	Mysko, W.	Waterhouse, P.G.
Garrett, N.J.	Neal, W.D.	Weight, R.W.
Georgee, D.P.	Neilson, W.M.	White, P.J.M.
Gnezdiloff, R.G.	Newbury, G.A.	Whittaker, R.M.
Greig, F.B.	O'Brien, K.A.	Williams, J.R.
Hansen, L.J.	O'Dowd, G.G.	Winter, J.F.
Harris, A.D.	Packer, G.N.	Winton, M.G.
Hartley, G.J.	Paddon, R.E.K.	
Hastie, D.P.	Partridge, G.T.	19th Intake (Snails)
Hatcher, M.J.	Payne, B.W. (NZ)	
Hawkins, R.E.	Payne, K.W.	29 June 1967
Heap, G. (NZ)	Pearce, R.J.	
Hedt, L.E.	Peck, D.J.	Abernathy, W.J.
Heydon, G.C.	Perry, R.J.	Anderson, R.M.
Hills, T.I.	Pickering, C.W.	Andrews, M.A.
Hogan, R.	Pickering, E.J.	Anesbury, L.C.
Hooper, R.	Price, P.J.	Ayers, D.A.
Horne, K.W.	Pronczak, P.J.	Baff, K.G.
Horner, R.L.	Puslednik, H.	Bankin, K.R.
Hosking, H.A.J.	Quilkey, S.P.	Barnicoat, D.J.
Ireland, P.D.	Ralston, J.H.	Barrett, A.G.
Iwanowski, W.	Riddell, J.R.	Barridge, K.J.

Beardmore, D.R.	Hopper, W.L.	O'Brien, D.J.
Binnington, A.R.	Howard, H.A.	O'Buch, R.
Birt, E.E.	Hudson, J.R.	Oxley, G.F.
Bishop, T.J.	Hugall, M.S.	Palfrey, K.T.
Blanch, A.J.	Hutchinson, P.J.	Parkinson, C.R.
Blewitt, T.J.	Irvine, R.A.	Patchett, M.C.
Bock, P.A.	Ivory, G.S.	Pearson, D.G.
Bolam, S.R.	Jeffrey, A.M.	Penna, S.
Boneham, D.N.	Jenkins, E.L.	Pond, J.C.
Borham, A.	Johnson, D.M.	Porter, R.J.
Brettschuh, P.	Johnston, J.D.	Prewett, B.J.
Browne, G.W.	Johnston, J.N.	Rablin, C.D.
Buckton, W.C.	Johnston, W.A.	Rees, G.
Budick, P.R.	Jones, B.L.	Richardson, A.W.
Buhse, D.A.	Jones, T.R.	Riley, C.M.
Burney, D.W.	Jordan, B.M.	Robinson, R.J.
Calvert, K.F.	Joss, I.L.	Rodda, S.J. (NZ)
Carseldine, S.G.	Kelly, B.M.K.	Romanowski, H.W.
Carter, W.M.	Kent, R.J.	Romeyn, F.
Churcher, M.	Klingberg, K.P.	Rothwell, P.B.
Clark, H.J.	Knowles, G.C.	Ruming, S.J.
Cole, G.W.	Kozlyk, J.J.	Sanders, B.R.
Condell, G.R.	Laird, B.R.	Schulz, H.P.
Connell, D.L.	Lane, R.E.G.	Sharpe, R.G.
Connelly, J.W.	Lorenz, K.	Shaw, A.E.
Coote, D.G.	McCabe, A.	Sheehan, T.A.
Corcoran, J.L.	McClelland, R.A.	Sibley, M.P.
Crawley, E.J.	McGovern, B.J.	Simpson, G.F.
Davey, N.L.	McGrath, J.J.	Simpson, P.R.
Davies, W.E.H.	McGreery, G.D.	Smith, L.M.
Davis, R.B.	McGuiness, P.G.	Smith, R.J.
Davison, T.J.	Mackenzie, M.J.	Snodgrass, S.J.
Dawes, D.G.	McLaren, R.J.	Spink, R.J.
Day, E.	McLoughlin, R.F.	Staples, G.A.
Dolby, W.J.	McNabb, G.M.	Stevens, W.R.
Donnelly, D.W.	Maccarone, J.	Stolberg, G.E.
Dougle, R.L.	Mantell, J.M.	Streater, N.T.
Frew, D.J.	Martin, B.K.	Stryboss, H.E.
Gnezdiloff, J.M.	May, G.	Taylor, P.C.
Hagar, R.W.	Milkins, L.A.	Thomas, R.W.
Harris-Walker, P.	Molloy, W. (NZ)	Thomson, R.J.
Hart, B.M.	Moran, A.	Thulin, K.A.
Hartcher, P.A.	Munro, M.R.	Townsend, A.W.
Haxell, P.R.	Murphy, J.D.	Trapp, D.M.
Heit, J.S.	Murphy, R.W.J.	Van Boven, M.H.
Henderson, E.G.	Murray, N.B.	Van Den Bosch, J.B.
Hickman, G.J. (NZ)	Neal, G.G. (NZ)	Vellacott, J.P.
Hopper, E.J.	Newman, M.D.	Vietnieks, G.

Watson, K.E.	Churchward, P.J.	Lamb, K.W.
Watson, P.J.	Colgrave, W.T.	Laughlin, S.R.
Webeck, T.J.	Colville, W.F. (NZ)	Ledingham, G.E.J.
West, J.J.	Coomber, D.R.	Lee, K.R.
Wiech, R.M.	Coupe, D.M.	Leighton, W.D.
Wilkinson, T.G.	Coyte, A.J.	Linfoot, M.S.
Winther, C.E.	Crossingham, G.	Logan, W.B.
Winton, A.N.	Crosswell, P.D.	Lovell, P.E.
Wyatt, K.W.	Crotty, P.D.G.	McCloskey, A.H.
Yates, A.N.	Cubit, G.A.	MacDonald, G.W.
Zekants, J.	Da Re, F.A.	McGuffie, W.A.
20th Intake (Squirrels)	Davenport, N.L.	McLean, G.R.
27 June 1968	Denner, B.	McLernon, T.J.
Aizlewood, G.H.	Dennis, G.W.	Mak, P.J.
Aldridge, R.J.	Donaldson, M.G.	Merrigan, W.N.
Anderson, T.R.	Doyle, K.R.	Messer, D.R.
Archibald, D.J.	Dubickas, J.	Miller, L.W.
Axtell, P.W.N.	Dullroy, D.J.	Moffatt, I.J. (NZ)
Bailey, K.W.	Dyce, G.K.	Moss, E.F.
Bailey, P.G.	Edmanson, R.	Moxham, T.J.
Ball, R.C.	Elward, A.L.	Mullins, T.T.
Bartlett, K.D.	Evans, A.R.	Murphy, R.J.
Bates, N.W.	Evans, E.J.	Nelson, C.R.
Begley, P.	Fletcher, L.P.	Nichols, B.T.
Bell, I.R.	Foley, G.E.	Noble, W.G.
Bennet, D.P.	Garrett, T.R.	Pegg, R.H.
Biessbarth, H.J.H.	Gilchrist, K.J.	Penna, G.
Birss, J.R.	Gordon, L.R.	Pickering, D.H.
Brien, R.L.	Halupka, T.	Pickering, D.W.
Broksch, B.C.	Hamer, J.R.	Pitman, G.R.
Buchanski, R.	Hansen, A.R.	Pokarier, B.D.
Bucholz, R.T.	Harris, M.J.	Potter, G.E. (NZ)
Bulkeley, P.H.	Harrison, D.J.	Poyner, R.B.
Bulley, W.H.	Hester, G.A.	Rashleigh, A.W.
Buttery, A.S.	Higgins, B.R.	Ratcliffe, R.
Callinan, I.P.	Hill, G.C.	Reeves, G.R.
Cameron, W.N.	Hinder, A.F.	Reimann, F.C.
Campbell, B.A.	Hood, B.A.	Richardson, B.S.
Cannen, S.	Horner, G.M.	Richardson, R.J.
Caudwell, P.R.	Jacklin, W.F.	Robertson, R.J.
Chamberlain, I.J.	Jenkins, J.L.	Robinson, J.T.
Chiles, S.	Jessop, R.C.	Romkes, J.F.
Chitty, T.L.	Johnson, G.T.	Russell, D.L.
Christianson, M.	Jones, P.A.	Salter, I.R.
	Jorgenson, P.E.	Sbizzirri, F.
	Judson, L.J.	Scrivner, G.K.
	Kemperman, J.F.	Shepherd, K.J.
	Kerr, D.J.L.	Siebert, P.L.

Sloane, P.A.	Bolton, J.M.	Haines, R.J.
Sloane, T.A.	Borchert, I.G.	Hare, E.W.
Smith, A.R.	Breakspeare, R.W.	Heffernan, D.F.
Smith, D.J.	Bromage, R.	Hennig, P.M.
Smith, G.D.	Browne, R.N.	Hewitson, R.L.
Smith, M.J.	Bruce, N.W.	Hicks, J.V.
Smith, R.J.G.	Brunato, M.A.	Higgins, W.E.
Stephenson, B.C.	Buchanan, R.C.	Hills, B.W.
Stewart, D.L.	Burrows, D.K.	Hobday, T.G.
Stillman, G.J.	Boyton, B.J.	Hobday, T.S.
Summerfield, G.I.	Carmody, T.	Hogan, P.J.
Sutcliffe, J.M.	Carn, G.S.	Howard, B.P.
Teale, M.J.	Carney, J.J.	Humphries, I.E.
Thompson, D.R.	Carr, E.J.	Hutchinson, A.J.
Thompson, F.	Carr, J.W.	Hutton, A.R.
Tompkins, P.J.	Carseldine, G.A.	Innes, S.
Tooth, G.M.	Chay, K.H.	Jackson, R.H.
Treadwell, A.V.	Clark, K.R.	Jensen, M.J.
Truan, G.D.	Clouten, R.A.	Johnson, M.D.
Twomey, P.M.	Conomos, M.	Johnston, J.C.
Warden, T.S.	Craig, P.C.	Jones, P.G.
Warhurst, I.R.	Crandall, R.	Kalab, G.R.
Waters, P.J.	Crothers, R.M.	Kamerling, A.J.
Watson, N.	Crow, T.G.	Kath, D.F.
Webster, D.J.	Crowe, L.D.	Keetch, E.W.
Welch, J.N.	Cuff, D.G.	Kershaw, A.
West, B.	Cuthbert, H.H.	Kirby, B.D.
Wilson, G.J.	Davidson, G.P.	Knilands, W.J.
Wnuczynski, A.	Davis, V.G.	Knutsen, S.P.
Young, R.A.	De Loas, G.	Larsen, W.
21st Intake (Hedgehogs)		
25 June 1969		
Aaltonen, J.A.	Easterbrook, E.C.	Lewis, D.G.
Abrahall, D.	Edgar, R.L.	Lewis, M.A.
Bailey, R.F.	Elker, B.D.	Lindner, H.J.
Ball, J.W.	Everett, K.W.	Lutch, G.R.
Banks, D.J.	Farlow, W.J.	Lutton, R.B.
Barnett, B.A.	Faulkner, E.B.	McAllister, N.
Bates, M.J.	Feeley, A.E.	McIntosh, G.R.
Bearman, K.C.	Ferris, L.J.	McKay, P.J.
Bell, A.R.	Fryar, D.E.	McKean, D.J.
Bellgrove, P.F.	Garland, I.J.	McKenzie, R.A.
Bilsen, G.R.	Gentry, R.J.	McLaughlin, G.E.
Blanning, R.E.	Graymore, S.	McPhillips, M.G.
	Green, A.	Maddern, R.O.
	Green, G.A.	Marsh, K.N.
		Maxwell, A.L.
		Maxwell, R.W.
		May, J.E.
		Mead, P.J.

Medew, J.D.	22nd Intake (Antelopes)	Gooley, L.H.
Meredith, J.D.		Goss, G.G.
Millen, C.A.H.		Grainger, A.G.
Morrison, R.G.	25 June 1970	Grave, D.A.
Murrell, D.C.		Greaves, M.S.
Noordzy, M.J.J.	Akaczonek, T.	Hajek, C.W.
Olden, G.M.	Allen, R.K.	Harrison, J.A.
Parsons, G.L.	Andersen, A.H.	Harry, L.J.
Patrick, R.V.	Anderson, B.	Hart, L.S.
Pearce, W.J.	Andrews, S.P.	Hassett, S.J.
Perrin, S.A.	Baker, P.W.	Hawkins, S.T.
Perry, W.	Balcombe, G.W.	Herkess, F.I.
Phillis, J.W.	Balodis, R.A.	Holmes, J.G.
Philp, B.T.	Banton, M.T.	Howarth, R.J.
Pickering, A.J.	Barber, B.W.	Jeffrey, G.B.
Raudonikis, T.	Barnett, C.J.	Jeffrey, S.F.
Raulstone, P.C.	Barrett, B.E.	Johns, R.N.
Reibel, J.L.	Bartlett, G.J.	Johnston, P.F.
Richardson, A.P.	Black, G.D.	Jordan, G.J.
Rooney, K.J.	Brighton, D.W.	Jumeau, P.R.
Rosenblatt, P.C.	Brinkmann, R.J.	Karmiste, V.
Rowett, L.N.	Brook-Rerecich, P.	Keable, S.H.
Rudder, A.J.	Broughton, J.S.	Kearney, P.A.
Ryan, B.A.	Byrne, J.E.	Kennett, A.G.
Sandy, J.G.	Carter, M.J.	Kent, G.R.
Scholz, W.D.	Clune, N.R.	Kilpatrick, L.R.
Scott, T.R.	Cole, R.A.	Kisbee, M.W.
Searle, R.W.	Craig, G.B.	Klibschon, K.H.
Searle, W.S.	Cranney, I.J.	Kurczewski, P.
Shadbolt, P.R.	Davey, P.N.	Lackey, L.A.
Shannon, P.	Daw, G.H.	Laidlaw, I.T.
Simpson, K.T.	Deane, K.P.	Lewandowski, G.Z.
Simpson, M.C.	Downey, B.F.	Lock, C.M.
Smith, M.I.	Evans, R.J.	Lohmeyer, G.L.
Smith, P.J.	Ferman, C.G.	Looke, K.G.
Soper, B.W.	Fern, G.R.	McConnell, G.J.
Streitberg, F.B.	Fletcher, M.W.	McMahon, B.C.
Teale, J.S.	Flett, R.D.	McNaughton, W.B.
Timbs, J.R.	Foggo, C.D.	McPherson, D.K.
Trafalski, Z.L.	Foxon, R.A.	Mason, G.J.
Tucknott, A.J.	Fuary, M.J.	Mathews, W.T.
Webster, G.R.	Galbraith, A.N.	Matthews, B.J.
Willoughby, K.R.	Gehradte, P.J.	Monckton, M.W.
Wilson, I.D.	Gibbs, G.K.	Montey, G.H.
Wood, S.C.	Gibbs, P.W.	Moore, L.R.
Zarate, J.I.	Gillam, A.J.	Morgan, B.L.
	Ginn, W.E.	Morgan, P.G.
	Goode, B.D.	Murphy, G.K.

Murphy, J.J.	23rd Intake	Hogarth, J.A.
Nigol, I.K.	(Goannas)	Hourigan, J.T.
Nixon, T.J.		Hunt, D.R.
Noonan, G.A.	24 June 1971	Iles, S.D.
Nordheim, J.E.		Jaeger, T.R.
O'Brien, D.K.	Adams, J.K.	Kath, T.W.
Osborne, R.J.	Allan, G.R.	Keen, D.L.
Otto, B.A.	Allan, R.J.	Kemp, I.A.
Owens, G.W.	Alston, P.W.	Kendall, G.R.
Paine, R.T.	Austin, K.	Lampard, S.C.
Palin, D.R.	Bailey, L.A.	Lawley, I.E.
Percival, J.E.	Beare, R.P.	Lewin, C.H.
Perren, R.K.	Behm, G.T.	Lewis, V.P.
Philippe, R.J.	Betts, P.J.	Lynch, D.G.
Pocock, R.J.	Billsborrow, M.	McCann, M.J.
Ralph, H.D.	Borg, A.	McCorley, C.J.
Roeth, D.A.	Boyes, J.J.	MacFarlane, A.B.
Rosewarne, P.J.	Bradley, K.M.	McLeod, D.J.
Rouen, J.G.	Brown, K.L.	Maddock, J.O.
Salmon, I.C.	Burns, C.R.	Milne, I.L.
Samulski, A.W.	Clark, C.E.	Murphy, A.W.
Sandlant, G.R.	Collins, P.G.	O'Brien, L.M.
Sidman, P.G.	Curran, K.T.	Olsen, T.R.
Skyring, L.D.	Dee, P.J.	Pallister, D.W.J.
Smith, G.R.	Dempsey, M.W.	Parsons, A.R.
Sowter, W.M.	Devlin, F.A.	Pauley, S.G.
Stade, R.U.	Dowd, G.J.	Pearson, B.R.
Stevens, M.F.	Drover, W.R.	Penfold, G.J.
Stevens, P.A.	Dunphy, M.C.	Perks, G.B.
Stone, M.G.	Edwards, K.J.	Philip, L.W.
Taylor, D.P.	England, T.P.	Pluck, A.W.
Terbeeke, A.A.	Ewing, P.W.	Purdy, D.W.
Thomas, J.V.	Fidler, P.J.	Ratcliff, K.N.
Tobin, E.M.	Fischer, W.	Riley, T.R.
Tonkin, R.C.	Fitter, J.T.	Ross, C.D.
Tuncks, G.A.	Foggo, G.R.	Rowe, A.J.
Turnbull, G.W.	Frawley, P.C.	Rutledge, P.R.
Turner, D.W.	Fuller, P.F.	Schroeder, W.H.K.
Vella, R.J.	Gibson, G.L.	Schroter, D.L.
Walsh, J.J.	Glazier, G.E.	Sharp, C.L.
Walters, S.J.	Goodall, P.R.	Shaw, R.F.
Webber, F.	Gowans, K.A.	Shephard, G.E.
Woloszyn, L.O.	Hadley, B.W.	Shirley, P.D.
Wood, G.A.	Hardy, D.J.	Sibson, R.S.
Wykes, L.T.	Hicks, D.M.	Simpson, D.D.
Zerbe, E.W.	Hill, J.D.	Sinton, T.W.
	Hing, G.T.	Sloman, L.I.
	Hodgson, R.M.	Smith, D.R.

