



THE  
**DAFFODIL SQUADRON**  
1953~1955

Presents...

Origins  
of the  
Royal Australian Air Force  
Apprenticeship Training Scheme

I was approached in 1985 at Headquarters Support Command R.A.A.F. Melbourne by SGT Warren Sowter, an ex-apprentice MT Fitter from the 22nd Intake. I was AEENG5 and he was researching the history of Technical Training in the R.A.A.F. for his Degree of Bachelor of Education (Technical) at the Sydney College of Advanced Education. In later years I remembered his enterprise and began searching for him and his Thesis, titled 'A History of The Royal Australian Air Force School of Technical Training'.

In 2008 I made contact with Warren and asked his permission to convert his Thesis to a computer record and to make it accessible to all those who have worn the R.A.A.F. Apprentice sky-blue triangle patch. He kindly gave permission and provided me with all the research material he had kept for all those years. For this, we owe Warren many thanks because his excellent Thesis has preserved a part of Air Force history. This, and other records he has retained, could well be all that remains of the documents of the period as many of the historic records of the Apprenticeship Training Scheme have been lost, misplaced or destroyed!

I have faithfully transcribed the following pages from the original policy documents (Agendum No. 6768) which were part of those records. The documents have been transcribed (as pen amended) maintaining the original format, layout, and errors (including a calculation error for Drill hours in Annexure II). The aim was to present the documents as close to their original appearance as possible. I also intend to convert Warren's Thesis, and other records, given time!

W.L. (Bill) Arden (7th Intake) — 2008

## Introduction

This page is not part of the original documents but is included here to clarify the layout and style adopted within the R.A.A.F. in 1947, or more particularly, as used by the specialist Branch originators i.e. Personnel, Training, Technical, Radio, Medical etc., as each had their own interpretation.

The concept of the R.A.A.F. Apprenticeship Training Scheme was approved by the Air Board on 21st September 1945 (Supplement No.1). The original proposals were subsequently re-drafted and submitted as Supplement No.2. Then, on 22nd March 1946, the Board strongly recommended to the Minister that the scheme be instituted in accordance with the principles set out in the Agendum and in Supplement No.2.

Ministerial and Governmental approval for the institution of the Apprenticeship Scheme was confirmed on the 21st January, 1947.

Air Board Agendum No. 6768 to Supplement No.3 was to obtain the Air Board's approval for the publication of a brochure, in the form of an Air Publication, outlining the conditions of entry and service for R.A.A.F. apprentices.

## Transcription Content

Promulgation of Letter No. S.S.56 to Minister for Air from Minister for Defence giving Ministerial and Government approval on 21st January 1947.

Air Board Agendum No. 6768 To Supplement No.3

ANNEXURE 1 - Summary of Conditions of Entry and Service.

APPENDIX I - Emoluments of Apprentices and Airmen.

APPENDIX II - Engineering and Radio Apprentice Trades.

APPENDIX III - Standards of Physical Fitness.

APPENDIX IV - List of Nominating Authorities.

APPENDIX V - Documents Required for Medical and Aptitude Tests.

ANNEXURE 2 - R.A.A.F. Apprentice Training Scheme - Technical.

ANNEXURE 3 - Aircraft Apprentices - Radio Training.

[this content is held but not included here]

R.A.A.F. APPRENTICESHIP TRAINING SCHEME.

Promulgation of Letter No. S.S.56 to Minister for Air from  
Minister for Defence.

**21 JAN 1947**

I refer to your letter of 28th October forwarding the proposals of the Air Board for the introduction in the R.A.A.F. of a system of apprenticeship training similar to that in force in the R.A.F.

2. The scheme as been examined by the Defence Committee which had before it a comparative statement (copy attached) prepared by the Principal Administrative Officers Committee (Personnel) showing the conditions of service under the existing Army apprenticeship training scheme and the proposed R.A.A.F. scheme. (It was ascertained that the R.A.N. did not propose to institute a scheme for training tradesmen.) The R.A.A.F. proposal differs considerably from the Army scheme which is based on civil practice, but the Defence Committee observed that the R.A.A.F. scheme is designed to meet R.A.A.F. requirements which are peculiar to all air forces and aviation generally and is similar to the scheme which has been in operation in the Royal Air Force for some 25-30 years. The Committee recommended that the scheme be concurred in in principle but that an endeavour be made to ensure uniformity as far as possible in regard to rates of pay and provision of rations and quarters for A.M.F and R.A.A.F. apprentices.