Soper, A.J.	Coulter, K.R.	Redden, N.L.
Steele, G.J.	Curry, W.I.	Riley, K.P.
Stewart, G.R.	Daw, N.K.	Rooney, L.J.
Stone, C.J.	Delaney, K.B.	Savage, J.S.
Swann, L.R.	Dickson, R.G.	Say, M.J.
Sweetman, M.J.	Dobson, R.J.	Sigley, G.R.
Thomas, J.S.	Dowdeswell, N.P.	Slater, R.J.
Thomas, L.M.	Drysdale, J.	Smith, J.J.
Trapp, R.L.	Dyer, K.R.	Spencer, A.J.
Turnbull, J.C.	Ester, R.R.	Stade, M.
Twine, T.J.	Estreich, D.P.	Stanley, B.W.
Van Hulsentop, C.	Fowkes, G.W.	Statham, C.A.
Vassallo, C.M.J.	Foxwell, W.J.	Steele, P.J.
Veal, H.K.	Freiberg, K.N.	Stewart, C.D.
Voght, G.L.	George, C.W.	Stiesch, H.R.
Vulker, H.H.	George, D.L.	Stone, R.J.
Walpole, W.R.	Gibbons, E.J.	Storer, A.K.
Watson, R.J.	Gilligan, D.L.	Struber, B.F.L.
Watson, T.J.	Gledden, D.C.	Stuart, G.L.
Weeks, G.M.	Green, L.J.	Tilney, H.J.
Winkel, L.I.	Griffioen, C.W.	Tumminello, D.M.
Wittwer, H.R.	Hansen, S.J.	Tuni, R.T.
Wood, D.M.	Hobbs, M.C.	Turner, G.A.
Wooten, R.B.	Horvath, R.D.	Vance, R.P.
Wright, P.J.	Hosking, P.K.	Wakefield, R.W.
	Howlett, P.J.	Warburton, I.
24th Intake (Skunks)	Jones, D.P.L.	Watego, I.H.
	Kapel, R.H.	Wheeler, K.R.
22 June 1972	Karlsen, P.J.	Wilson, D.M.
	Keogh, G.J.	Wilson, E.N.
Adams, G.M.	Kondratowicz, A.G.	Wilson, R.K.
Andrew, G.J.	Kowalski, C.P.	Winton, A.T.
Arnold, R.D. (NZ)	Liivamagi, R.J.	Wright, D.J.
Bailey, N.E.	McConnell, G.D.	Zadow, R.E.
Barnett, R.B.	McCutcheon, P.M.	
Beggs, W.J.	McNamara, P.W.	25th Intake (Horses)
Berry, T.G.	Maidment, D.J.	
Beutel, T.L.	Martin, G.	21 June 1973
Buba, S.P.A.	Mitchell, D.I.	
Burr, R.L.	Nicol, T.J.	Adams, K.J.
Busby, F.R.	Noble, C.J.	Andrews, W.B.
Chippendale, G.J.	Nussey, J.T.	Aspey, P.
Christiansen, D.W.	O'Donnell, K.F.	Bates, T.M.
Clark, D.C.	Palmer, R.W.	Bayne, R.G.
Cobb, N.P.	Picton, N.M.	Bennett, P.M.
Cooper, R.F.	Price, D.P. (NZ)	Blackman, N.P.
Corcoran, M.E.	Pring, J.M.	Blyth, W.T.
Coss, K.M.	Rayfield, P.N.	Bowden, F.S.

Bowman, N.P.	Lyndon, D.T.C.	Wesley, S.K.
Bradford, A.J.F.	Macarthur-King, P.N.	White, D.S.
Brischetto, J.A.	McCartney, G.C.	Whittle, D.G.
Carmichael, D.W.	McGennisken, L.I.	Wilkinson, A.S.
Congram, P.N.	Martin, S.J.	Winter, A.J.
Conrades, B.S.	Millard, D.W.	Worthington, P.J.
Cooke, B.E.C.	Mooney, B.E.	
Cracknell, D.	Mooney, W.D.	26th Intake
Cradock, W.J.	Mulvey, R.G.	(Octopuses)
Crimean, J.M.	Murfitt, R.B.	
Cunningham, L.G.	Murray, G.F.	20 November 1973
Dalton, C.F.	Newman, H.G.	(Airframes and
Darcy, T.G.	Newton, N.S.	Armament)
Davidson, J.J.	Oakey, M.W.	
Dennis, D.A.	Owens, L.E.	Andrews, B.T.
Dobson, L.G.	Parker, K.B.	Backhouse, J.W.
Dyson, H.J.	Pike, G.K.	Baker, G.E.
Edwards, M.W.	Pinstone, G.J.	Boyle, R.J.
Egan, D.R.	Prideaux, K.R.	Bridger, R.A.
Eliasz, J.	Quirk, R.W.	Cahill, K.J.
Ellett, R.J.	Robertson, K.E.	Dolahenty, C.J.
Ferraro, S.	Roser, K.S.	Ellis, A.J.
Fletcher, G.E.	Rowe, I.R.	Fogo, D.K.
Forster, T.R.	Salt, R.	Gannon, G.W.
Fraser, M.C.	Scott, B.T.	Gunnis, F.W.
Gale, W.	Scully, L.B.	Hall, M.R.
Gill, G.D.	Searle, G.J.	Heron, P.J.
Gillam, J.A.	Seebohm, J.A.	Honsa, A.F.
Hamilton, G.J.	Sinclair, A.C.	Hudson, R.N.
Hanlon, P.	Smith, R.W.	Johnson, P.J.
Hare, T.G.	Staff, W.E.	Keane, B.J.
Harper, G.	Stenzel, D.K.	Keehn, G.J.
Hastie, P.W.	Stephens, M.G.	Kirk, D.H.
Healey, B.D.	Stewart, K.D.	Klarenbeck, G.J.
Henry, G.H.	Sturwohld, D.K.	Lock, B.A.
Hill, M.	Sunnerdale, L.M.	McPherson, P.J.
Hinchliffe, M.	Tessier, B.R.	Middap, L.P.
Hornby, K.	Thompson, I.C.	Mitchell, S.J.
Jarick, G.L.	Thomson, J.I.	Moore, R.J.
Jones, G.W.	Tobin, T.J.	Moriarty, J.S.
Kelly, G.L.	Trewin, W.J.	Neville, P.J.
Kelly, K.B.	Ujma, J.M.	Nobbs, W.R.
Kennett, D.F.	Van Roon, A.G.W.	O'Sullivan, S.D.
King, J.C.	Van Zanten, K.T.	Packham, P.J.
Kinnane, P.G.	Vernik, R.J.	Pingnam, P.J.
Locke, G.H.	Wallace, I.M.	Roberts, C.J.
Lorraine, P.T.	Walters, K.B.	Smith, S.R.
Luyten, W.M.	Ware, R.A.	Smolenski, D.L.

Stafford, M.G.	Edwards, G.A.	Ramsbotham, W.F.
Trichet, M.T.	Horgan, W.M.	Ruprecht, M.
Vejle, G.	Judd, R.H.	Russell, K.J.
Waugh, P.J.	Lee, D.J.	Saunders, S.E.
Winterford, D.P.	McQuire, T.A.	Schofield, W.P.
Woodward, P.J.	Mead, C.J.	Sheridan, T.B.
Woodrow, A.B.	Mitchell, G.T.	Stephens, P.A.
Zagami, F.A.	Playford, D.R.	Umstad, R.M.
	Sharp, C.A.	Willmer, B.W.
17 December 1973	Thompson, S.J.	
(Engines and Motor Transport)		
Beer, G.R.		17 July 1974
Brakensiek, J.	Chipper, B.S.	(Armament and
Cork, J.J.	Loibl, J.	Engines)
Crosland, C.R.	Stokes, P.J.	
Cummins, D.J.	Taylor, R.C.	
Daniels, J.		Aitken, D.E.
Erzay, F.		Blackburn, B.L.
Green, B.R.		Brooks, F.A.
Heaps, W.N.		Brown, L.J.
Hinks, K.A.		Case, M.J.
Hughes, K.J.		Cash, J.M.
Korhonen, H.E.		Clements, P.J.
Lingard, G.R.		Conliffe, P.
Millar, D.W.		Cooper, B.
Moellers, J.		Cooper, T.W.
Pickering, J.L.		Davey, G.G.
Routledge, M.G.		Dixon, P.A.
Simons, M.S.		Duckworth, P.J.G.
Slatter, R.A.		Edwards, P.W.
Tedford, W.V.		English, E.R.A.
Thomas, G.C.		Eyre, M.
Trembeath, K.D.		Grant, B.J.
Waites, G.A.		Hack, D.E.
Ware, J.M.		Haigh, R.M.
Watson, J.D.		Herd, W.P.
Wessling, A.G.		Hill, W.V.
Whiting, P.T.		Hindle, L.P.
Willett, R.D.		Hooper, M.W.
		Howarth, L.R.
26 February 1974		Hulin, C.
(Electrical)		Hutchinson, R.C.
Bennett, S.H.P.		Jacobsen, P.C.
Bond, S.A.		Jung, E.R.
Buck, K.		Maddaford, G.A.
	Owen, A.J.	Manning, G.K.
	Palmer, L.G.	Mercer, J.P.
	Philp, G.C.	Newton, M.J.
	Porteus, C.J.	O'Donnell, P.J.
	Potter, B.R.	Ohlin, M.J.
	Pywell, C.D.	

Piercy, G.L.	28th Intake	Mouser, R.D.
Romano, S.J.	(Scorpions)	Neilson, C.R.
Steere, N.W.		O'Reilly, K.J.
Thompson, C.N.	4 July 1975	Panlock, G.K.
Wilson, L.A.	(Airframes,	Pesch, N.
	Armament, Engines	Piggott, R.L.
22 October 1974	and Motor	Pitman, D.J.
(Electrical)	Transport)	Roos, B.G.
Chambers, K.	Adam, D.R.	Ross, P.R.
Dennis, K.J.M.	Beh, R.J.	Rowe, G.P.
Dyball, R.C.	Bellingham, P.T.	Saari, M.T.
Elliott, W.R.	Bennett, G.R.W.	Sandham, C.
Finniss, G.A.	Blakers, A.L.	Swan, M.C.
Fuller, R.W.	Bornen, K.R.	Sykes, M.F.
Godfrey, R.A.	Bortolussi, D.J.	Wilson, V.C.
Gray, R.J.	Brown, B.I.	9 October 1975
Holesgrove, P.E.	Burger, P.J.	(Electrical)
Holland, M.H.	Byrne, P.D.	
Nicholson, D.W.	Campbell, S.J.	Carter, K.J.
O'Reilly, J.F.	Collins, G.D.	Cavanagh, P.F.
Platt, N.M.	Cooper, F.B.	Dempsey, N.F.
Power, W.A.	Corcoran, L.M.	Donovan, M.R.
Purcell, G.J.	Dalley, K.R.	Dundas, M.S.
Richardson, C.V.	Davies, G.J.	Gunn, S.G.
Wheeler, M.A.	De Jong, P.M.	Hodgson, P.R.
24 January 1975	Evans, G.R.	Howard, B.A.
(Instruments)	Fathers, C.	Kennedy, T.J.
Buckley, M.G.	Fitzgerald, L.P.	Magon, P.J.
Chippendale, H.J.	Gannon, G.F.	O'Kely, K.R.
Doolan, P.	Hall, P.J.	Riddington, P.L.
Duncan, G.D.	Harris, L.E.	Rolfe, T.P.
Goold, K.R.	Hayes, D.A.	Sharp, P.M.
Hanson, J.D.	Hedges, M.J.	Wiggins, P.N.
Harvey, M.A.	Hermansen, D.K.	5 December 1975
Kelly, K.J.	Hickson, K.A.	(Instruments)
McGowan, R.W.	Higham, G.D.	
McGrath, N.W.	Hillsley, K.W.	
Nelson, S.W.	Hoddy, K.P.	Bollam, D.H.
Oliver, M.D.	Hornby, A.	Brundell, D.K.
Perkins, W.A.	Horne, T.D.	Burt, W.S.
Poyner, M.A.	Hunt, K.N.	Cashen, G.W.
Richards, D.C.	Huntly, A.M.	Cochrane, D.J.
Thomson, E.S.C.	Lindsay, A.J.	Colley, V.P.
Wenck, P.J.	McGowan, B.D.	Cook, D.P.
	McKenzie, R.T.	Craig, A.D.
	Mobbs, R.D.	Davis, S.J.R.
	Montefoire, F.A.	Jenkinson, G.B.

Kennedy, G.D.	Thomas, M.B.	Mitchell, B.J.
Muller, W.	Van Workum, J.	Moloney, G.J.
Prior, B.M.	Walton, T.M.	Moss, P.J.
Reid, B.L.	Wilcock, M.J.	Muller, P.J.
Reidy, M.P.	Withers, A.J.	Munchow, K.R.
Robinson, N.M.		North, P.M.
Wastell, H.B.		O'Donohue, D.N.
29th Intake (Emus)	7 October 1976	O'Sullivan, G.
	(Airframes, Electrical	Richardson, A.J.
	and Motor	Richardson, R.D.
	Transport)	(NZ)
23 July 1976	Adams, S.J.M.	Riley, J.L.
(Armament and	Alcorn, R.W.	Sondergeld, M.J.
Engines)	Allen, M.J.	Spalding, M.R.
Anderson, A.J.	Anderson, G.C.	Spencer, D.J.
Bagdonas, G.A.	Appo, B.M.	Thompson, M.A.
Bell, W.B.	Backx, B.M.	Tuohy, B.E.
Creagh, C.J.	Bagley, P.A.	Turner, G.D.
Currier, K.G.	Bellingham, W.J.	Van Den Heuvel, K.C.
Cusack, B.J.	Bornen, R.L.	Van Hattem, H.C.J.
Fullelove, J.J.	Boshammer, I.R.	Walls, K.M.
Galvin, M.G.P.	Boucher, R.L.	Watson, P.J.
Gay, W.M.	Brokenshaw, R.W.	
Graham, J.I.	Broome, R.F.	23 March 1977
Harvey, M.A.	Carn, M.J.	(Instruments)
Hewson, F.W.	Craig, G.D.	
Heynsdyk, R.	Davies, A.M. (NZ)	Abraham, B.K.
Hopgood, P.J.	Dunlop, K.F.	Ackers, W.A.
Horton, P.M.	Durrant, M.J.	Bohm, J.E.
Jackson, R.J.	Edwards, M.R.	Collinson, S.J.
Kirk, D.R. (NZ)	Frankland, R.J.	Dennis, K.J.M.
Lambert, M.J.	Fraser, R.B.	Dickens, K.G. (NZ)
Lee, R.G.	Grant, A.	Fitzgerald, G.J.
Lewis, A.L.	Gross, D.M.	Fuller, R.W.
Linton, I.T.	Hall, R.B.	Hubbard, A.J.
McKevett, J.K.	Hawkes, P.M.	Kukas, A.F.
Nagy, J.S.P.	Hunter, K.G.	Luscombe, C.E.
Nixon, M.S.	Hurley, J.J.	Page, J.M.
Oldacres-Dear, P.J.	Jones, D.J.	Palmer, A.W.
Parker, N.R.	Langham, K.J.	Robilliard, R.J.
Pill, G.B.	Leggett, S.J.	Rust, P.J.
Qualischefski, Q.M.	Lindsay, J.	Stapleton, K.H.
Quince, M.H.	Lucas, T.J.	Streather, A.G.
Riding, C.J.	McBeth, S.J.	Thomas, S.W.
Robinson, M.W.	Martell, B.A.	
Stewart, K.W.	Medlen, S.J.	
Sugden, W.R.	Merikallo, H.S.	
Sullivan, R.B.	Mitchell, A.J.	

30th Intake (Spiders)	McDonough, M.T. McNamara, P.J. McNamee, D.L. Mitchell, S.P. Mudge, M.J. Newall, R.T. Nicolosi, G.S. O'Brien, W.N. Porter, R.J. Powell, G.B. Richards, J.W. Scott, D.H. Shaw, W.A.J. Skelton, H.D. Smith, O.G. Spedding, B. Stallbaum, G.K. Steiner, P. Switzer, P.J. Taylor, C.W. Thomas, P.L. Trindall, M.J. Tuck, S.J. Wagland, W.J. Webb, S.A. Willems, G.P. Woodcock, G.I. Wrobel, A.J.	Morris, M.W. Mullins, P.M. Oxman, P.J. Rosenboom, J.C. Walmsley, N.W.
4 December 1977 (Airframes, Armament, Engines and Motor Transport)		27 April 1978 (Instruments)
Air, G.L. Akins, B.J. Allbrum, G.K. Allen, A.P. Allen, E.C. Anning, P.E. Bainbridge, S.J. Bunker, P. Chambers, C.K. Chavasse, R.J. Cocker, D.J. Collier, A.M. Comans, P.L. Cullerne, P.L. Davidson, C.R. Davis, R.A. Davis, R.E. Doherty, S.J. Doolan, N.R. Dunster, B.R. Durbridge, M.J. Easthope, M. Ellis, P.J. Flannery, M.F. Fowler, G.J. Gardiner, P.J. Greive, S.A. Hellyer, M. Hogue, G.A. Huddy, B.D. Hunold, P.D. Jones, G. Klein, M.D. Knox, P.J. Laird, L.W. Laughlin, I.E. Leahy, K.P. Lyon, B.A. McAuley, D.J. McCaig, R.W.	Adams, R.L. Clark, J.R. Colyer, T.W. Duncan, P.B. Dwyer, A.G. Farrell, J.P. Graham, P.I.R. Hawkeswood, D. Langford, M.L. Moll, D.J. Murray, P.G. Naylor, R.L. Patrick, G. Petersen, H.J. Purvis, A.J. Reece, D.N. Scrimgeour, S.J. Stafford, M.F. West, C.B.	
	16 March 1978 (Electrical)	31st Intake (Porcupines)
		1 December 1978 (Airframes, Armament, Engines, Motor Transport)
		Anderson, C.J. Anile, F.G.A. Bailey, W.K. Bamford, S.P. Beales, A.J. Beech, G.R. Bennett, G.F. Beutel, D.A. Blackadder, R.D. Brunton, C.J. Bucknell, S.W.

Buldo, P.A.	Meechan, S.F.J.	Eyres, P.B.H.	
Cahill, P.A.	Mendez, B.L.	Fitzgerald, G.E.	
Carr, R.J.	Mills, A.I.	Gardiner, R.J.	
Charles, M.A.	Mulder, R.G.	Gilchrist, D.P.	
Charlier, E.J.D.	Neaton, B.V.	Girdlestone, W.A.	
Clancy, T.M.	Nunney, N.T.	Grayson, M.J.	
Connor, M.J.	Pannell, C.	Hanger, G.B.	
Cook, G.J.	Parker, R.J.	Hebblewhite, J.A.	
Cox, W.M.	Patterson, K.C.	Heinz, G.	
Cutland, D.T.	Pforr, S.J.	Hindmarsh, M.S.	
Davis, S.M.	Powell, I.N.	Lacey, G.J.	
Davison, J.A.	Ramsay, M.A.	Langton, B.M.	
Ellis, B.T.	Reig, T.P.	Ley, P.J.	
Field, I.D.	Roberts, B.A.	Lorraway, L.E.	
Flanagan, C.M.	Rodwell, M.P.	McLennan, G.H.	
Ford, A.K.	Rumsey, P.E.J.	Page, S.J.	
Ford, K.L.	Ryan, M.J.	Powers, D.J.	
Gardner, O.A.	Schaumburg, K.J.	Reinke, B.E.	
Gasson, I.E.	Scobie, P.R.	Rouse, D.S.	
Gatehouse, E.	Scott-Jackson, N.J.	Schoenfeld, J.	
Geldens, J.E.	Sheldon, B.P.	Skeates, S.S.	
Goodridge, C.A.	Smith, A.G.	Stoekle, R.P.	
Gronow, M.D.	Smith, T.W.	Thompson, A.R.	
Hadden, L.C.	Storey, M.S.	Varney, W.J.	
Harris, R.C.	Titchmarsh, N.C.	Walsh, A.J.	
Hart, B.I.	Tuddenham, I.R.	Watson, M.A.	
Heck, G.T.	Watson, M.R.	Weier, P.W.	
Herrmann, A.C.	Weir, I.J.	Wesselink, S.W.	
Heyman, T.A.	Weymouth, P.L.	Whelan, N.	
Hibbs, D.J.	Wilcox, C.J.	Wilkie, B.W.	
Hobbins, C.N.	Wilson, C.D.	Wilson, K.W.	
Hogarth, I.D.	Wright, P.A.	Wylds, C.B.	
Holden, A.J.	Yarrow, M.H.	Young, M.G.	
Hogg, T.W.	6 April 1979 (Aircraft Metalworker, Electrical and Instruments)		
Imber, M.A.	32nd Intake (Iguanas)		
Jolliffe, T.G.			
Kenning, A.			
Kenny, J.G.			
Kenny, P.J.			
Latham, W.L.	Bartlam, M.J.	6 March 1980	
Leslie, G.S.	Bennett, S.G.	(Airframes, Armament, Engines and Motor Transport)	
Lewin, B.J.	Burton, R.J.		
Luck, S.D.	Callaghan, T.J.		
McCabe, N.P.	Corkhill, M.P.		
McFadden, A.W.	Cox, F.S.		
McMahon, S.D.	Curlewis, M.B.		
Marshall, I.	Donaldson, D.J.		
Maughan, K.M.	Edmonds, B.W.		
		Adcock, I.L.	
		Ainge, J.P.	
		Allan, R.R.	
		Arnold, G.M.	
		Baccus, T.J.	
		Bain, G.A.	

Barker, A.J.	Newnham, P.A.	Clitheroe, S.P.
Beach, A.C.	Norman, S.J.	Creer, R.J.
Binns, K.G.	O'Shea, P.J.	Dalgleish, R.J.
Boyd, I.	Paroz, G.A.	Dingle, J.J.
Brant, G.J.T.	Patterson, K.A.	Downing, R.K.
Butcher, D.E.	Perrin, G.T.	Evans, M.D.
Cairns, R.N.	Perry, R.L.	Farley, W.B.
Campbell, S.J.	Piesse, G.J.	Feild, D.J.
Cardell, M.K.	Pledger, N.D.	Flannery, J.A.
Connell, M.P.	Reid, M.A.	Foster, S.M.
Cooley, V.J.	Richardson, D.W.	Gorton, A.R.
Cramer, K.A.	Robertson, S.M.	Greenslade, P.B.
Duncan, L.J.	Rodway, M.T.	Kerr, G.R.
Duncan, R.M.	Rose, G.G.	McCairney, P.D.
Fernandez, L.C.	Rossetto, A.	McKenzie, C.L.
Fleming, R.A.	Sambell, D.P.	Messenger, R.D.
Fowler, D.K.	Scherr, D.I.	Muston, R.M.
Francis, R.A.	Schnieder, R.J.	Oxlade, W.B.
Gadaleta, F.M.	Shambler, M.	Roberts, K.
Gent, P.A.	Sherlock, T.V.	Ryland, D.L.
Giddy, B.W.J.	Shuck, S.G.	Schmitt, W.
Graziotti, P.A.	Siogren, R.C.	Scotney, K.J.
Green, P.M.	Stallbaum, B.M.	Signorino, C.M.
Green, T.J.	Steer, T.E.	Smith, B.H.
Hall, D.J.	Streeter, G.A.	Smith, P.W.
Harrod, S.D.	Stubbs, P.G.	Stevenson, D.L.
Hassen, R.A.	Takken, T.J.	Szeremeda, M.J.
Haughton, T.A.	Tilley, G.S.	Thwaite, N.R.
Hey, O.M.	Ward, J.D.	Watkins, M.D.
Hodgins, S.L.	Weis, P.A.	Willi, N.R.
Holland, C.A.	Wigley, M.E.	Winyard, P.J.
Irwin, D.G.	Wilhelm, R.N.	Wootton, S.J.
James, A.B.	Wittman, A.M.	
Jeffrey, R.G.		33rd Intake (Dodos)
Jones, S.R.		
Keightley, I.R.	5 June 1980 (Aircraft	4 March 1981
Knight, S.R.	Metalworker,	(Airframes,
McNaught, D.A.	Electrical and	Armament, Engines
Maher, W.C.	Instruments)	and Motor
Mahoney, S.A.	Adams, M.A.	Transport)
Marcus, S.B.	Austin, P.	
Marodi, J.S.	Bailey, M.J.	Ashton, I.L.
Matthews, S.S.	Bannister, D.C.	Barnard, A.J.
Mazalo, R.D.	Beilby, K.A.	Barton, G.J.
Meehan, D.L.	Blyth, S.J.	Bayfield, R.J.
Morton, I.	Brown, G.	Bennett, D.
Moss, G.D.	Caddick, D.A.	Bisset, R.J.
Naggs, D.E.	Carsley, C.J.	Boardman, C.I.

Bow, S.R.	Lupson, M.S.	
Brietsameter, M.J.	Lysons-Smith, D.M.S.	3 June 1981 (Aircraft
Brookhouse, M.M.	McDonald, W.G.	Metalworker,
Brown, J.S.	McKimm, W.G.	Electrical and
Brown, W.A.	Maxwell, G.J.	Instruments)
Brydon, G.	Mostina, M.S.	
Burley, G.L.	Mott, A.W.	Allen-Waters, P.G.
Cameron, R.J.	Newby, B.W.	Appleby, J.W.
Chambers, R.J.	Noy, M.J.	Barron, M.M.
Cooper, B.N.	Parsons, D.S.	Batcheldor, S.J.
Cousens, M.	Patterson, C.S.	Blakey, T.G.
Curl, G.M.	Penberthy, R.J.	Carruthers, T.
Currie, C.I.	Pepi, R.	Caruana, M.
Davis, P.	Plews, B.P.	Carulli, D.C.
Den Hartog, R.G.	Pollock, M.J.	Cummings, L.R.
Dowdle, P.J.	Polzin, S.L.	Duffield, S.M.
Einam, S.R.	Pragt, N.W.	Garforth, R.
Ervin, D.A.	Rands, B.M.	Garvey, D.G.
Filia, A.D.	Read, K.J.	Griffiths, I.
Gawley, I.J.	Ross, S.	Guilhot, S.L.
Glasby, L.C.	Sawtell, G.	Hindmarsh, G.K.
Glasgow, J.D.	Scully, B.F.	Hogue, R.J.
Godbee, W.C.	Sellick, V.J.	Jinman, P.C.
Gordon, L.R.	Shelley, P.M.	Johnson, D.P.
Haase, M.W.	Simmons, M.D.	Johnson, D.S.
Hallinan, M.B.	Simons, P.	Kelly, R.S.
Hangan, W.P.	Sinclair, M.A.	Kline, P.J.
Harris, M.D.	Singleton, P.G.	Lancaster, D.J.
Hayter, I.A.	Smith, D.M.S.	Laursen, D.W.
Hawthorne, P.W.	Stamp, T.B.	Liddell, K.M.
Heath, D.J.	Stanley, J.M.	McNabb, G.A.
Hein, C.G.	Stone, A.	Malby, K.J.
Holden, R.W.	Sutton, A.T.	Melrose, R.D.
Holmes, C.J.	Swan, R.E.	Melvin, R.J.
Johnson, D.B.	Thomas, M.P.	Morison, G.S.
Jones, G.N.J.	Thompson, M.A.G.	Murphy, G.A.
Kelsey, A.S.	Thomson, D.J.M.	Nolan, R.J.
Kibblewhite, W.R.	Van Hattem, W.	Page, G.R.
Kilgallon, K.J.	Van Kruyssen, P.	Przibilla, C.D.
Kuchta, A.G.	Watson, P.C.	Raines, G.W.A.
Lagstrom, G.T.	Whately, K.R.	Rich, I.J.
Lane, P.E.	Wilson, M.J.	Sampson, C.J.
Langford, N.A.	Wood, S.J.	Sherrington, M.R.
Law-Davis, W.J.	Woods, E.J.	Sims, A.G.
Lawrence, C.J.		Skeates, P.S.
Lee, P.D.		Sutton, P.J.
Lennox, D.R.		Walton, R.S.
Lowth, B.E.		Wesener, D.K.

Whelan, S.A.	Patch, W.B.	Cooper, S.B.
Wilson, P.J.	Pearce, R.T.	Corcoran, S.D.
Wood, N.B.	Pinch, I.D.	Cork, A.R.
Youngs, D.H.	Pyman, A.B.	Crane, G.B.
	Rankin, P.A.	Denman, R.S.
34th Intake (Eels)	Richardson, D.J.	Dennis, C.R.
	Relph, A.F.	Dew, R.A.
2 June 1982	Robinson, S.D.	Evans, D.C.
(Armament,	Saunders, S.B.	Fahey, A.L.
Electrical and	Sheppard, I.J.	Ferguson, P.J.
Instruments)	Siddall, C.M.	Fischer, P.A.
	Smith, C.M.	Fox, A.M.
Baker, A.J.	Spann, S.J.	Francis, I.E.
Baker, R.E.	Spillane, M.J.	Garman, P.G.
Baldacchino, S.D.	Stalker, G.N.	Graham, S.G.
Balke, M.L.	Taylor, S.J.	Grayson, C.J.
Brundell, M.E.	Terry, G.	Harrison, N.
Bush, C.J.	Trawinski, F.A.	Heath, C.M.
Byrne, G.W.	Treloar, P.T.	Hindle, D.J.
Cheek, P.	Van Der Hayen, M.H.	Hollier, R.J.
Coleman, C.R.	Waine, D.S.	Jibson, D.K.
Collett, C.	Watter, S.J.	Jones, T.J.
Coventry, C.R.	Whitby, G.J.	Kelso, R.J.
Cunningham, M.G.	Whiteman, P.J.	King, L.J.
Date, F.W.	Wild, B.J.	Lamb, D.S.
Dawes, P.J.	Wilken, M.C.	Lawrence, P.N.
Disario, G.	Williams, R.D.	Leben, M.A.
Gordon, D.C.		Littley, G.R.
Hammond, A.S.		McCaughey, B.E.
Holland, J.L.		McColl, S.
Houghton, K.G.		McCrabb, B.J.
Hurnall, W.J.		Maloney, L.
Johnson, M.W.		Masterton, S.M.
Jones, S.L.		Maxwell, G.N.
Kalie, P.F.	Adams, T.N.	Menzies, D.R.
Leak, G.J.	Anderson, D.W.	Miller, M.B.
Long, G.D.	Apa, P.E.	Mooney, S.J.
McCosker, G.T.	Arthars, C.A.	Moore, P.
McFarlane, G.R.	Bell, P.G.	Nott, G.K.N.
McInnes, C.D.	Boardman, C.	Parkes, S.G.
Mallett, S.T.	Boel, J.H.	Perry, P.J.K.
Meredith, A.J.	Bradshaw, N.S.	Pledger, A.S.
Mitchell, R.G.	Brady, P.F.	Pyman, G.M.
Mocker, S.M.	Brady, T.J.	Rainsford, G.E.
Parker, N.D.	Burgess, I.D.	Roberts, P.
Parker, P.J.	Cheek, P.R.	Roney, P.W.
Parsons, I.D.	Choke, E.G.	Rossiter, M.A.
Partanen, K.P.	Collier, C.E.	Saker, P.W.

Sherwood, I.I.	Field, D.J.	Watts, D.A.
Siebuhr, L.G.	Fitzpatrick, D.J.	Watzen, C.J.
Sinfield, C.J.	Foote, S.E.	Welfare, A.R.
Spark, M.L.	Fox, W.A.	Whitty, M.A.
Swanson, A.G.	Franklin, J.G.	Williamson, M.G.
Tedesco, J.A.	Fraser, A.W.	Wilson, R.B.
Thomas, C.F.	Frazer, A.I.	Wittman, R.G.
Toms, M.P.	Gibbs, G.J.	Woods, J.F.
Waddell, N.E.	Gracie, M.P.	Wylie, C.S.
Wallis, J.D.	Graham, R.P.	
Walter, G.N.	Grimes, P.A.	25 May 1983
Wesselink, M.C.	Haddon, S.R.P.	(Aircraft
Williams, K.G.	Hall, D.P.	Metalworker,
35th Intake (Rodents)	Higgins, A.G.	Electrical and
	Holicky, M.J.	Instruments)
2 March 1983	Hope, A.C.	
(Airframes, Armament, Engines and Motor Transport)	Howard, P.R.	Alcock, G.J.
Adams, C.W.	Janson, A.G.	Allsop, R.B.
Barrett, C.C.	Kay, S.J.	Attwood, G.J.
Benbow, M.W.	Kearns, S.G.	Badart, A.H.
Betts, G.T.	Lawson, S.W.	Barnes, D.S.
Beverley, T.W.	Lessells, J.R.	Batkin, G.K.
Boshammer, S.D.	Lyons, D.J.	Bond, M.L.
Brown, D.A.	McAnally, A.E.	Brown, T.R.
Burry, M.J.	MacFarlan, R.J.	Cabot, S.A.C.
Caerdinael, D.J.	Markwell, D.K.	Caddick, M.D.
Choice, I.R.	Martin, D.J.	Cameron, S.B.
Clifton, C.D.	O'Reardon, T.L.	Cawsey, A.G.
Coates, D.P.	Payne, A.K.	Chappell, J.S.
Cottell, B.G.	Pengelley, P.M.	Cohen, S.T.
Cowen, J.B.	Petersen, B.	Cooke, S.L.
Crockett, S.M.	Phillips, G.E.	Copp, P.M.
Daniel, M.C.	Poidevin, B.M.	D'Arcy, I.D.
Davis, B.J.	Potts, R.J.	De Araugo, A.B.
Davis, W.R.	Raffles, M.B.	Deeben, J.W.
Duncombe, J.P.	Richards, W.	Devlin, M.R.
Elkerton, S.J.	Roberts, M.J.	Dowe, B.G.
Ellison, T.J.	Scott, I.	Duncanson, D.M.
Enchelmaier, G.C.	Sorbello, R.P.	Elsasser, R.D.
Everitt, M.H.	Stallard, N.W.	Falappi, S.F.
Farrar, P.	Strotz, P.A.	Farry, G.J.
Fells, J.L.	Taylor, G.G.	Galli, N.I.
Ferguson, M.A.	Thomas, G.E.	Gegenhuber, M.
	Thompson, C.J.	Gordon, S.D.
	Thorpe, I.M.	Graziotti, P.A.
	Tickner, G.E.	Greenhouse, S.J.
	Trott, A.D.	Henderson, R.J.
	Tulloch, J.W.	Henrichs, R.W.