3. On the basis of the conclusions of the Defence Committee, I concur, in principle, with the introduction of the proposed apprenticeship training scheme in the R.A.A.F., but consider that an endeavour should be made through the Inter-departmental Committee now considering the pay code for the postwar Permanent Forces, to obtain uniformity as far as possible in regard to rates of pay and conditions of service for A.M.F. and R.A.A.F. apprentices. I am arranging for this aspect to be brought to the notice of the Department of the Treasury.

ROYAL AUSTRALIAN AIR FORCE APPRENTICESHIP  
TRAINING SCHEME.Introduction.

By Minute dated 21st September, 1945, on Air Board Agendum No. 6768, the Board approved of the R.A.A.F. Apprenticeship Training Scheme and decided that implementation of the scheme should proceed forthwith.

2. Supplement No.1 to the above Agendum outlined proposals covering such implementation; these proposals were subsequently redrafted and submitted as Supplement No.2. By Minute dated 22nd March, 1946, the Board strongly recommended to the Minister that the scheme be instituted in accordance with the principles set out in the Agendum and in Supplement No.2.

3. Ministerial and Governmental approval for the institution of the Apprenticeship Scheme was confirmed on the 21st January, 1947.

4. The purpose of this Agendum is to obtain the Air Board's approval for the publication of a brochure, in the form of an Air Publication outlining the conditions of entry and service for R.A.A.F. apprentices.

Conditions for Apprentices.

5. The draft conditions for apprentices are attached as Annexure I to this Agendum. Rates of pay have not yet been finalised by the inter-Service working party dealing with uniform pay and related conditions of service and it will be necessary to include such rates in the brochure prior to its publication. It will be appreciated that early promulgation of these conditions will be necessary.

6. Annexure II shows how it is proposed to allocate the time to particular subjects for technical apprentices, whilst Annexure III shows the same detail in respect of Radio apprentices.

Age on Entry.

7. Supplement No.2 to Agendum No. 6768, shows the age of an apprentice on entry to be between 15 and 16 years, this age bracket being agreed to by the Board.

Subsequent discussions and a closer analysis has shown that an upper age limit of 16 would debar a number of boys who would be completing or about to complete their Intermediate Certificate. It is submitted that these boys should not be excluded, and paragraph 15 (c) of the brochure now shows the age on entry to be between 15 and 17 years.

It is noted that the age of entry to the A.M.F. apprenticeship training scheme is between 15 and 17 years and to the R.A.F. scheme 15 and 17½ years.

Recommendation.

8. It is recommended, for the consideration of the Air Board, that the summary of conditions of entry and service of Aircraft and Radio Apprentices which appears at Annexure I be approved, and that arrangements be made for its early publication.

Air Marshall,  
CHIEF OF THE AIR STAFF.

6768  
Supp.No. 3.

RAAF Apprenticeship Training Scheme.  
Air Board Minute - 31<sup>st</sup> July, 1947.

The Board approves the recommendation in paragraph 8.

ROYAL AUSTRALIAN AIR FORCE

SUMMARY OF CONDITIONS OF ENTRY AND SERVICE

OF

AIRCRAFT AND RADIO APPRENTICES.

LIST OF APPENDICES.

- Appendix I - Emoluments of Apprentices and Airmen (including Aircrew).
- Appendix II - Aircraft Apprentice and Radio Apprentice Trades.
- Appendix III - Standards of Physical Fitness for Apprentices.
- Appendix IV - List of Approved Nominating Authorities.
- Appendix V - Documents required before Candidates report for Medical Examination and Aptitude Testing,

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Scope of Pamphlet.

1. This pamphlet consists of a detailed summary of conditions of entry and service for aircraft apprentices in the Royal Australian Air Force. These conditions are liable to change from time to time according to R.A.A.F. requirements. They are subject to particular provisions contained in Air Force Regulations.