Hoban, J.T.	Butt, M.I.	Ryan-McCormack,
Hudson, C.J.	Cane, A.J.	M.B.
Hunter, J.A.	Christiansen, P.N.	Sanderson, A.D.
Ilgen, R.R.E.	Core, A.J.	Shaddock, R.B.
Irlam, P.R.	Dillon-Shallard, D.B.	Shearer, R.E.
Johnstone, P.R.	Dodds, M.J.	Smith, I.G.
Kemp, T.K.	Dodson, M.D.	Snape, D.G.
Kemp, W.C.	Dwyer, W.K.	Snowdon, T.G.L.
Kerrison, G.W.	Edwards, D.D.	Suede, J.R.A.
Koos, D.L.	Elefeld, K.F.	Walker, S.A.
Lacey, W.W.	Evans, C.D.	Weber, J.F.
Lemon, K.F.	Fitzpatrick, G.J.	Webster, S.
Lunn, B.A.	Gesch, S.C.	Whitcher, A.C.
Mazalo, G.G.	Greed, R.J.	Wickham, S.T.
Munday, I.T.	Haigh, C.L.	Woodbury, R.J.
Noy, P.R.	Harrington, D.B.	Woodford, A.J.
Perret, A.G.	Heaslip, W.J.	Woolfe, T.J.
Redman, P.G.	Henderson, D.J.	
Reid, M.S.	Hockey, M.B.	
Ridder, P.A.	Holt, S.C.	
Ross, I.J.	Hunold, S.J.	
Seaton, D.A.	Hutchin, T.R.	
Simmonds, A.P.G.	Irwin, R.A.	
Smith, B.M.G.	Jacobs, T.S.	
Tanner, M.P.	Jeffrey, K.W.	
Vella, D.G.	Jones, W.R.	
Verheran, P.D.	King, D.N.	
Wallace, P.B.	Loth, J.J.	
Wearn, G.R.	McCormack, T.G.	
Wendt, T.R.	McGlinchey, B.	
Wheeler, P.W.	McNichol, G.P.	
36th Intake (Stallions)		Matthews, G.J.
18 April 1984 (Airframes, Armament, Engines and Motor Transport)		Maxwell, D.R.
Ballantyne, D.R.	Mihich, S.J.	Mihich, S.J.
Banks, S.T.	Morris, S.J.	Morris, S.J.
Bayly, P.J.	Morrison, S.J.	Morrison, S.J.
Beattie, J.D.S.	Mulquiney, P.L.	Mulquiney, P.L.
Betts, S.A.	Murphy, B.P.	Murphy, B.P.
Boyd, C.	Murphy, P.F.	Murphy, P.F.
Bridger, G.D.	Nicholson, R.H.	Nicholson, R.H.
	Percy, I.J.	Percy, I.J.
	Redman, E.S.	Redman, E.S.
	Reeve, R.J.	Reeve, R.J.
	Ries, B.J.	Ries, B.J.
	Richards, C.J.	Richards, C.J.
	Rockcliff, S.D.	Rockcliff, S.D.
	Roe, G.J.L.	Roe, G.J.L.
	Rooke, G.	Rooke, G.
		4 July 1984 (Aircraft Metalworker, Electrical and Instruments)
		Andreassen, P.J.
		Bailey, P.R.
		Bleuel, M.B.
		Brown, G.A.
		Burrows, J.R.
		Butler, A.D.
		Butler, K.L.
		Caban, S.W.
		Cairns, R.T.
		Caplice, B.A.
		Collins, P.
		Constable, G.V.
		Craik, M.J.
		Delarue, G.N.
		Dickson, A.B.
		Dugan, G.R.J.
		Ellis, R.J.
		Ernest, D.
		Foley, J.F.
		Geoghegan, K.R.
		Greenslade, A.G.
		Harper, R.D.
		Harris, D.F.
		Hedges, S.P.
		Helmore, D.K.

Hodgkins, R.L.	37th Intake (Turkeys)	Moore, J.E.
Hogben, M.W.		Morrin, G.C.
Hook, P.J.		Morrow, G.A.
Jenkins, M.D.		Murray, G.A.
Jerram, M.V.		Newdick, D.W.
Jones, M.D.T.		Nichols, R.P.
Kaminski, M.G.		Nowlan, L.M.
Katte, R.I.		Pender, P.N.
Lacey, J.C.	Anderson, C.K.	Podbury, S.A.
Le Dan, W.B.	Bell, A.J.	Pollock, M.
Lock, N.J.	Buffett, C.W.	Raison, R.A.B.
Lofts, L.W.G.	Calleja, M.J.	Richardson, M.W.
Lynch, A.M.	Caudwell, S.P.	Roberts, P.A.
McKenna, R.B.	Cram, M.T.	Ryan, J.D.
McKnight, C.J.	Cumming, R.J.	Scott, M.D.
McManus, P.J.	Darlow, R.L.	Skinner, P.J.
MacNab, A.	Davies, C.A.	Slade, A.G.
McTeare, B.K.	Dixon, S.A.	Smeaton, D.J.
Mathers, W.J.	Elvin, G.T.	Spence, S.J.
Medhurst, B.G.	Evans, C.T.	Surfield, P.J.
Metcalfe, S.A.	Gannon, P.E.	Thomas, R.K.
Morris, G.R.	Gilewski, J.J.	Tucker, R.J.
Moule, G.W.	Gray, M.R.	Veen, S.A.
Mus, G.	Hardy, P.J.	Walling, G.J.
Newman, A.J.	Hargreaves, A.M.	Waters, C.R.
Palmer, J.M.	Harper, S.D.	Whalan, D.A.
Pickard, S.R.	Harrison, D.G.	Whitford, D.R.
Poole, B.D.	Hemsley, M.R.	Wilkinson, P.A.
Porche, G.J.	Hewson, T.K.	Zarb, G.A.
Pryce, C.D.	Hill, M.P.	
Reeve, R.M.	Hind, G.A.	17 July 1985
Scott, M.A.	Huckstepp, G.K.	(Electrical and
Silling, A.P.	Irving, G.L.	Instruments)
Smith, S.C.	Jackson, R.A.	
Smith, S.V.	Jarrett, C.J.	Bailey, R.M.
Stokes, D.A.	Jeffery, D.S.	Beveridge, G.C.
Strong, E.S.	Johnston, D.L.	Bull, M.A.
Swanson, G.M.	Jones, A.C.	Clarke, D.J.
Thomas, G.J.	Keehn, A.B.A.	Clarke, P.G.
Tindal, M.J.	Kildare, R.C.	Cutts, P.G.
Toering, J.	Kilsby, T.W.	Donlan, M.A.
Vranjes, M.D.	Kingston, M.R.	Fortuin, V.L.
Watson, T.J.	Krstic, L.	Gillespie, A.D.C.
West, S.R.	Lomnicki, S.	Gilvarry, M.J.
Western, D.T.	Lynn, A.J.	Gover, J.M.
Whiteside, B.W.	Martin, D.A.	Grieves, P.W.
Whiting, M.P.	Maskell, T.J.	Johnson, D.A.
Williams, S.J.	Moore, D.P.	Jones, A.C.

Korndorfer, P.	Dent, B.J.	Slattery, D.W.
Laws, R.J.	Dyer, D.M.	Smyth, R.G.
Maher, D.B.	Eleveld, K.A.	Tamblyn, C.J.
Mason, S.A.	Fay, J.M.	Trute, R.J.
Mitchell, M.J.	Gately, R.G.P.	Turnbull, A.J.
Morello, H.	Gosper, M.J.	Vercoe, G.T.
Moss, C.S.	Hancock, R.P.	Voak, G.
Nicolle, P.A.	Hanns, P.F.	Withers, G.P.
O'Neill, M.A.	Hansberry, R.P.	
Park, R.G.	Hart, J.K.	16 April 1986
Parlevliet, D.J.	Henri, T.W.	(Electrical and
Phillips, M.G.	Herps, P.R.	Instruments)
Powell, J.G.	Hicking, J.W.	
Reddacliff, P.W.	Holland, C.K.	Bentley, D.A.
Riemsdyk, M.	Jardine, A.J.	Blakemore, C.
Ross, S.C.	Johnstone, M.A.	Duck, R.J.
Smith, D.J.	Jude, N.J.	Farmer, D.J.
Smith, I.S.N.	Kirkman, M.J.	Fay, A.J.
Staines, N.S.	Lambert, J.C.	Gilbert, S.T.
Stepto, A.A.	Lane, S.J.	Hall, G.G.
Strefford, D.J.	Livingstone, I.	Hulme, S.D.
Stuart, P.J.	McInnes, P.J.	Jenkins, P.A.
Stys, A.W.	Martin, P.J.	Kaesler, M.A.
Tatnell, A.T.	Meloncelli, S.M.	Laird, J.
Whately, S.D.	Meredith, P.S.	Lewis, T.J.
Wilson, K.J.	Middleton, S.R.	McCreath, A.E.C.
Wood, G.J.	Middleton, T.	McKernan, M.R.
38th Intake (Asses)		
19 February 1986		
(Airframes, Armament, Engines and Motor Transport)		
Adams, K.G.	Neverov, S.A.	Phillips, C.A.
Austin, D.P.	Newbegin, W.K.	Rennie, A.C.
Baile, N.R.	Nicholson, M.C.	Snelling, C.H.F.
Baumann, M.L.	Patterson, A.	Stagg, S.M.
Bland, M.D.	Penberthy, B.A.	Taylor, P.J.
Burr, M.	Pinder, S.C.	Tews, A.D.
Cameron, B.J.	Pitts, C.P.	Williams, A.J.
Castles, J.M.	Powell, M.J.	Young, A.J.
Chivers, A.M.	Price, J.P.	
Clarke, B.A.	Rattray, J.T.	39th Intake (Leeches)
Dalli, R.	Reeve, A.J.	
Dening, R.T.	Reilly, D.L.	3 September 1986
	Rose, M.D.	(Airframes, Engines
	Ryan, P.J.	and Motor
	Schofield, R.P.	Transport)
	Sharp, K.L.	
	Sheedy, I.A.	Andrews, J.C.
	Sillence, D.T.	Banks, D.B.

Bassaletti, M.R.	15 October 1986	40th Intake (Lambs)
Borchard, M.A.	(Armament)	
Campbell, C.J.L.		22 July 1987
Cruikshank, M.W.		(Airframes and
Curley, J.E.		Engines)
Digney, S.M.	Bailey, R.J.	
Dixon, R.J.	Bartholomai, T.J.	
Dobbie, C.W.A.	Blackberry, A.J.	
Dorney, P.A.	Booth, A.T.	
Duck, R.E.G.	Chalmers, P.W.	
Edwards, S.C.	Edwards, P.A.	
Eggers, M.C.	Foster, M.J.	
Grist, S.W.	McIntyre, S.A.	
Harper, N.R.	Nott, G.S.	
Hughes, S.L.	Tomkies, Q.R.	
Johnson, C.W.	Watson, M.G.	
King, A.J.		4 December 1986
Knorre, C.R.		(Electrical and
Lane, T.P.		Instruments)
Leven, W.M.	Adams, C.W.J.	
Little, A.J.	Anderson, G.A.	
Lombardi, M.	Arnold, N.M.	
McGarrigle, K.W.	Bajramovic, D.J.	
McRae, J.N.	Ball, T.M.	
Magnusson, J.L.	Coe, M.A.	
Marsh, G.J.	Gablonski, J.E.	
Moore, D.M.	Gibson, P.M.	
Moore, M.R.	Gofton, B.J.	
Nemme, E.T.	Grelck, D.R.	
Nimmo, W.J.	Hancock, C.E.J.	
Ohlin, J.C.	Henderson, D.C.	
Patterson, G.R.	Henley, M.D.	
Pearce, A.M.	Hunter, D.	
Reeve, D.W.	Jensen, B.J.	
Schutz, H.W.W.	Jolliffe, S.F.	
Shepherd, S.R.	Middap, M.C.	
Sketcherly, A.D.	Morrison, B.D.	
Smith, A.M.	Paske, Q.N.	
Spackman, J.P.	Pearce, D.H.	
Sutherland, I.A.	Pedersen, A.C.	
Szmanski, M.H.	Penton, P.A.	
Taylor, D.J.	Pitcher, C.J.	
Town, J.A.	Porche, T.J.	
Unwin, A.J.	Rac, S.J.	
Walker, D.A.	Stacey, M.L.	
Webb, B.D.	Willmot, P.A.	
Wood, S.A.B.	Winterton, R.J.	
Woodger, B.K.	Young, G.M.	

24 September 1987 (Armament and Motor Transport)	Reichardt, M.B. Ruch, P.E. Smith, D.K. Smith, D.T.P.	20 September 1988 (Armament and Motor Transport)
Anson, A.N.	Strickland, M.L.	Allen, M.J.
Bell, D.G.	Teusner, R.J.	Beattie, D.L.J.
Booth, T.J.	Torkington, A.	Boyce, G.J.
Brown, K.J.	Wagner, A.L.	Brooks, S.G.
Coates, S.J.	Wease, E.W.	Carruthers, D.J.
Danvers, C.J.	Wilkie, D.C.	Cronin, S.M.
Doughty, H.G.		Dakin, B.S.
Ellis, C.T.	41st Intake (Ibises)	Devlin, N.W.
Ferris, J.S.		Dolan, B.W.
Francis, T.J.	4 August 1988 (Airframes and Engines)	Eason, C.D.
Garcia, S.A.		Edwards, B.J.
Godwin, C.E.		Ellis, J.A.
Hevesi, P.L.		Frampton, R.W.
Hodges, G.C.	Bryce, K.R.	Franklin, D.P.
Horton, W.R.	Buha, M.J.	Giles, K.J.
Lee, P.W.	Collie, T.I.	Greig, D.K.
Luke, M.S.	Draper, N.M.	Heald, M.D.
McConnell, R.M.	Foster, S.C.	Hernandez, T.C.
Moran, P.J.	Franks, R.A.	Hewitt, A.J.
Puchala, T.C.	Frohloff, B.J.	Hirst, D.A.
Smith, D.J.	Hain, L.	Holdaway, S.
Voy, M.R.	Hall, A.D.	Jansson, P.J.
	Hill, D.G.	Jerrett, D.J.
3 December 1987 (Electrical and Instruments)	Kay, M.R.	Jobson, D.L.
	Keogh, B.A.	Lawler, M.A.
	Kirkham, J.	McKinna, C.J.
	Lawrie, J.	Mackie, C.A.
Bailey, P.D.	McCracken, G.A.	Moore, A.M.
Cofield, L.G.	Masters, B.D.	Newbury, A.N.
Cooke, W.R.	Nicholson, M.	Nielsen, S.V.
Cooley, P.B.	Nixon, G.	Noyen, D.J.
Cribbes, M.S.	Noon, D.	Nunan, R.K.
De Jonge, M.R.	Olen, J.M.	Pannell, S.A.
Dunstan, K.D.	Peachy, L.C.	Parry, T.R.
Fleming, B.A.	Pybus, B.C.	Paterson, G.L.
Gibbons, D.J.	Rayner, M.	Punt, I.C.
Kerry, P.W.	Smith, C.E.	Robertson, J.D.
McPherson, S.J.	Somers, C.C.	Shanley, M.S.
Martin, T.L.	Steitberg, W.R.	Southgate, B.C.
Melhuish, D.J.	Warde, M.D.	Thomas, J.W.
Mellin, B.J.	Williams, S.L.	Trowbridge, A.
Mladineo, S.M.	Wright, A.D.	Van Beek, L.A.
Morris, K.J.	Zantuck, S.A.	Walker, A.D.
Pertzel, I.G.		Wasson, C.J.

Watson, B.J.	42nd Intake	Dew, S.A.
Weston, J.I.	(Oorarries)	Dowsley, M.D.
Woodman, C.B.		Draper, W.J.
1 December 1988	8 August 1989	Hammer, D.J.
(Electrical and	(Airframes and	Hills, D.P.
Instruments)	Engines)	Hopewell, M.V.
Aurisch, R.S.	Bailey, T.J.	Hubbard, B.H.
Biggs, G.S.	Booth, T.J.	Jadric, I.
Brennan, D.J.	Brown, S.R.	Jenyns, D.L.
Brew, H.R.	Bryan, P.D.	Knocker, J.B.
Chadwick, A.D.	Camilleri, M.M.	Lamont, J.P.G.
Chawner, T.E.	Carrington, D.J.	Langford, C.W.
Clive, G.J.	Castello, M.P.	Mahony, S.L.
Coughlan, B.	Clifford, E.J.	Mainwaring-Samwell,
Cox, J.M.	Coathupe, N.R.	I.R.
Crouch, P.J.	Cromarty, C.R.	Meechan, D.D.
Cumming, D.G.	Finn, A.J.P.	Norman, J.R.
Darby, C.B.	Gray, T.J.	Nugent, G.A.
Dolan, B.W.	Green, G.A.	Osborn, M.J.
Emerson-Walling, F.W.	Hyder, L.S.	Phipps, M.A.
Gay, J.E.	Jones, J.J.	Seiler, M.A.
Gigante, C.	Jones, P.E.	Singleton, C.A.
Gillespie, S.	Kerr, R.C.	Skead, B.G.
Godfrey, D.A.	Khan, W.R.	Stewart, T.A.
Grant, P.J.	King, J.M.	Tucker, W.J.
Guy, P.S.	McCormack, G.M.	Van Bruggen, P.F.
Hamann, C.R.	Molan, D.W.	Wright, P.J.G.
Hinder, G.G.	Munchenberg, S.A.	5 December 1989
Hoy, C.K.	Nelson, G.C.	(Electrical and
Jabs, P.	Riggs, J.T.	Instruments)
Khalil, M.	Rosenberg, C.P.	Blow, D.R.
Moore, P.D.	Sheekey, S.P.	Brooks, J.D.
Reid, S.A.	Stoakes, W.R.	Bugg, S.N.
Roberts, P.A.	Stone, J.R.	Collins, L.F.
Rose, C.D.	Ward, S.E.	Dexter, J.
Saelman, J.	Williams, G.K.	Eagles, S.P.
Shipley, G.M.	Winter, S.M.	Gourley, D.J.
Slade, C.J.	19 September 1989	Hall, R.L.
Smith, D.I.	(Armament and	Jessop, A.W.
Stockl, J.A.	Motor Transport)	King, J.
Tiesman, R.F.	Atherton, M.C.	Lock, A.W.
Walling, F.	Atkinson, S.	McLean, J.B.
Williams, S.R.	Badham, A.J.	Maher, B.A.
	Bell, A.D.	Murray, M.D.
	Cole, M.C.	Rigg, P.M.
		Ronnfeldt, I.G.