What the Service Offers.

2. The R.A.A.F. aircraft apprentice scheme provides educational and technical training for boys between the ages of 15 and 17 years at the date of their entry into the R.A.A.F., with a view to their becoming skilled tradesmen in the Permanent Air Force. During their apprenticeship, they are provided with free accommodation, food, clothing, medical and dental attention, and free rail travel to their homes twice per year. \*Pay of the apprentices will be at the annual rate of .... for the first year, .... for the second year, and .... for the third year. Detail of the weekly rates of pay for aircraft apprentices, skilled tradesmen in the Group I trades, to which apprentices are remustered on successful completion of their training, and airmen aircrew are given at Appendix I.

Apprentice Trades in the R.A.A.F. as at 1st January, 1948.

3. The following trades are at present open to aircraft apprentices:-

- (a) Fitter (Engine).
- (b) Fitter (Airframe).
- (c) Electrical Fitter.
- (d) Fitter (Armourer).
- (e) Fitter (Driver Motor Transport).
- (f) Instrument Maker.
- (g) Radio Fitter (Air).
- (h) Radio Fitter (Ground).
- (j) Telegraphist Mechanic.

All these trades and such others as may be determined necessary from time to time in the light of further developments in aviation will be Group I; these trades are the most highly skilled and highly paid in the R.A.A.F. Details of the trades are given at Appendix II.

Choice of Trades.

4. In general, two separate apprentice groups of trades are open to candidates, that is, radio trades and engineering trades. A candidate may apply for entry into either of these groups but on entry he will not be allocated to a particular trade within such group, and no guarantee can be given that he will be trained in the trade of his first choice. Allocation to trades will be made later after apprentices have shown, by the results obtained during their training, the trade for which they possess the most aptitude. Wherever practicable apprentices are permitted to make their own choice, but the final allocation to a particular trade will depend upon the number of vacancies in that trade and the relative technical aptitude of the apprentice concerned.

Period of Apprenticeship.

5. The period of apprenticeship is normally three years. This period is followed by one year's tour of duty at a selected unit, during which the ex-apprentice will be employed on productive work.

Terms of Engagement.

6. An aircraft apprentice on joining is attested for the period covering his apprenticeship, normally three years, and twelve Years regular service thereafter. Ex-apprentice airmen may be

selected for re-engagement at the end of their twelve-year term for additional periods of six years.

#### Health and Welfare of Apprentices in the R.A.A.F.

7. The health and general welfare of aircraft apprentices receive careful and continuous attention. Vaccinations, re-vaccinations and inoculations as are considered to be necessary in the interests of the health of the apprentice and the Service will be carried out by the Royal Australian Air Force medical authorities. Parents or guardians of accepted candidates who do not consent to vaccination or inoculation will be required so to inform the Air Board at the time of entry in order that an appropriate note may be made in apprentices records.

8. Special attention is paid to physical training; ample opportunities are afforded for games and outdoor exercises and for suitable employment of leisure time. Parents or next of kin of apprentices will receive bi-annual reports of their progress from the apprentice school.

#### Religious Instruction.

9. The chaplains of the various denominations are given every facility in arranging for the religious instruction of apprentices.

#### Accommodation.

10. Apprentices are accommodated separately from men. Care is taken to ensure that meals and conditions under which they are served are satisfactory; apprentices are encouraged to take a pride in the appearance of their mess, in its conduct, and in their own behavior. Consumption of intoxicating liquor by apprentices is prohibited on or off duty. Permission to smoke while off duty may be given to apprentices above the age of eighteen.

#### Leave.

11. Apprentices will be granted leave for approximately six weeks in the year in two periods. During leave periods they will be paid their normal rate of pay plus allowances in lieu of rations. A proportion of their normal pay (see Appendix I) will be preserved and paid to the apprentices when they proceed on leave. For these two leave periods free return railway tickets will be issued.

#### Graduation and Reclassification.

12. Apprentices will graduate by examination. On graduation they will be granted the classification of Aircraftman Class I (Group I), and posted to a selected unit. At the end of this fourth year of their service the qualified apprentices will be trade tested and, if they attain the prescribed standard, will be granted the classification of Leading Aircraftman, subject to the recommendation of their Commanding Officer. An ex-apprentice who does not attain the required standard for reclassification to the rank of Leading Aircraftman will have further opportunities to pass the necessary trade test. On reclassification as Leading Aircraftman, an airman will become eligible for promotion to non-commissioned and subsequently to warrant rank.

#### Further Advancement.

13. The following opportunities for further advancement in the R.A.A.F. will be available to all apprentices:-



- (a) Commissioning. Cadetships at the Royal Australian Air Force College will be granted to selected apprentices. On graduation from the R.A.A.F. Cadet College they will be granted permanent commissions in an appropriate branch of the R.A.A.F., normally the Technical Branch. Provision will also be made for the grant of permanent commissions to apprentice trained airmen at any time during their R.A.A.F. service subject to Service requirements and recommendation of Commanding Officers. A limited number of apprentices selected for commissions may undergo a degree course at a University.
- (b) Aircrew Employment. In the main there are four regular aircrew categories namely, Pilot, Navigator, Radio Operator and Gunner. Flight Engineers may also be required in limited numbers. All apprentice trained airmen will be eligible to volunteer for selection, at all times, for employment as pilots and navigators after a period of employment in their mustering. Apprentices in mustering which are allied to the above Radio Operator, Gunner and Engineer aircrew categories will constitute the main field of selection for aircrew duties in those categories. Aircrew of the flight engineer radio operator and gunner categories may also be selected for training as pilots and navigators.
- (c) Re-engagement of Aircrew Personnel. Personnel selected as pilots and navigators, unless selected for commissions in accordance with policy outlined above, will be required to serve in their aircrew capacity for a period of six years. Subject to their re-engagement, ex-apprentices, in common with direct entrants, will still be eligible for commissions.
- (d) Retention of Skill of Aircrew Personnel. Radio operators, engineers and gunners are required by virtue of their aircrew duties to maintain their skill in their basic trade. On completion of active aircrew employment, they will return to their basic mustering and will be given a refresher course in order to qualify for promotion and re-engagement. On return to their basic mustering airmen will be liable, subject to age and medical limitations, to recall for aircrew services. After a period of employment in their basic mustering they will be again eligible for selection for a further period of aircrew service, probably in an instructional capacity. During periods of aircrew employment, they will be eligible for selection for commissions in appropriate branches of the service.

#### General Liability for Duty in the Air.

14. Any member of the R.A.A.F. may be required to fly as passenger in any type of aircraft in any part of the world irrespective of the fact that they may not be regularly employed or mustered as aircrew.

#### Qualification for Entry of Apprentices.

15. (a) Education, General Intelligence and Technical Aptitude. Candidates for engineering trades must have received a good general education to at least sub-Intermediate standard such as will enable them, provided they have the necessary aptitude, to profit by the educational and technical training open to apprentices. Candidates for radio trades must have reached Intermediate standard in Mathematics and Science. Candidates are selected in accordance with their educational background, character, ability and results they obtain in special aptitude tests.

-5-

- (b) Nationality. Candidates must be British subjects of European descent and normally the sons of parents, both of whom are (or, if deceased, were at the time of death) British subjects.
- (c) Age Limits. Candidates must have attained the age of fifteen years, but must not have attained the age of seventeen years on the first day of the month of entry to the Service.
- (d) Physical Fitness. Candidates must reach the high standard of fitness demanded by the Royal Australian Air Force, A guide to this standard is given in Appendix III to this pamphlet.

Dates of Nomination and Entry.

16. There will be two entries per annum as detailed hereunder:-

	<u>Month of Entry</u>	<u>Latest Date for Receipt of Nomination.</u>
(i) Engineering Trades	January and July	September and March
(ii) Radio Trades	January	September

Nominations.