Sell, C.	Jullienne, T.	Horton, M.B.
Steger, D.J.	Krempin, P.J.	Lyon, B.J.
Steinfurt, P.M.	Krickow, C.E.	McKay, D.S.
Thew, R.	McCudden, P.D.	Marriott, S.D.
Thomas, K.S.	MacGregor, S.C.	Newman, D.E.
Wall, M.J.	Mackie, S.N.	Parkinson, I.P.
Wall, R.A.	Maddison, A.J.	Redding, B.C.
Weeks, A.R.	Maddock, D.G.	Renfrey, W.R.
	Miller, R.C.	St.Jack, R.M.J.
43rd Intake (Numbats)	Mirecki, M.J.	Schade, S.R.
	Newton, R.	Schipanski, L.G.
28 August 1990 (Airframes, Armament, Engines and Motor Transport)	O'Callaghan, C.O.	Shepheard, D.G.
	Pinkney, C.N.	Sinclair, I.R.
	Rigney, M.D.K.	Smith, M.P.
	Roseby, D.S.	Thompson, W.V.
	Scott, R.M.	Woolmer, K.E.
	Smith, D.G.	
	Smith, P.A.	44th Intake (Sloths)
Arnold, S.G.	Spackman, J.J.	
Baas, M.J.	Tanner, T.N.	28 August 1991
Brenner, A.T.	Taylor, D.V.	(Airframe, Armament, Engine and Motor Transport)
Bryen, J.T.	Turnbull, D.A.	
Cheesman, P.G.	Wallace, A.J.	Akarana, J.L.
Clark, I.C.	Walters, W.B.	Allen, W.J.
Cole, M.P.	Waters, M.A.	Anderson, S.C.
Cram, M.W.	Watts, B.S.	Andresen, A.T.
Donald, M.D.	Webb, A.J.	Borton, S.B.
Dunn, N.A.	Wenzel, A.N.	Bridewell, M.D.
Elliot, A.G.	West, S.A.	Burr, N.M.
Emery, B.J.	Windhaus, T.M.A.	Cairns, G.S.
Ewing, K.R.	Wiseman, H.B.	Cruickshank, G.P.
Fallis, G.A.		Dodge, A.N.
Field, S.D.	4 December 1990	Entwistle, S.
Finnigan, S.P.	(Electrical and Instruments)	Evans, P.
Flavel, S.R.		Farthing, P.J.
Forbes, C.A.	Booth, P.G.	Frankum, J.S.
Forsdick, M.I.	Campbell, D.L.	Fraser, A.D.
Gardner, P.J.	Christopher, T.A.	Harrington, G.W.
Goad, S.A.	Davis, C.L.	Hayler, J.S.
Gower, A.J.	Duncan, D.C.	Hesse, K.A.
Gray, D.J.	Flannery, C.D.	Hill, G.M.
Gray, P.A.	Gegenhuber, A.	Incze, M.A.
Gray, S.R.	Goedhart, C.S.	Jorgensen, J.H.J.
Greenacre, J.B.	Gollan, M.E.	Kemp, P.J.
Hogan, K.A.	Gutterson, S.R.	Kitchen, C.C.
Holland, B.E.	Higgins, J.M.	
Horan, D.C.	Holzheimer, D.P.	
Idec, P.S.		

MacDonald, B.D.	Melville, C.A.	Sweeney, L.V.
McKim, P.J.	Morgan, S.C.	Ticehurst, P.S.
Maple, J.M.	Radcliffe, P.C.	Trott, G.W.
Milde, D.R.	Scott, C.A.	Tyson, C.J.
Minor, J.R.	Townsend, D.W.	Wiggins, D.E.
Neilson, L.C.	Wallis, N.J.D.	Williams, S.P.
O'Brien, P.M.	Weik, D.A.	
Paterson, D.J.	West, A.M.	2 December 1992
Pike, J.W.	Willmot, R.A.	(Electrical and
Portelli, K.L.	Wilson, S.A.	Instruments)
Prucha, S.T.	Wood, S.S.	
Pyrah, D.R.		Barker, S.C.
Reig, S.M.		Borton, C.F.W.
Richter, M.I.		Brennan, P.M.
Robinson, J.S.	45th Intake (Locusts)	Burge, D.C.
Rutland, K.M.		Duckier, R.J.
Ryan, T.J.	24 August 1992	Haines, D.C.
Sambrooks, K.J.	(Airframes and	Heatrick, K.D.
Sanders, C.R.	Engines)	Hodson, G.J.
Scully, D.R.		Hohensee, S.E.
Shiels, M.J.	Allen, C.D.	Kirkels, B.
Smith, A.M.	Anderson, S.R.	Kleef, A.D.
Stark, D.W.	Andrews, A.D.	Krummel, L.B.
Stirrup, B.J.	Andrews, N.J.	McIntyre, J.D.
Taylor, I.R.	Baker, A.N.	McKelvie, M.
Telford, S.R.	Bavage, A.H.	Patterson, A.H.
Tweedie, M.J.	Biddle, T.W.	Reinertsen, J.D.
Van Der Sluis, M.	Bloxsome, W.R.	Samuel, S.T.
White, A.R.	Bourke, A.P.	Sargent, B.L.
Woollett, T.D.	Bozanich, J.	Stevenson, M.T.
4 December 1991	Bradbury, C.T.	Warren, R.D.
(Electrical and	Broughton, A.J.	Willis, T.J.
Instruments)	Campton-Laird, P.M.	Wynne, S.
Barnes, K.D.W.	Chamberlain, L.D.	
Bird, M.J.	Eggins, G.W.	46th Intake (Sprogs)
Blackwood, V.E.	Erceg, A.F.	
Blaslov, A.J.	Gommers, I.L.	29 March 1993
Butler, J.A.	Johnson, T.A.	
Byrne, A.S.	Keir, D.J.	Angus, P.T.
Condon, M.J.	Klemm, S.N.	Archer, D.S.
De Lacy, L.J.	Knabe, B.J.	Barge, D.W.
Duncan, P.A.W.	Kutija, M.	Bigg, S.J.
Fryar, D.S.	Mearns, N.J.	Booth, A.J.
Jefferson, D.W.	Prendergast, S.	Brandle, L.J.
Kerr, S.R.	Richie, M.J.	Campbell, S.
McGarrity, C.L.	Roser, R.W.	Crouch, J.P.
	Ross, G.B.	Gaddes, S.D.
	Ruth, P.J.	Jones, W.R.
	Schultz, J.A.	
	Seal, G.C.	

King, N.J.	Parslow, D.B.	Sanders, R.G.
Lochrin, A.D.	Phillips, L.D.	Schapp, S.J.
McCallum, A.G.	Piggott, T.N.	Stabler, M.W.
McKelvie, A.	Polsson, M.J.	Stark, C.T.
Manning, A.R.	Riggs, S.J.	Taylor, M.J.
Medwell, M.E.	Robbins, P.R.	Wadley, G.P.
Nimmo, S.J.	Rule, D.V.J.	

APPENDIX 2

RADIO TRADE APPRENTICES

(Note: Because the first thirteen intakes undertook a variety of courses which finished at different times, rather than all together, graduation dates are not shown before the No.14 Intake graduated in 1962.)

1st Intake

Clark, R.J.
Gerschwitz, J.C.
Harrison, C.S.
Hughes, J.P.
Johnson, D.R.
Marsh, L.J.
Matthews, L.J.
Norrish, V.H.
Pearson, W.J.Y.
Pederick, F.O.
Pollett, B.F.
Riggall, L.R.
Ward, M.L.C.

Branigan, E.J.
Bristowe-Stagg, K.J.
Bush, A.M.
Ely, C.R.A.
Ereaut, P.S.
Fretwell, R.W.A.
Gray, D.J.
Harper, J.
Hull, L.R.
Jones, E.R.
Keeley, B.G.
Lyttelton-Chubb, C.E.
Matthews, G.K.S.
Newman, G.A.
Noble, H.C.
O'Burtill, M.N.
Parsons, M.L.
Ramm, G.J.
Righton, M.E.
Taylor, J.A.
Thomas, R.H.
Watson, L.W.

Hodgson, R.J.
Kunkler, N.W.
McDonald, K.E.
McGrath, B.
Nadin, C.A.
Pritchard, N.A.
Rowbotham, M.D.
Thurlow, B.J.
Wheatley, M.G.

5th Intake

Beardsmore, K.E.
Bell, B.G.
Clements, K.F.
Coutts, P.G.
Donovan, T.J.
Easton, M.M.
Green, R.L.
McLean, P.D.G.
McQueen, J.A.
Mitchison, T.O.
Nelson, R.E.K.
Nuttall, A.B.
Owens, J.J.
Plant, E.
Ryan, J.F.
Semmler, E.H.
Skinner, D.N.
Spencer, B.S.
Spiller, I.C.
Tipping, K.F.J.
Webster, M.T.

2nd Intake

Beasley, W.G.
Black, H.H.
Doulis, M.B.
Jackson, R.A.
Kimber, A.
Mullins, I.E.A.
Nicholls, G.B.
Parker, R.L.
Playford, N.W.
Riis, W.L.
Seedsman, B.W.
Stewart, B.
Symonds, I.W.
Wood, T.A.M.

Allie, L.J.
Carter, G.E.
Carters, R.F.
Casey, C.B.
Clarke, G.J.M.
Dahl, W.E.
Graham, W.J.
Grant, I.
Griffiths, J.M.
Johnson, K.J.
Hobler, P.

3rd Intake

Bell, R.N.

6th Intake	8th Intake	Montgomery, A.J. Noble, R.J. Quirk, P.A. Reynolds, A.C. Robinson, C.H. Routledge, J.L. Shennan, I.C. Smythe, J.R. Wardman, G.N. Whitford, E.R.
Bevan, T.H.	Alderson, W.	
Blair-Hickman, P.R.	Blundell, B.F.C.	
Brooks, C.J.	Boland, J.E.	
Buckham, P.G.	Dannatt, R.A.	
Bush, S.V.	Dickenson, G.G.	
Coleman, P.R.	Fitzgerald, A.T.	
Dalgleish, D.J.	Frith, K.W.	
Darley, G.B.	Foster, R.J.	
Davies, N.A.H.	James, T.W.S.	
Fahey, D.K.	Kelly, P.N.	
Farthing, G.R.O.	Kiernan, W.R.	
Fowler, C.E.	Leslie, F.D.	Allen, J.F.
Fullston, B.J.	Love, B.G.	Bailey, R.E.
Haber, D.A.	McLachlan, L.L.	Beer, K.C.
Jensen, G.W.	Purry, D.N.	Dilworth, E.J.
Kent, D.W.	Ryle, M.J.	Edwards, B.S.
McAlpine, N.A.	Schmidt, J.C.	Fitzgerald, B.F.
McIntyre, G.R.	Smith, G.E.	Greatorex, A.G.
Matthews, R.S.	Stuhmcke, J.W.	Harris, B.G.
Oliver, A.J.	Trushell, D.S.G.	Hassen, N.B.
Penn, J.	Tucker, G.N.	Livington, B.R.
Ross, W.E.		Noble, J.M.
Saunders, E.J.		Orr, R.T.
Shipard, J.W.		Pearce, G.K.
Singer, C.F.	Almeida, W.C.	Rigby-Meth, L.D.
Smith, R.C.	Belford, R.W.	Voight, F.D.
Tanner, B.J.	Bennetts, R.R.	
Turnbull, A.M.	Cooke, L.E.	
7th Intake	9th Intake	11th Intake
Angwin, E.P.T.	Davis, G.R.	Bennett, L.M.
Arthur, R.A.	Fisher, G.F.	Bond, C.A.
Boylden, G.E.	Gosbee, F.G.	Brennan, M.J.
Breen, R.A.	Hare, B.D.	Buswell, S.E.
Coleman, G.N.	Harris, R.M.	Doney, J.G.
Evans, M.J.	Hobler, D.	Elliot, A.H.
Gillet, D.A.	Hull, W.D.	Everett, P.B.
Hadfield, N.J.	Hurn, J.W.	Harris, B.D.
Long, P.H.	Lawson, J.G.	Hewitt, J.F.
Robins, J.T.	McCallum, R.A.	Johnson, M.P.
Swanson, N.D.	Maddox, K.J.	Larnach, W.K.
Tanzer, J.H.	Mansfield, J.W.	MacDonald, D.W.
Ward, D.J.	Matthew, A.W.	McDonnell, W.P.
Wood, D.P.	Matthews, M.E.	Middleton, N.P.
	Maystone, R.J.	Nielson, G.B.
	Mead, R.W.	Parkinson, G.W.
	Morris, C.T.P.	Pfitz, J.W.

Potter, R.E.	Silcock, P.R.	Rose, R.W.
Rickert, G.B.	Woithe, S.D.	Shannon, R.J.
Segal, G.J.		Staier, T.J.
Street, D.R.	14th Intake	
12th Intake	15 August 1962	16th Intake
Allum, R.D.	Chambers, R.I.B.	
Bailey, N.D.	Charlton, C.A.	Allan, B.G.
Bean, R.A.	Deeke, M.L.	Batty, I.C.
Davis, J.F.	Dennett, R.J.	Benson, C.E.
Duncan, G.M.	Dower, H.J.	Condon, L.
Foster, B.	Franklin, L.R.	Cooke, F.A.
Gregory, R.B.	Gustafson, P.A.	Davis, N.G.
Harris, B.D.	Guthrie, I.D. (NZ)	Deloub, B.D.
Hewitt, C.R.	Harrington, T.D.	Edwards, R.C.L.
Hite, W.F.	Holden, P.A.	Fenton, R.E.
McMahon, C.J.	Kidd, D.J.	Freedman, D.C.
Townsend, J.E.	Lindsay, L.M.	Hill, C.S.
Wright, B.A.	McEvoy, E.G.	Hunt, C.W.
13th Intake	Perry, E.E.	Jordan, B.K.
Armbrust, K.F.	Pope, M.W.	Littlehales, C.J.
Ashman, J.R.	Ripper, D.I.	Lingwood, K.D.
Beard, W.K.	Smith, A.W.	Lovett, C.
Bessen, R.J.	Triplett, L.R.	McKay, M.B.
Carlisle, J.	15th Intake	Rix, W.E.
Collyer, C.J.		Semler, A.J.
Crumpler, B.G.	21 August 1963	Shakespeare, G.K.
Dolley, B.H.	Blyth, A.T.	Sims, H.A.
Ellis, E.J.	Bray, S.A.	Smith, L.M.
Giles, G.R.	Carlyon, R.G.	Taylor, F.
Greeney, R.S.	Carney, B.G.	Tonkin, B.W.
Hains, D.K.	Cavanagh, L.J.	Valentine, L.D.
Hambling, R.J.	Chapple, A.J.	Ward, B.K.
Janes, T.G.	Cupitt, W.G.	Wilson, R.L.
Johnson, A.J.	Eldridge, C.J.	17th Intake
Leslie, D.K.	Fitzhenry, W.G.	11 August 1965
McLeod, A.A.	Flack, W.T.	
Manion, R.E.	Gould, G.H.	Blyth, A.R.
Pendlebury, P.J.	Holsken, R.T.	Carrington, R.A.
Petre, N.L.	Jackson, P.R.	Chappelow, P.
Preston, L.J.	Jupp, P.W.	Clayton, R.C.
Preston, M.J.	Ladd, B.T.	Crawford, R.G.
Riebeling, E.J.	Lane, J.E.	Dennes, G.E.
Riebeling, P.	Lobston, P.R.	Drummond, L.S.
Roser, D.J.	McCorry, J.H.	Duncan, P.A.

Fleming, Q.R.	Sargent, B.K.	Blackson, W.J.
Foley, J.W.	Shanley, A.J.	Browning, R.G.
Green, K.L.	Skinner, G.J.	Cashmere, J.A.
Holker, W.J.	Slattery, I.V.	Collins, J.R.
Kerr, I.D.	Smith, L.H.	Cox, T.W.
Matters, R.L.	Thompson, R.F.	Chiesa, A.R.
Nicholls, M.J.	Vanderlinden, J.	Christensen, M.P.
Outtrim, P.A.	Walters, P.W.	Dowling, R.P.
Pergunas, J.M.A.		Dries, R.W.
Pickup, J.R.	19th Intake	Edwards, K.R.
Richardson, B.M.		Gleeson, G.F.
Robertson, A.R.	16 August 1967	Holland, I.G.
Short, C.G.C.		Horikx, J.L.
Sinclair, G.R.	Chapman, G.R.	Jackowski, S.
Trezise, G.J.	De Ross, J.D.	Kerr, C.D.
Veitch, J.E.	Deans, J.S.	Kowalczyk, K.A.
Weeks, D.R.	George, A.H.	Kramer, D.E.
Wren, N.J.	Hewitt, P.V.	Laidlaw, I.C.
Younghusband, G.I.	Houlston, H.	Lovett, R.
	Johnson, E.D.	McArthur, D.J.
18th Intake	Jones, B.P.	Malkin, W.B.
	Laird, P.B.	Morris, J.R.
17 August 1967	Learhiman, G.J.	Napper, B.W.
	Lee, T.W.	Norman, K.J.S.
Cheshire, B.D.	Legg, H.J.	Pankhurst, D.E.
Cooper, P.J.	Lugg, D.A.	Reibelt, G.P.
Cottrill, V.M.	Moodie, R.A.	Rinaldi, F.W.
Coutts, G.R.	Neave, A.J.	Skewes, J.M.
Cromb, G.E.	Norton, R.A.	Stephenson, N.
Cureton, J.	Purcell, B.McC.	Walsh, O.G.
Daniel, D.L.	Robins, C.I.	Whitworth, D.M.
Davis, K.W.	Roelfsema, M.	Williams, W.H.
Dowling, G.V.	Smith, K.S.	Witty, P.E.
Evans, R.J.	Spillman, D.A.	
Forsyth, G.A.	Stroude, P.A.	21st Intake
Gaffee, D.J.	Thomsen, G.L.C.	
Gillick, B.J.	Toholka, F.J.	2 September 1969
Gilvarry, P.G.	Vereschildt, A.W.	
Jackson, G.C.	Voolstra, W.	Beutel, G.W.
Jones, J.L.	Wilkinson, T.C.	Blanch, E.D.
Kingsley, R.D.	Woodmansey, L.A.J.	Bond, W.J.
Ledingham, R.A.K.		Campbell, E.J.
Lydeamore, G.A.	20th Intake	Clapham, P.D.
Norris, T.R.		Clark, N.J.
Porter, G.L.	15 August 1968	Cleary, S.H.
Ramsey, M.J.		Drady, K.J.
Rushton, S.	Aitken, J.M.	Duck, G.E.
Sandford, C.J.	Baldock, P.H.	Eden, G.S.