- 17 (a) All candidates must obtain a nomination on the prescribed application form, which is available only from the approved nominating authorities shown at Appendix IV and from R.A.A.F. recruiting offices.
- (b) Nominations are accepted only on the understanding that :-
- (i) the candidate is certified by the nominating authority to be specially suitable as regards character, educational standard, physical fitness and aptitude for training as an apprentice in the Royal Australian Air Force.
- (ii) The nominations are submitted on the appropriate form.
- (iii) The candidate is not applying to any other authority for nomination and has not been rejected as unsuitable by any such authority.

Entry of Candidates.

18. Candidates who are selected for interview will be so informed by the Secretary, Air Board, but such notification does not, in itself, indicate acceptance for entry. Candidates will be required to undergo special aptitude tests and full medical examination. Directions for reporting at an R.A.A.F. establishment or selected country centre for medical examination, aptitude tests and interview by a Selection Board, together with rail or air warrants for the journey and forms enumerated in Appendix V, will be forwarded to candidates selected for interview. Candidates who successfully pass the medical examination and reach the required standard in aptitude tests will be eligible for enlistment to fill available vacancies. Successful candidates will be advised of their final selection by letter. Arrangements will be made, where possible, for parents who desire to seek more detailed information of the apprentice scheme to interview an appropriate Air Force authority.

Termination of Initial Engagement.

19. Should an apprentice under training be considered unlikely to become an efficient airman, he will be liable to be discharged. Discharges on such grounds will be effected early in the training period. If an apprentice fails in the passing out examination he may, at the discretion of the Air Board.

- (a) be given further training in his trade if he is considered likely to qualify within a reasonably short period;
- (b) be permitted, if he so desires and can qualify, to be remustered to another trade in the R.A.A.F.;
- (c) be discharged.

On completion of his initial period of engagement for 12 years any airman not selected for or not desirous of re-engagement will be discharged, and may, subject to his agreement be placed upon the R.A.A.F. Reserve.

Withdrawal of Apprentices.

20. The parent or guardian of an apprentice will be required to sign an undertaking to the effect that he or she is willing to allow the boy to undergo a three-year apprenticeship course followed by a twelve-year engagement.

21. In the case of an apprentice who withdraws from, refuses or fails to complete his training in, or leaves, or resigns from the Air Force before attaining the age of 21 years without the consent in writing of the Air Board, a charge of £50 for each year's training undergone, or proportionately for portion of a year, may be imposed by the Air Board or the guardian of such apprentice.

EMOLUMENTS OF APPRENTICES AND AIRMEN.  
(INCLUDING AIRCREW)

The rates of pay during apprenticeship\* are as follow:-

	<u>Per Week</u>	
	---	---
	<u>Under 18</u>	<u>Over 18.</u>
	---	---
First year		
Second year		
Third year		

2. On attaining the age of 18, an apprentice becomes entitled to receive the recruit's rate of pay of --- per week. First year apprentices receive in cash the sum of --- per week; second and third year apprentices receive in cash the sum of --- per week, the remainder being deferred from apprentice's pay and payable immediately prior to leave periods. On posting to a unit for duty on completion of training, apprentices receive the rate of pay appropriate to their classification and trade group, i.e., aircraftman class I, Group I.

3. The daily rates of pay for group I tradesmen will be as follow :-

RANK AND INCREMENT	GROUP			
	I s. d.	II s. d.	III s. d.	IV s. d.
Warrant Officer --				
On appointment	23.6		22.0	
After 2 years	24.0		22.6	
Flight Sergeant --				
On appointment	21.0		19.6	
After 2 years	21.6		20.0	
"    4    "	22.0		20.6	
"    6    "	22.6		21.0	
"    8    "	23.0		21.6	
Sergeant --				
On appointment	19.6		18.0	
After 2 years	20.6		18.6	
"    4    "	20.6		19.0	
Corporal	17.0 )	16.0 )	15.6 )	13.0 )
Leading Aircraftman	16.0	14.6	14.0	11.6
Aircraftman, Class I	15.0	13.6	13.0	11.0
Aircraftman (Recruit) --				
Adult				10.0
Minor				8.6

In addition to basic pay, apprentices and airmen are granted free rations and accommodation or an allowance in lieu and free medical attention. The apprentices receive free clothing whilst airmen receive free initial issue and a clothing upkeep allowance. A marriage allowance is payable to married airmen who have attained the age of 21.

\* Rates at present awaiting Treasury approval.

4. The daily rates of pay for aircrew will be as follows:-

RANK AND INCREMENT	DAILY RATE OF PAY	
	Pilots and Navigators	Signallers, Engineers and Gunners.
	s. d.	s. d.
Master Pilot, Navigator, Signaller, Gunner Engineer	26. 6	26. 0
After 2 years	27. 0	26. 6
"    4    "	28. 0	27. 0
Pilot I, Navigator I, Signaller I, Gunner I, Engineer I	24. 0	23. 6
After 2 years	24. 6	24. 0
"    4    "	25. 0	24. 6
"    6    "	25. 6	25. 0
Pilot II, Navigator II A Signaller II, Gunner II, Engineer II	22. 6	22. 0
After 2 years	23. 0	22. 6
"    4    "	23. 6	23. 0
Pilot III, Navigator III, Signaller III, Gunner III, Engineer III	20. 0	19. 6
After 4 years	20. 6	20. 0
Pilot IV, Navigator IV, Signaller IV, Gunner IV, Engineer IV	18. 0	17. 6
Trainee Pilot, Trainee Navigator, Trainee Signaller, Trainee Gunner, Trainee Engineer		

Direct entry --  
 Under 21 .. 8/6 Plus 2/- per day Flying  
                     Instructional Pay as from  
 21 and over 10/- commencement E.F.T.S.

Serving airmen at the rate of pay appropriate to their rank or classification and group -- plus 2/- per day Flying Instructional Pay as above.

ENGINEERING AND RADIO APPRENTICE TRADES.

The Royal Australian Air Force trades in which aircraft apprentices are trained are amongst the most highly skilled and most remunerative in the Service. Most of the trades taught have their counterparts in industrial life.

Brief particulars of the trades are:-

1. Fitter (Engine) and Fitter (Airframe).

The first period of the course is devoted to acquiring the requisite basic knowledge and skill of hand, the second to applying and extending this skill and knowledge, in the case of Fitters (Engine) in the maintenance, overhaul repair and test running of engines used in aircraft, and in the case of Fitters (Airframe) in the maintenance, overhaul and repair of service airframes. On the successful completion of the training course, an apprentice is posted to a unit where he exercises his trade under skilled supervision.

2. Electrical Fitter.

In addition to basic knowledge and skill of hand, apprentices for this mustering receive instruction in overhaul, repair, testing and maintenance of all electrical equipment in use by the Royal Australian Air Force (excluding wireless sets and certain instruments which are appropriate to wireless and instrument musterings and such other electrical equipment as is directly installed and maintained by electrical mechanics).

3. Instrument Maker.

Instruction in this trade covers the overhaul, repair and maintenance of instruments, cameras, bomb-sights and specific electrical instruments peculiar to instrument makers, and is in addition to training in basic knowledge and skill of hand.

4. Fitter Armourer.

The course in this trade is designed to fit an apprentice to undertake the care, maintenance, overhaul, repair and testing of small arms, machine guns, cannon, gun firing and cocking devices, power operated gun turrets, gun mountings, bombs, bomb-sights, rocket propelled airborne missiles, and other armament in use in the Royal Australian Air Force.

5. Fitter Driver Motor Transport.

Apprentices in this mustering will be taught the requisite basic knowledge and skill of hand so as to undertake the repair, overhaul and maintenance of service road vehicles, earth moving equipment, diesel motors, haulage and mechanical lifting appliances.

6. Radio Fitter (Air).

1. These tradesmen are required for the installation, alignment, inspection, fault diagnosis, servicing and major repair of all wireless telegraphy, radio telephony, inter-communication and radar equipment in current use in aircraft, and for the servicing and major repair of all appropriate test equipment.

2. They are responsible for the installation, servicing and repair of all aircraft aerial systems, ancillary radio apparatus and power supply cabling for airborne radio equipment up to and including the fuses of the general service aircraft electrical system, and for the replacement of batteries required specifically for the use of airborne radio equipment. These tradesmen are not responsible for the charging, servicing or replacement of aircraft accumulators.