Gavrilovic, B.	Haebich, T.L.	Heather, A.M.
George, D.	Hall, W.L.	Holland, C.L.
Goodman, B.	Harrington, L.J.	Kendal, A.R.
Hall, P.E.	Harris, T.R.	Luff, R.
Hetper, G.	Henriksen, G.G.	McCoombs, C.
House, K.G.	Holloway, R.G.	Mackenzie, J.G.
Kraft, K.T.	Hunt, L.S.	McDonnell, J.M.
Laird, P.G.	Hunter, K.R.	McFarlane, D.V.
Lange, C.J.	Jarvis, E.C.	Massie, A.D.
Leach, D.C.	John, E.C.	Mewburn, R.
Lietch, N.	Kitney, R.D.	Pick, P.J.
Locke, D.L.	Lewis, G.P.	Roberts, G.L.
Lowe, J.W.	Lewis, P.R.	Skipworth, A.W.
Maney, R.J.	Mackay, C.L.	Sollers, B.J.
Mayhew, G.A.	McRae, K.A.	Wakefield, A.N.
Naylor, R.A.	Pickering, R.E.	Webster, P.J.
Nelson, D.A.	Reese, R.J.	Weir, B.K.
O'Malley, S.	Richter, D.M.	
Richards, A.R.	Sichter, T.J.	24th Intake
Richards, T.W.	Smith, E.J.	
Schmidt, J.W.	Stokes, P.D.	6 September 1972
Schubert, F.R.	Thomson, C.P.	
Simpson, B.T.	Thwaite, M.J.	Binks, H.C.
Stanley, J.D.	Van Der Burgt, H.J.	Crimean, S.R.
Theodore, N.K.	Villiers, B.	Davies, J.P.
Vardy, S.L.	White, T.G.	Gordon, B.J.
Wade, A.D.		Honeysett, K.
Walter, S.F.M.	23rd Intake	Howarth, S.E.
Withenshaw, C.		James, R.I.
Wood, D.F.	9 August 1971	Joel, M.F.
Wykes, G.J.	Allan, R.N.	Keddie, S.J.
Wyllie, R.J.	Bambach, R.J.	Keehn, R.G.
Young, A.N.	Bates, W.J.	Kennett, J.W.
Young, M.C.	Bond, G.G.	Longston, A.G.
	Bryce, D.G.	Mace, T.P.
22nd Intake	Carter, R.C.	Marr, A.B.
	Cowan, T.D.	McGrath, R.J.
12 August 1970	Dahl, L.C.	McPhail, S.T.
	Daly, F.A.	McPherson, J.R.
Aspey, N.	Darby, I.C.	Munzenberger, A.P.
Bradford, G.W.	Dix, R.M.	Nayda, L.B.
Bryant, K.J.	Farley, R.G.	Noyes, V.J.
Butler, C.R.	Garner, W.K.	O'Donnell, D.M.
Clements, G.T.	Geddes, K.J.	Offer, L.G.
Cullen, K.L.	Gilbert, B.	Rigby, J.
Daniel, H.W.T.	Habel, C.N.	Ryan, M.J.
Daniel, T.K.	Haddock, P.J.	Schollick, R.C.
Glover, R.D.		Scott, G.A.

Seaman, W.J.	Hoy, N.	Foottit, D.D.
Weir, B.L.	Hunt, B.J.	Hallas, P.G.
Wynd, C.M.	Roberts, C.J.M.	Harris, R.R.S.
	Roberts, G.A.	Macgregor, I.C.
25th Intake	Smith, C.	McLuskey, M.C.
	Stannard, C.J.	Pritchard, M.R.
12 September 1973	Stockey, R.M.	Regan, S.R.
	Taylor, R.M.	Tiller, M.P.
Bambach, B.G.	Weidenhaupt, P.J.	Whiteway, C.L.
Barbeler, P.J.	Wiggins, P.W.	Zadow, C.R.
Brown, D.J.		
Colman, C.J.	27th Intake	29th Intake
Craig, I.D.		
Dutney, G.J.	23 September 1975	28 October 1976
Edwards, J.A.	Armbrust, C.D.	Cockburn, M.J.
Fitzgibbon, P.D.	Beckwith, S.C.	Dryley, D.W.G.
Hely, M.C.G.	Biglin, L.W.	Fagg, H.A.
Holgate, A.	Clark, B.	Gray, P.A.
Hulley, R.W.	Cuttle, K.	Green, N.K.
Hutchinson, G.L.	Franklin, J.W.	Jones, M.D.
Kingston, M.H.	Fry, R.N.	McKee, G.J.
Ladyman, C.	Gartner, I.R.	McLean, M.T.
Laidlaw, G.P.	Goodall, S.P.	Mineham, M.A.
McAllan, R.P.	Green, A.F.	Try, C.R.
McManus, M.S.	Harris, S.J.	Watson, L.C.
O'Reilly, P.J.	Hill, D.M.	Weeks, R.I.
Page, B.R.	Jefferis, G.J.	Wieringa, J.R.
Paine, L.R.	Lewis, P.J.	Wood, A.
Rosser, P.G.	McVinish, B.J.	Young, P.R.
Stubbs, G.T.	Marston, J.K.	
Thompson, D.R.	Moodie, R.A.	30th Intake
Toholka, T.C.	Northway, B.W.	
White, B.G.	Penfold, R.J.	13 December 1977
	Rann, W.R.	Anderson, J.E.
26th Intake	Reece, D.G.	Beaver, S.M.
	Schmidt, P.N.	Belcher, R.F.
6 September 1974	Vogels, H.C.	Beurle, P.C.
		Blum, B.A.
Brighton, G.W.	28th Intake	Bowen, P.C.
Collins, B.W.		Brown, S.W.
Crossley, G.G.D.	28 October 1976	Carruthers, J.B.S.
Daniels, P.W.	Benz, S.A.	Coleman, B.J.J.
Dench, S.J.	Butler, P.	Condon, S.F.
Dickeson, S.H.	Carr, P.C.	Crockford, M.A.
DuMoulin, P.G.	Castles, G.D.	Dale, A.D.
Harry, P.R.	Daalmeyer, B.C.	Dayman, M.R.
Hoffmann, R.H.B.		
Howman, P.K.		

Farmacy, A.	Palkovics, S.	33rd Intake
Fergus, M.	Paton, R.J.	
Hutchins, M.R.	Pilbeam, I.C.	24 November 1981
Lang, B.A.	Powell, D.B.	
Love, K.W.	Reed, A.P.	
McAuley, R.K.	Roberts, M.J.	
McKenzie, C.E.	Robertson, B.R.	
Manson, A.J.	Ross, G.J.	
Marr, D.A.	Senjov, J.T.	
Pedley, A.	Teahan, K.P.	
Pitt, R.S.	Timbs, G.K.	
Randall, R.E.	Walker, W.S.	
Reushle, D.M.	Ward, W.J.	
Smith, G.P.	Webster, M.A.	
Squire, R.J.	Wescott, S.M.	
Strafford, H.R.	Yeoman, G.L.	
Valuch, A.J.		32nd Intake
Vlcek, J.F.		
Windle, K.J.		
Witney, G.A.		22 October 1980
31st Intake		
12 December 1978		
Andersen, A.P.	Ashworth, D.H.	
Ayton, A.G.	Bagnell, S.J.	
Baligae, M.R.	Cook, M.A.	
Bryan, G.M.	Cox, B.W.	
Clutterbuck, A.M.	Coyne, W.J.	
Craighead, S.J.	Cullen, R.M.	
Faux, R.J.	Dawson, D.M.	
Ford, M.R.	Dines, M.J.	
Gardner, P.J.	Greber, B.T.	
Grainger, G.R.J.	Lane, A.M.	
Hayes, C.J.S.	Miller, P.A.	
Healy, D.V.	Mitchelson, P.L.	
Heatherington, P.J.	Nillesen, P.J.	
Holmes, R.W.	Paris, T.J.	34th Intake
Holstein, J.A.	Price, C.E.	
Huddleston, B.A.	Price, S.J.	
Huf, S.L.	Reid, I.W.	14 October 1982
Ings, G.A.	Robjent, P.J.	
James, A.	Spencer, M.W.	
Jamison, A.F.	Terrell, S.A.	
Jeffries, S.M.	Tottle, A.J.	
Mitchell, S.A.	Vis, P.T.	
Monisse, J.P.	Whiteside, M.A.	
		Anderson, T.J.
		Arnold, R.J.
		Axtens, P.M.
		Booth, M.A.
		Conrad, B.A.
		Debeljevik, B.A.
		Gladwin, S.R.
		Hall, J.L.
		Johnson, I.G.
		McCarthy, S.

McDonald, S.D.	Baker, B.C.	Grace, J.R.
Martin, M.D.	Baker, K.D.	Gray, P.J.
Menadue, R.J.	Barnett, R.J.	Horton, M.S.
Moran, F.R.	Beness, J.S.	Hunt, M.J.
Morey, B.J.	Bickley, C.R.	Jobson, M.D.
Read, L.P.	Brand, R.A.W.	Kleinschmidt, B.J.
Ross, I.N.	Clarke, J.B.	Lenske, C.D.
Southgate, P.F.	Drew, I.R.	McFadden, D.K.
Ward, G.A.	Fulton, A.D.	McQueen, G.I.
35th Intake	Gardam, A.T.J.	Mallett, M.J.
7 June 1983	Healey, D.M.	Morris, D.A.
Beattie, B.A.	Horn, W.A.	Pavlovski, C.J.
Bowen, M.A.	Jones, R.E.	Phillips, A.D.G.
Browning, M.R.	Kelsey, J.	Ritchie, W.G.
Churchill, G.N.	Kirkpatrick, S.H.	Stuart, D.W.
Cottrell, G.E.	Knellwolf, P.R.	Van Baalen, G.
Erdeljac, B.A.	MacLean, A.S.	Verwayen, P.J.
Flaherty, S.D.	McKean, M.D.	Walsh, D.R.
Goldsworthy, C.M.	Martin, J.K.W.	Ward, R.J.
Grant, B.C.	Meacham, N.G.	Wheatland, A.M.
Hausfeld, S.A.	Menzies, M.A.	Yeatman, G.C.
Hoad, M.S.	Mullins, J.P.	38th Intake
Kowalewski, R.J.	Nuss, P.R.J.	22 April 1986
Lane, R.J.	Odri, D.	Batcheldor, R.M.
Lazell, D.J.	Osborne, S.M.	Blacker, M.R.
Macnaughtan, C.J.	Renouf, J.P.	Blackwell, D.J.
Merritt, B.J.	Robertson, B.W.	Buckland, S.C.
O'Reilly, R.G.	Sheehan, P.W.	Buckle, G.L.
Pennington, A.T.	Short, S.K.	Carter, D.J.
Purdy, G.K.	Snudden, N.D.	Chellew, P.J.
Rae, D.K.	Speer, P.R.	De Friskbom, A.J.
Ray, M.C.	Stuart, M.J.	Dunne, G.A.
Reid, S.	Taylor, N.	Farrar, D.L.
Scrace, A.	Wallace, M.R.	Francis, J.S.
Steman, J.	Ware, A.J.	Grimmer, S.F.
Tribe, A.	Webber, R.	Hinds, J.C.
Weisse, R.A.	37th Intake	Hunt, D.G.
White, S.A.	26 June 1985	Johnson, I.M.
Williams, G.P.	Cates, M.G.	Johnson, M.D.
36th Intake	Collett, L.J.	Joosse, R.R.
5 June 1984	Cross, A.J.	Knowles, A.J.
Ashton, P.A.	Dale, C.J.	McIntosh, D.K.
	Engel, R.	Mangold, W.W.
	Field, A.R.J.	Nield, J.D.
	Fraietta, A.	O'Brien, D.L.

O'Rourke, M.T.	Weston, K.A.	Hull, S.R.
Pipe, S.J.		Hunt, A.D.
Rankin, A.P.	41st Intake	McCaskill, B.M.
Rochester, I.B.		Marshall, J.W.
Sheen, S.C.	7 December 1988	Minney, J.A.
Taylor, B.G.		Norton, M.J.
Ward, P.L.	Brooke, C.A.	Page, B.D.
Woods, C.L.	Carson, B.A.	Pollard, C.R.
Woods, S.J.	Connaughton, R.W.	Radcliffe, L.G.
39th Intake	Eatts, M.R.	Rohan, A.P.
25 February 1987	Eden, R.J.	Smith, W.P.
Buckingham, D.N.	Hodges, S.J.	Vacher, T.W.
Cornish, D.A.	Jago, N.J.	Welstead, A.
Fairhead, M.C.	Jones, D.E.	44th Intake
Herrington, S.A.	Lemke, J.J.	
James, A.F.	Rutter, N.H.	10 December 1991
Karo, P.	Scott, S.R.	
Knight, P.J.	Tschugguel, K.H.	Bray, C.D.
Long, A.J.	Williams, A.R.	Caruana, A.J.
Oliver, M.P.	42nd Intake	Cowie, B.R.
Reilly, D.J.		Gilchrist, N.K.
Schultz, D.I.	6 December 1989	Hellwege, C.S.
Symes, S.J.	Cotterill, M.D.	Hull, L.A.
Ward, D.P.	Goodacre, N.J.	Liddle, D.J.
Worthington, R.J.	Gough, C.D.	Loveday, J.
40th Intake	Herring, A.J.	McCarthy, H.D.
9 December 1987	Kaesler, C.D.	MacFarlane, S.W.
Bender, M.L.	McGarry, K.S.S.	Maag, R.J.
Bown, D.T.	Moore, D.E.	Meech, C.A.
Creanor, S.M.	Murdock, J.R.	Menzel, M.J.
Dick, M.K.	Nicholls, R.J.	Phillips, D.J.
Duncan, G.A.	Peters, D.N.	Rath, M.M.
Eno, M.J.	Semmler, D.I.	Stabler, S.D.
Gardner, J.J.E.	43rd Intake	Thorne, T.W.
Johnston, P.M.		Trundle, M.A.
Kerkham, G.P.	12 December 1990	Whitworth, M.G.
Mason, C.S.	Chinnick, B.	45th Intake
Morris, K.A.	Danstra, S.P.	8 December 1992
Mullin, B.D.	Elksnat, C.H.	Bassett, D.M.
Murphy, P.K.	Gray, D.M.	Bretherton, D.
Rockliff, S.J.	Green, G.M.	Brown, D.J.
Squires, B.I.	Griffin, C.F.	Coombe, M.T.
	Harrington, G.W.	Dew, D.S.
	Hayward, B.M.	Douglas, M.D.

Franklin, N.A.
Gardiner, A.E.
Geisler, R.J.
Gilbert, M.S.
Gleeson, D.F.
Heathcote, R.
Leach, P.A.
Lorkin, B.F.
Merrick, I.A.
Oliver, C.D.
Parker, R.A.
Pedler, R.D.
Petrovic, I.
Phillips, D.M.
Ryan, J.L.
Sanewski, G.I.
Saunders, B.J.
Saunders, P.C.
Thomas, J.E.
Wade, A.M.
Ward, G.J.
Whittaker, M.

APPENDIX 3

**JUNIOR EQUIPMENT & ADMINISTRATIVE
TRAINEES**

1952		1954
No.1 Course		No.3 Course
Aldridge, M.S.	Walker, H.C.	Aiton, B.J.
Arthur, R.	White, R.	Alcock, E.S.
Bailey, R.J.W.	Wilson, J.A.	Allen, E.G.
Barty, B.K.	Woolley, P.R.	Barrow, T.A.
Bennett, A.C.J.		Bernardi, J.D.
Betts, W.J.	1953	Blissett, R.J.
Brand, L.J.	Aldred, B.J.	Blunt, R.C.
Dawson, R.P.	Bell, A.J.	Brown, K.J.E.
Donnelly, V.J.	Carlos, D.S.	Carlyon, J.A.
Dootson, M.	Chynoweth, B.K.	Cross, E.L.
Ekert, B.	Drinan, J.G.	Dodd, L.F.
Gibson, P.E.	Drinkwater, W.T.	Drinkwater, J.
Golding, C.H.	Gilmore, A.S.	Dunstan, G.W.
Hall, R.	Gittings, A.S.	Doyle, B.T.
Harrison, P.J.	Hancock, B.P.	Ellem, E.D.
Hughes, W.D.	Hurman, K.H.	Ely, C.R.
Jones, A.N.	Jacka, B.I.	Flood, P.J.
Lane, W.J.	Kebblewhite, J.A.	Gildersleeve, J.W.
Larkin, F.L.	Lees, L.J.	Green, B.W.
Leahy, P.C.	McMartin, K.R.	Greenwood, D.M.
McKinlay, K.R.	McNeill, R.S.	Heath, R.E.
McKinnon, R.D.	McRae, D.W.	Higoe, B.J.
Mather, D.J.	Millar, A.L.	Inglis, G.F.
Mitchell, M.J.	Mundy, K.J.	Kemmis, R.A.
Moss, G.	Owens, B.L.	King, B.G.
Naggs, R.D.	Payne, A.L.	Lee, J.W.L.
Newton, N.C.	Perret, J.E.	McDonald, I.
Phillips, T.G.	Ryle, W.T.	Mitting, J.M.
Pond, R.	Sherlock, A.N.	Moore, M.D.
Rippon, I.R.	Stone, D.D.	Moulds, G.O.J.
Street, J.V.	Storey, C.G.	Murphy, B.R.
Tweedie, M.L.	Thornton, A.E.	Murphy, J.N.
Tyndall, K.R.	Whitley, R.G.	Oversby, I.C.
	Witenden, B.E.	

Pearson, C.H.	Stubbs, A.P.C.	1957
Pfoeffner, R.P.	Taylor, R.W.	
Ralph, L.W.	Tyrie, R.B.	No.6 Course
Ridout, J.W.	Wheeler, R.L.	
Rogers, L.	Wilson, L.G.	
Sheppard, E.M.		Beaumont, W.J.
Shortall, B.W.		Bramham, D.G.
Smith, B.J.		Butler, K.B.
Squires, R.J.		Butler, R.J.
Tonkin, G.L.		Casselton, K.
Whish-Wilson, A.J.		Cuzner, N.G.
1955		Duffy, P.A.B.
	Auld, R.W.J.	Foale, L.S.
No.4 Course	Boucher, A.J.	Gilbert, J.D.
Beckmann, K.	Brown, R.N.C.	Grant, J.
Boye, C.W.	Browne, A.A.	Griffiths, R.L.
Bleakley, N.V.	Bryan, J.L.	Ireland, J.B.
Brading, C.S.	Butler, R.J.	Jones, O.D.
Carroll, K.G.	Butler, S.K.	Keenan, E.G.
Cochran, R.W.J.	Callaghan, S.R.	Kerr, D.A.
Connell, G.M.	Cooke, B.B.	Lowe, G.N.
Crilly, E.L.	Cummings, B.E.	Luke, J.
Davey, N.W.	Dewberry, I.G.	Peace, G.F.
Dootson, K.	Dickson, P.N.	Power, G.B.
Ellis, B.	Doughty, L.W.	Richards, S.W.G.
Ewing, D.L.	Hatfield, J.B.	Slavik, D.
Flower, R.J.	Howe, L.G.	Wilson, R.A.
Goodridge, J.E. #	Hyde, D.P.	Young, J.C.
Hannam, R.B.	Kelly, J.G.	1958
Hill, P.S.	Le Marseny, G.	
Kirwan, V.R.R.	Leibke, D.C.	
Lane, T.J.	MacKenzie, C.D.	No.7 Course
McNeill, K.J.	Morgan, P.F.	
Makin, C.A.	Perazic, G.V.	
Malcolm, R.J.	Ranson, G.H.	
Maynard, E.J.V.	Stansfield, W.F.	
Michel, G.L.	Stiles, C.G.	
Mullens, J.R.	Steele, A.R. *	
Nelson, A.E.	Stewart, G.D.	
Riley, A.P.H.	Strauch, R.E.	
Ross, R.R.	Swanton, A.J.	
Sandys, A.J.	Symons, M.E.	
Sherwood, V.	Williams, P.G.	
	Wilkinson, P.J.	
	Wilson, W.B.	
# Surname changed to Kirk.	* Surname changed to Wright.	

FROM THE GROUND UP

Kalenkowski, E.	Watkins, R.C.	Dunkeld, R.J.
Leach, R.H.	Whalley, E.L.	Greaves, R.E.
Leifels, J.A.	Whittle, T.	Harvey, R.M.
Lord, D.E.	Wright, J.N.	Johnson, D.
Lyford, G.G.		Lehane, P.J.
McDonald, C.P.	1959	Lindores, A.
McGrath, L.R.		Lord, J.A.
Madden, J.W.	No.8 Course	Philips, R.J.P.P.
Martin, H.F.		Prentice, D.J.
Parker, F.J.	Bateson, W.J.	Shields, F.J.
Paulga, J.	Baxter, A.R.	Slavik, U.W.
Payne, C.F.	Best, A.J.	Wade, G.F.
Senior, I.K.	Blanch, R.I.	Wainwright, N.K.
Sprague, V.P.	Bowd, W.B.	Wilcox, A.E.
Wall, R.G.	Branson, N.W.	Wilson, N.

APPENDIX 4

DIPLOMA & ENGINEER CADETS

1961	No.14 Associate Diploma in Communication Engineering Course	1965
No.4 Engineering Diploma Course	Bickle, G.M. Duncan, P.I. Keanalley, R.R. Leo, G.T. McLintock, J.R. Raison, B.K. Sharp, M.R. Tidd, D.A.E.	Cheer, G.D. (NZ) Dudman, B.H. Gentle, A.H. Porter, K.B. White, J.E.
		1964
1962		1966
No.5 Engineering Diploma Course	Bayfield, N.R. Cant, R.W. Gretton, R.I. Griffin, K.V. Hall, W.N. Lenox, D.E. MacDonald, C.W. Penna, D.B. Whately, D.B.	Andrews, T.M. Baker, J.W.C. Cairns, K.J. Chandler, G.N. Dey, R.J. Gould, G.H. Holt, L.R. Hughes, B.L. Knowles, C.J. Locket, R.D. Marriott, D.P. Prins, H.J. Tsicalas, P.J.
No.6 Engineering Diploma Course		
Killeen, R.A. Murphy, B.J.P. Pluck, J.H. Russell, N.J.	No.8 Engineering Diploma Course	
	Badcoe, M.S. Detjen, H.H. Dilworth, E.J. Dobbin, M.W. Folley, K.J. Hanham, E.E. Twine, G.A. Senini, R.	1967
1963		
No.7 Engineering Diploma Course	Bock, H.H. Bradford, C.E. Watson, E.B. Weller, E.M.	No.11 Engineering Diploma Course
		Allanson, R.E. Bond, G.C. De Visser, P.J. Greentree, M.L.

Grohovaz, E.	Grimshaw, F.R.H.	No.1 Business Studies
Hogendyk, A.R.	Jacobson, R.C.	Course
Kennedy, J.R.	Knight, K.E.	
Kirk, C.	Knight, R.G.	
Laverack, R.E.	Krooglik, W.	
Nalder, I.A.	Marsh, D.E.	Conran, C.D.
Neil, C.H.	Mayne, W.M.	
Sillett, B.J.	Perrone, F.	1971
Smedley, D.B.	Russo, P.	
Tabbagh, E.B.	Smith, G.E.	No.13-14 Engineering
Traise, E.K.	Tait, F.A.	Diploma Course
	Wright, J.I.P.	
No.1 Commerce		Ambrose, J.
Diploma Course		Appleby, D.F.
Mason, B.R.		Barns, G.E.
Moore, G.L.		Boxer, P.E.
Western, C.K.		Burgess, L.J.
		Eske, F.W.
1968		Greeney, R.S.
		Hurditch, D.A.
No.11A Engineering		James, R.R.
Diploma Course		Jeans, K.W.
Giles, C.D.		Kerr, K.B.
Holsken, R.T.		Kingsley, R.D.
Knott, M.D.		Lang, S.B.
Lindsay, L.M.		Linard, B.D.
Prowse, D.J.		McGilverry, D.N.
Spicer, D.J.		McKee, M.E.
Twiss, P.A.		Moody, K.W.
White, B.		Munt, W.R.
Wilson, F.E.		Papas, S.
		Popham, J.R.
No.2 Commerce		Rae, J.S.
Diploma Course		Risson, R.J.
Edwards, D.H.I.		Reid, L.F.
		Rush, W.K.
1969		Ruskin, S.A.
		Shanley, A.J.
No.12 Engineering		Stagg, D.J.
Diploma Course		Stocks, G.L.
Baker, J.R.		West, P.
Bray, S.A.		Wylie, A.K.
Brown, G.H.		Zannakis, M.
Frederick, G.P.		
		No.2 Business Studies
		Course
		Dent, J.D.
		Green, D.B.
		Haensel, G.B.

Parker, C.D.	<u>Detachment A</u>	Moreland, G.A. Roediger, T.A.
1972	15 December - No.3A Business Studies Course	Stanfield, D.L. Sutherland, T.J. Thomson, K.J. Weight, R.W. Welldon, R.J.
13 December - No.14 Engineering Course (late graduates)	Aldridge, A.K. Freeman, W.J. Miller, M.	
Beckwith, L.A. Farrell, P.A. Fielding, A.F. Fitzgerald, C.K. Garraway, R. McLeod, K.G. Stokes, K.J.	1973	1975
	21 December - No.16 Engineering Course	18 December - No.18 Engineering Course
	Aeschliman, C.H. Bekeris, R.P. Biggar, N.J. Castledine, D.A. Doak, T.C. Hood, R.J. Jones, K.C. Matthews, N. Royal, R.F. Schmidt, A.D. Seibold, K.A. Shannon, R.S. Slattery, D.S. Spinaze, J.E. Thies, G.A. Ward, D.A. White, K.D.	Balboni, P.J. Barker, T.C. Edwards, P.M. Harris, D.P. Ingram, T.J. Moffat, N. Morris, G. Nicol, S.G. Schafferius, I.B. Story, P.J. Tobin, M.J. Turner, K.M. Walsh, J.S. Worth, D.J.
13 December - No.15 Engineering Course	1974	1976
Atkins, P.R. Campbell, J.W. Edwards, R.J. Gill, M.J. Green, P.D. Hall, A.T. Mead, P.E. Pemberton, M.C. Powell, R.E. Robson, A.R. Russell, K. Schmidt, N.G. Synkar, B. Talbot, A.J. Vanda, E.A. West, P.	20 December - No.17 Engineering Course	15 December - No.5 Engineering (Degree) Course
13 December - No.3 Business Studies Course	Bode, L.E. Bowden, D.R. Cather, B.M. Davies, J.A. Goodman, B. Hodges, E.C. Kennedy, N.S. Kucks, D.C. McClenahan, S.J. McDonald, R.I.	15 December - No.19 Engineering (Diploma) Course
Neale, K.G. Waters, G.W.	Cronk, P.M. Eames, T.J. Gash, C.F. Haines, K.C. Harvey, R.H. Johnston, A.P.	

Ledingham, R.A.	Chamberlain, I.J.	Trew, A.N.
McCormack, P.W.T.	Keast, G.S.C.	Turner, S.J.
Mazlin, W.E.	Reimann, F.C.	Vichie, A.G.
Millington, S.L.	Slee, C.E.	
Nebauer, J.D.	Sucker, S.W.	1981
Palmer, L.	Thompson, W.H.	
Radcliffe, A.J.	Wadham, G.S.	
Robb, J.A.		16 December - No.23
Stone, P.J.		Engineering Course
Tuckerman, C.C.		
Wallace, G.A.		
1977	13 December - No.21	
15 December - No.6	Engineering	
Engineering (Degree)	(Diploma) Course	
Course		
Best, P.G.	Flint, S.R.	Barneveld, N.J.
Markwell, T.R.	Hunt, B.J.	Black, R.R.
Martin, C.E.	Kiem, E.	Both, S.A.
Monaghan, J.G.	Kurvits, M.	Breen, G.W.
	Lowe, B.J.	Cortese, R.
	McColl, I.N.	Crispin, G.A.
	McDonough, P.L.	Cummins, B.S.
	Nugent, R.W.	Davey, K.F.
	Steer, D.M.	Dries, R.W.
	Rigg, W.H.	Evans, G.D.
15 December - No.20	1980	Fantini, J.M.
Engineering		Grey, B.A.
(Diploma) Course	18 December - No.22	Hayden, A.R.
	Engineering Course	Hazeldean, R.G.
Burke, A.J.	Atkins, P.D.	Heslehurst, R.B.
Christensen, R.G.	Beattie, D.C.	Hogan, P.J.
Dennes, G.F.	Chittick, A.M.	Holmes, D.E.
Garrett, S.W.	Dale, A.A.	Jackson, P.A.
Hammond, M.J.	Dolling, A.C.	Jelley, L.D.
Lack, M.H.	Eckel, J.D.	Kearney, J.W.
Lanagan, P.D.	Forrest, K.M.	Koerber, R.M.
Marburg, A.L.	Fort, N.G.	Lefevre, G.A.
May, W.A.	Foster, S.W.	McGlone, G.R.
Napier, R.G.	Herrmann, J.B.	Moreland, D.J.
Reynolds, M.J.	Lawder, T.J.	Murphy, C.A.
Richardson, P.E.	Minto, M.C.	Norris, K.F.
Woolcott, P.D.	Morrison, A.S.	Pacey, P.C.
	O'Keefe, M.	Paton, J.J.
1978	Paterson, S.C.	Roberts, K.P.
13 December - No.7	Purcival, G.K.	Rogers, P.J.
Engineering (Degree)	Russell, C.C.	Tabbagh, P.P.
Course	Scott, M.W.	Vernick, R.J.
Bournes, S.J.	Stengers, G.M.	
	Tickner, P.J.	
		1982
		16 December - No.24
		Engineering Course
		Augustin, A.E.

Bowden, G.R.	Nicholson, A.B.	1985
Bright, P.J.	Rampant, S.L.	
Brown, A.R.	Ranson, S.N.	12 December - No.27
Crowe, K.E.W.	Reeves, C.G.	Engineering Course
Crowley, C.K.	Saunder, T.J.	
Flynn, G.J.	Shepherd, R.J.	
Gale, W.	Skipworth, B.A.	
Granger, W.A.	Stolinski, R.B.	
Innes, T.C.	Sunners, M.P.	
Kiss, P.K.	Tilbrook, L.A.	
McBride, J.C.	Todd, S.P.	
Mann, G.J.	Tutty, M.G.	
Meyer, G.	Vicino, G.	
Mohr, R.M.	White, P.S.	
Morton, S.A.		1984
Patacca, J.P.		
Peake, R.S.		
Pitt, M.W.		13 December - No.26
Stark, G.A.		Engineering Course
Steemson, G.D.		
Secker, G.B.	Ball, D.L.	
Thomasson, R.J.	Boorman, D.C.	
Topfer, J.R.	Brennan, C.	
Walker, K.F.	Burkhardt, R.M.	
Williams, R.D.	Calvert, D.A.	
	Carrera, R.	
1983	Constance, C.C.	
	Dowling, D.W.	
15 December - No.25	Dowse, A.E.	
Engineering Course	Focht, P.J.	
	Gallant, J.C.	
Bartetzko, M.O.	Gatt, S.V.C.	
Benfer, M.J.	Harvey, J.R.	
Bratkovic, B.K.	Maillakakis, N.D.	
Bright, S.D.	Mannix, P.A.	
Brooker, D.	Mason, G.G.	
Coles, D.A.	Micheli, S.M.	
Downing, C.M.	Mitchell, J.E.	
Edwinson, E.R.	Overend, D.A.	
Hendricks, F.S.P.	Randall, P.E.	
Heron, L.J.	Taylor, G.R.	
Hume, G.B.	Thompson, N.D.	
Jones, D.C.	Thorne, C.B.	
Kenny, P.R.	Walkington, M.C.	
Lake, R.J.	Webb, C.A.	
McLennan, P.R.	West, G.J.	
Miller, G.J.	Williams, G.N.	
Murphy, I.G.		<u>Detachment A</u>
		Bailey, A.R.

Birrell, S.J.	Wickham, T.B.	Henry, R.T.
Boyd, P.M.	Wilkin, M.O.	Kent-Hughes, T.J.
Eriksen, E.J.	Willimott, A.J.	Langlois, D.H.
Frazis, G.	Yates, P.C.	Manning, S.I.
Hale, G.M.	Young, G.D.	Mathew, A.R.
Ibbotson, J.		Newton, J.G.
Jelovic, A.	<u>Detachment A</u>	Pearce, G.J.
May, D.R.		Pinney, G.B.
Millar, K.J.	Bishell, B.E.R.	Pollock, P.R.
Perticato, R.	Blyth, L.N.	Pryke, A.
Reynolds, A.J.	Cavanagh, M.A.	Reid, D.E.
Sampson, M.W.	Cowan, G.L.	Thomson, G.D.
Stephens, G.L.	Day, P.L.	Van Dijk, P.
Vrancic, D.Z.J.	Dennis, N.P.	Whitby, D.W.
1986	Edwards, G.J.	
13 December - No.28	Gunson, T.E.	<u>Detachment A</u>
Engineering Course	Lunn, D.L.	
Ahern, J.X.	Mattner, D.J.	Chase, P.W.
Barlow, S.B.	McAlindon, J.P.	Cora, G.X.
Blacklock, D.A.M.	McBride, B.W.	Evans, W.C.
Bourne, T.A.	Milton, J.E.	Gale, S.W.
Boyan, C.S.	Parsons, G.A.	Gordon, D.J.
Boyd, E.J.	Shadbolt, M.C.	Harvey, D.J.
Cram, N.A.	Thomas, G.W.	Milan, M.D.
D'Silva, D.A.	Wade, M.B.	Pickavance, R.A.
Eilert, F.G.	Watson, G.	Smith, R.M.
Foster, M.	White, K.L.	
Griffin, M.F.	Wilford, J.A.	1988
Jeffery, S.R.		15 December - No.30
Keech, G.R.	1987	Engineering Course
Kelly, L.L.	16 December - No.29	
Kelly, M.J.		
Kwok, K.L.	Anthoney, J.R.	
Miller, W.B.	Bagster, L.J.	
Millett, P.A.	Bardak, I.	
Millis, C.A.	Bastin, J.A.	
Pearce, S.J.	Bowler, D.E.P.	
Pollock, R.A.	Campbell, M.I.	
Rao, R.N.	Carlisle, H.W.	
Roberts, C.J.	Crosby, C.I.	
Roderick, G.J.	Dickson, M.J.	
Sanderson, A.M.	Ellis, S.W.	
Stanley, L.W.	Esler, A.J.	
Turner, P.S.	Girvan, J.J.	
Weiers, K.	Gray, D.K.	
	Growse, D.K.	

McConvill, P.J.	Thomson, S.T.	Bray, S.K.
McGovern, D.J.	Todd, P.D.	Checker, A.D.
Marinic, J.R.	Trentin, D.	Cruden, M.W.
Michelon, S.A.	Williams, C.D.	French, M.A.
Padovan, N.		Hersey, C.J.
Pegler, A.D.	<u>Detachment A</u>	Northam, R.J.
Scougall, M.K.		

APPENDIX 5

TECHNOLOGIST APPRENTICES

Engineering	2nd Intake (Cherubs)	3rd Intake (Beadsmen)
1st Intake (Pioneers)	6 December 1985	4 December 1986
7 December 1984		
Bergan, W.N.	Alexander, J.A.	Amos, S.
Burge, P.A.	Anderson, P.R.	Anderson, C.J.
Coghlan, W.P.	Baird, G.E.	Banham, S.J.
Cronk, B.J.	Bamforth, S.B.	Bomm, J.P.
Edwards, S.	Bell, R.G.	Brander, M.N.
Galea, C.A.	Blyth, P.R.	Butler, P.J.
Grimmer, A.G.	Buckle, J.H.	Carseldine, D.H.
Harding, G.	Channells, A.P.	Coleman, D.D.
Holt, P.J.	Cross, N.W.	Coles, D.K.
Kemp, N.A.	Donaldson, S.J.	Collins, V.
Kidney, T.A.	Dunstan, H.R.	Creese, B.E.
Leonard, N.T.	Elliott, K.I.	Dickinson, G.P.
Magers, R.	Flux, A.B.	Enchelmaier, S.I.
Martinek, D.J.	Hayes, B.P.	Fischer, A.
Messemaker, J.R.	Higbed, M.M.	Gazzard, C.J.
Murdoch, G.K.	Jones, E.C.	Hall, G.K.
O'Keefe, J.G.	Keady, P.J.	Hitch, G.
O'Neill, P.F.	Matthews, D.J.	Huggins, S.W.
Oldfield, R.J.	Micallef, G.	Jarvis, A.R.
Parkinson, S.R.	Norman, B.P.	Jensen, S.R.
Peredi, S.	O'Sullivan, M.D.	Just, R.W.
Rawlinson, G.J.	Ratcliffe, C.A.	Kelly, S.J.
Ridley, M.E.	Russell, P.C.	Kirkpatrick, R.S.
Rollinson, L.B.	Shepherd, C.L.	Lanson, W.S.
Saxby, I.M.	Simmonds, I.R.	Loder, W.A.
Smith, M.J.	Stanley, P.R.	MacQueen, A.S.
Tonkin, P.M.	Sunley, S.M.	McCready, S.K.
Wilton, C.J.	Truscott, M.R.	Marskell, P.J.
Winmill, A.J.	Turner, E.C.	Moran, M.A.
	Van Bodegom, P.M.	Morris, C.J.
	Whelan, S.J.	Murdock, C.W.
	White, I.A.	Paull, G.B.
	Youngs, S.W.R.	Peters, T.G.
		Presneill, S.J.
		Pridham, T.A.

Rudolph, P.A.	Bradford, A.I.	Driscoll, M.J.
Shaw, D.F.	Chate, W.G.	Fennell, N.S.
Slotter, R.J.	Dearinger, A.J.	Gibson, P.G.
Smith, M.R.	Dell, K.S.	Grieve, P.S.
Spooner, P.G.	Forster, A.	Hovius, J.G.
Strong, D.J.	Goad, A.J.	Kennedy, S.
Travlaridis, C.	Johnson, T.	Maher, T.P.
Warne, M.P.	Knowles, S.R.	Wood, S.D.
Welsh, G.S.	Landridge, M.A.	
4th Intake (Orts)	Leonard, I.C.	8th Intake (Serfs)
3 December 1987	Maynard, A.C.	4 December 1991
Bachrann, M.	Morris, P.B.	Blacklaw, I.S.
Beattie, R.S.	Parker, C.J.	Browning, M.J.
Boeske, E.J.	Ronnfeldt, D.G.	Chatburn, K.R.
Booth, M.D.	Shakespeare, M.	Hamilton, M.A.
Bowman, B.W.	Timms, D.W.	Head, S.J.
Brown, G.D.	Xinos, D.A.	Jones, G.T.
Cook, P.C.J.	6th Intake (Rubetas)	King, T.R.
D'Elboux, T.A.	5 December 1989	McCallister, R.C.
Dowe, M.S.	Adrain, C.J.	McClymont, T.D.
Doyle, J.E.	Bourke, L.M.	McEvoy, M.R.
Fowke, R.J.	Hallam, J.G.	Mitchell, G.J.
Gibson, D.C.	Hopton, D.S.	Price, J.P.
Jorgensen, D.A.	Jackson, M.A.	Purry, C.D.
Koschenow, M.G.	Jorgensen, K.B.	Tarmo, A.A.
Lockley, C.M.	Kelly, R.A.	Tenaglia, M.F.
McEwan, P.S.	Lang, G.A.	Wevers, S.J.
Mitchell, G.J.	Orrock, R.C.	Wilson, G.D.
Moore, G.J.	Parish, A.D.	9th Intake (Excors)
Nolan, P.J.	Pfitzner, N.D.P.	8 December 1992
Sam, S.J.	Rasmussen, B.	Chomicki, A.Y.
Shannon-Hooper,	Sullivan, G.J.	Davies, J.D.
P.M.	Trott, W.A.	Firkins, P.T.
Skelton, E.C.	Ubrihien, C.J.	Hogan, A.
Stevens, C.C.	Wall, A.K.	Kakoschke, S.L.
Vanderlinden, D.J.	Walton, J.P.	Marshall, W.G.
West, G.S.	7th Intake (Dryads)	Packer, W.L.
Winton, D.R.	4 December 1990	Timms, S.L.
5th Intake (Acolytes)	Beecroft, C.	Tuppurainen, S.P.
1 December 1988	Brown, R.R.	Wilkins, B.D.
Beraldo, L.F.	Buckingham, G.A.	Winter, P.J.
Bobardt, R.	Culpin, D.J.	

10th Intake (Lemmings)	2nd Intake	4th Intake
29 March 1993	11 December 1985	9 December 1987
Bakker, P.A.	Barrett, B.T.	Brown, S.N.
Bartlett, A.	Butler, S.J.	Collins, D.
Bloom, A.	Campbell, D.W.	Elmes, S.D.
Bonnar, D.A.	Coghill, C.W.	Fracchia, S.P.
Callan, K.B.	Denton, B.W.	Gall, D.T.
Coulter, S.R.	Duberal, A.L.	Halas, R.A.K.
Crichton, W.R.	Dwyer, R.A.	Hall, M.J.
Day, A.W.	Frith, C.J.	Handy, I.A.
Gilbert, K.W.	Gonzalez, F.C.	Hill, B.A.
Hudson, T.R.	Goyns, R.J.	Jennen, P.
Keir, J.C.	Ipsen, D.P.	McConnell, G.W.
McAlinden, N.J.	Kelly, R.E.	MacNamara, C.J.
Quinn, R.J.	Lawrence, C.J.	Murrell, B.M.
Sephton, G.J.	Moen, S.A.	Otago, K.T.
Stanley, I.J.	Nolan, S.T.	Pearson, B.A.R.
Willis, G.J.	O'Shannessy, C.M.	Perry, M.A.
Radio	Price, J.L.	Ridley, P.A.
1st Intake	Sammons, P.F.	Scott, A.C.
13 December 1984	Scott, G.G.	Smith, N.R.
Baldwin, J.J.	Thompson, P.G.	Wade, D.L.
Boyes, B.R.		Winton, T.M.
Canterbury, J.E.		Wriede, B.B.
Cummings, M.N.		Zibell, R.S.
Downing, W.J.		
Fuller, G.J.C.		
Hanna-Rivero, J.		
Healy, G.J.		
Hoye, S.M.		
Jensen, D.G.		
Lander, E.J.		
Lyness, H.S.		
Marshall, A.I.		
Riemsdyk, E.R.		
Riordan, E.P.		
Smith, D.L.		
Smith, M.J.		
Wickham, G.P.		
8 December 1986		
Baker, P.A.		
Barchard, S.A.		
Brander, G.I.		
Brown, C.J.		
Chalmers, A.		
Craig, C.J.		
Gruit, M.B.		
Huggins, A.J.		
Humphries, R.S.		
Rolleston, S.P.		
Saywell, A.G.		
Skeat, A.		
Skeels, A.D.R.		
Stockwell, R.M.		
Toole, N.A.		
Winton, R.T.		
Wise, T.G.		
		5th Intake
		7 December 1988
		Alderson, L.D.
		Cowie, D.J.
		Davis, P.
		Donoghue, S.D.
		Du Preez, A.G.
		Francis, B.D.
		Healey, D.J.
		Hughes, D.
		Jones, A.J.
		McFaul, G.L.
		Renkin, G.J.
		Sleep, J.R.
		Tucker, M.D.
		Wing, M.E.

6th Intake	Heaton, R.E.
	Keil, D.J.
6 December 1989	Lewis, D.J.
	Murphy, T.J.
Barnes, A.T.	Pattison, B.J.
Birt, S.C.	Rebetzke, D.J.
Blake, G.R.	
Buettel, C.W.	9th Intake
Conlan, D.R.	
Coulson, M.J.	8 December 1992
Crosswell, L.R.	
Gregorc, F.	Banham, M.P.
King, M.E.	Carige, J.J.
Leggett, C.L.	Christie, M.A.C.
Monz, A.B.	Clarke, B.J.
Morson, M.A.	Dixon, C.S.
Rosenboom, W.R.	Lavers, C.V.
Ross, B.	Lindley, H.A.P.
Sanger, D.W.	Lloyd, C.A.
Somerville, N.T.	Oppermann, S.J.
Turner, V.M.	Owen, S.A.
	Paton, S.J.
7th Intake	Patterson, N.G.
	Smith, D.S.
12 December 1990	Watts, J.V.
	Wise, D.K.
Cooper, S.D.F.	Zahn, T.J.
Fox, R.A.	
Gillies, J.N.	
Glassby, M.A.	
Green, M.P.	
Jansen, W.L.	
Leistra, D.J.	
Mann, A.C.	
Schilling, G.B.	
Van Berendonck, C.L.	
	8th Intake
	10 December 1991
Bartholemew, J.B.	
Best, G.N.	
Bond, J.K.	
Clarke, M.R.	
Davies, J.	
Gillon, I.W.	
Heron, M.J.	

BIBLIOGRAPHY

INTERVIEWS

Bartram, GpCapt J.R.15 Nov 96
Blanch, Cpl R.I.30 Jun 96
Blunt, Cpl R.C.28 Jun 96
Burge, Cpl D.C. 11 Nov 96
Bushell, ACdre E.G.15 Nov 96
Butcher, WOFF I.11 Nov 96
Clark, LAC H.J. 12 Nov 96
Clark, SqnLdr M.L.29 Jun 96
Cummings, Sgt B.E.29 Jun 96
Doughty, WOFF L.W.30 Jun 96
Duncan, WOFF P.B.11 Nov 96
Edwards, WOFF R.15 Nov 96
Fretwell, WgCdr R.W.A.13 Nov 96
Golding, SqnLdr C.H.30 Jun 96
Grantham, GpCapt G. 3 Apr 97
Green, Cpl (now Rev.) B.W.28 Jun 96
Gretton, GpCapt R.I.12 Nov 96
Hersey, D.C.13 Nov 96
Harvey, LAC R.M.30 Jun 96
Kee, ACdre R.A. 8 Feb 97
King, WgCdr B.G.29 Jun 96
Lord, WOFF D.E.29 Jun 96
Lovett, WOFF R.12 Nov 96
McCarthy, GpCapt D.R.14 Nov 96
McMartin, WgCdr K.R.28 Jun 96
Makin, GpCapt C.A.30 Jun 96, 5 Mar 97
Owens, WOFF B.L.28 Jun 96
Payne, FSgt C.F.28 Jun 96
Peace, Sgt G.F.30 Jun 96
Rae, WgCdr J.S.22 Sep 96

Skimin, GpCapt A.W.14 Mar 97, 15 Mar 97
Stirzaker, WOFF G.27 Apr 96
Stone, FltLt R.L.25 Sep 96
Sullivan, WgCdr L.H.14 May 96
Taylor, Mrs N. 7 Apr 97
Thomson, ACdre J.I.21 Aug 96
Tidd, AVM D.A.E.19 Sep 96
Vardy, WgCdr C.A.29 Jun 96
Wainwright, GpCapt N.K.22 Oct 96
Waters, GpCapt G.W. 4 Jun 96
Watts, WgCdr L.C.13 Mar 97, 20 Mar 97
Weller, AVM E.M. 13 Nov 96
Wrigley, GpCapt F.J.14 Nov 96

CORRESPONDENCE

Auld, G.S., Wagga Wagga, NSW
Bowles, W.H., Ingleburn, NSW
Bradford, C.E., Wagga Wagga, NSW
Crail, K.J., Toowoomba, QLD
Driver, R.J., Newcastle, NSW
Fisk, G.B., Moriac, VIC
Fordyce, J., Peakhurst, NSW
Frost, R.W., Atherton, QLD
Grinham, L.J., Clifton Springs, VIC
Harper, N., Abbotsford, NSW
Hislop, D., Hobart, TAS
Keehn, C.W., Toowoomba, QLD
Lewis, R.G., Wingham, NSW
Miller, R.R., Geary's Gap, NSW
Neal, G.G., Hawker, ACT
Nicholls, A.J., Laidley, QLD
Penno, R.M., Hove, SA
Saleh, M., Quebec, Canada

Saunders, J.C., Evans Head, NSW	Skimin, A.W., Weetangera, ACT
Scrace, M., Quirindi, NSW	Skuthorpe, J.B., Marrickville, NSW
Shaw, J.J., Forestville, NSW	Withers, W.R., Kununurra, WA

UNPUBLISHED THESIS

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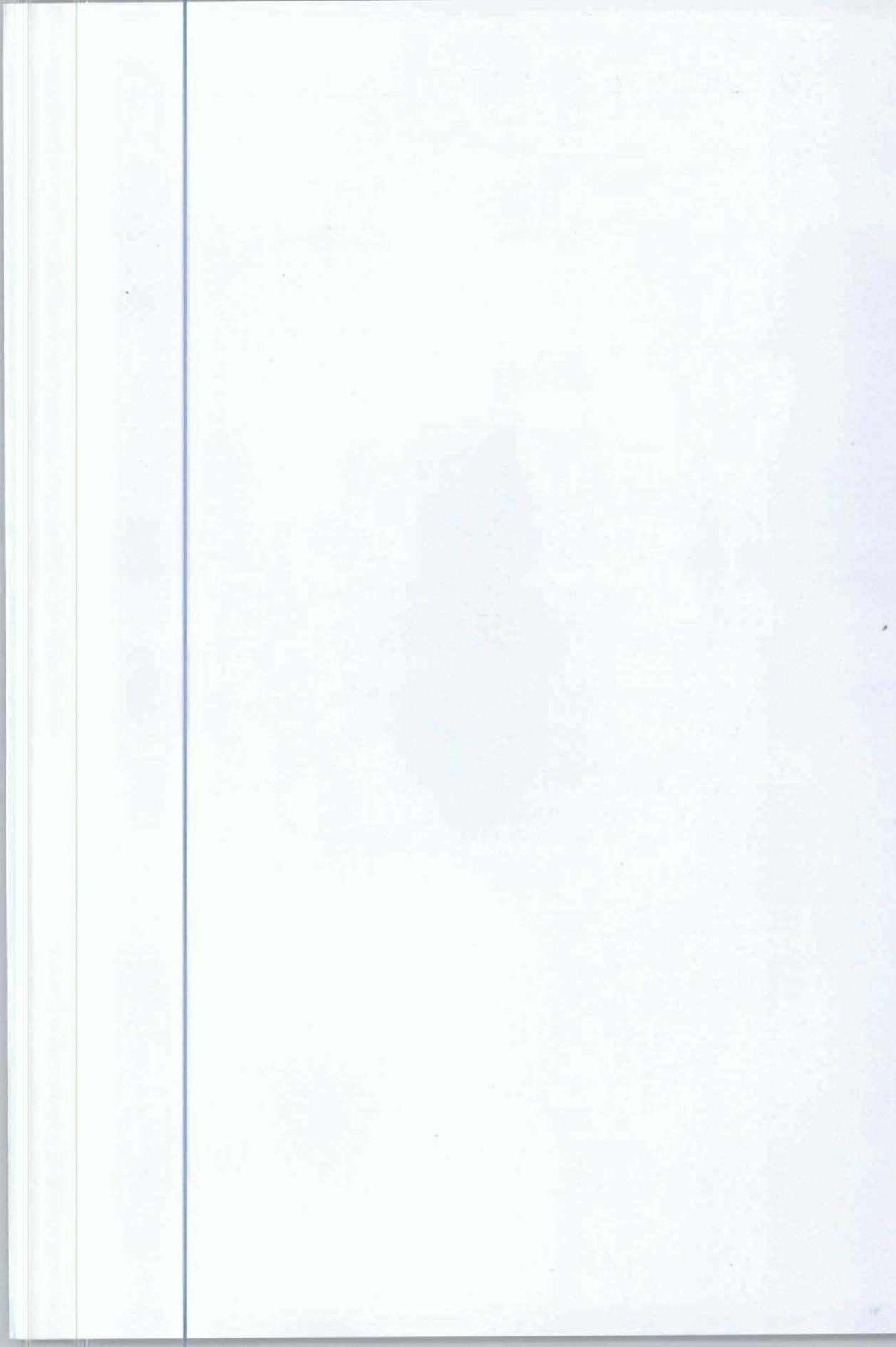
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FROM THE GROUND UP

For forty-five years, from 1948 until 1993, the Royal Australian Air Force conducted an apprentice training scheme to provide skilled tradesmen for its engineering and radio musterings. The many thousands of youths who passed through the scheme comprised not just Australians but Pakistanis and New Zealanders too, and in its later years included girls as well as boys. For such a technical service as the RAAF, apprentice training was a key element in providing a solid foundation for supporting and maintaining an increasingly complex range of aircraft and other equipment systems.

This book, specially commissioned by the RAAF to commemorate the unique contribution apprentices made to the service over nearly half a century, provides a documented record of the scheme's origins, rationale and development. It also traces the debate which gave recognition to the service's changing requirements and ultimately led to the termination of the apprentice training.

Here is recounted not just the story of the two technical trade streams of the scheme, but the short-lived clerical equivalent (the Junior Equipment and Administrative Trainee Scheme) and the later but equally short-lived Technologist Apprentice Scheme, as well as the crucial connections between early apprentices and the Diploma (later Engineer) Cadet Squadron which was established to provide tertiary-trained technical officers.

In addition to providing an absorbing narrative and analysis of the various training schemes, the book contains a detailed listing of the more than 7000 graduates from them: nearly 5000 engineering apprentices, nearly 1100 radio apprentices, 255 junior trainees, 372 Technologist Apprentices, and just over 600 DCS/ECS members.