3. They are required to operate and carry out daily servicing of portable petrol-electric A.C. and D.C. generating sets, used for the testing of aircraft radio equipment.

4. They are required to be capable of operating, in accordance with the correct procedure, all airborne radio equipment to a standard which enables them to carry out functional tests efficiently; this includes, inter alia, the ability to send and receive aural morse at 8 words per minute, and to analyse correctly the various presentations of cathode-ray tubes in current Service use.

7. Radio Fitter (Ground).

1. These tradesmen are required for the installation, alignment, inspection, fault diagnosis, servicing and major repair of all wireless telegraphy and telephony equipment and all radar equipment, in current use in ground stations and in radio vehicles.

2. They are responsible for the installation, servicing and major repair of aerial systems, feeder systems, test equipment and ancillary equipment associated with ground station and mobile ground radio equipment. They are required to operate and service Diesel and petrol-electric generating sets, converters, accumulator charging plant and accumulators used specifically for supply power to ground radio and line equipment. They are required to instal, service and repair power supply cabling; in the case of ground stations, up to and including the fuses of the mains power supply only.

3. They are required to be capable of operating, in accordance with the correct procedure, all ground radio equipment, to a standard which enables them to carry out functional tests efficiently; this includes, inter alia, the ability to send and receive aural morse at 8 words per minute, and to analyse correctly the various presentations of cathode-ray tubes in current Service use.

8. Telegraphist Mechanic.

1. These tradesmen are required for the installation, adjustment, inspection, fault diagnosis servicing and major repair of all line telegraphy equipment and cypher machines, ancillary apparatus and test gear, in current use in Fixed and Mobile Signals Offices.

In detail these duties cover the following apparatus:-

Typewriters

Teletypewriters

Telephone and Teletypewriter Switchboards

All component apparatus of the 5 Unit Tape Relay System.

All components of the Mores Handspeed and Automatic Line.

Wireless Telegraphy Equipment.

Teletypewriter and Line Test Gear for the above.

Manual and Automatic Cypher Equipment.

2. They are required to operate and service Diesel and petrol-electric generating sets, converters, accumulator charging plant and accumulators used specifically for supplying power to line telegraphy equipment. They are also required to instal and service associated cabling where applicable,
3. They are required to be capable of operating in accordance with the correct procedure, all line telegraphy equipment to a standard which enables them to carry out functional test efficiently; this includes, inter alia, the ability to operate teletypewriters and perforators at 12 w.p.m. and to operate cypher machines.



STANDARDS OF PHYSICAL FITNESS FOR AIRCRAFT APPRENTICES.

1. The official medical examination is necessarily strict. A CANDIDATE'S PARENT OR GUARDIAN IS STRONGLY ADVISED, THEREFORE, TO HAVE HIM EXAMINED BY A DOCTOR, IN THE LIGHT OF THE STANDARDS SET OUT BELOW, PRIOR TO HIS BECOMING A CANDIDATE FOR ENTRY. It must be clearly understood, however, that the fact that a boy has been examined locally (whether by a private doctor or by the medical officer of a local education authority, where an authority undertakes a preliminary medical test) and found fit, does not constitute a ground for any claim against the Air Board if a boy is rejected at the Royal Australian Air Force medical examination.

2. Special attention should be paid to defects of the feet, eyes (e.g. squint and chronic inflammation of the lids or eyeballs), ears, throat (particularly septic or enlarged tonsils; but see paragraph 5 below), teeth and general physique; these have been found to be frequent causes of rejection of candidates.

3. The following is an outline of the standards of physical fitness demanded:-

- (a) The boy must be free from any disease or physical defect calculated to render him unfit for his duties in the Royal Australian Air Force.
- (b) He must be fit, and likely to continue fit, to serve abroad in any climate under active service conditions,
- (c) He must not suffer from any of the following defects:-
  - (i) Fits, chronic bronchitis or winter cough.
  - (ii) A weak constitution evidence of tuberculosis disease, etc.
  - (iii) Contraction or deformity of chest, joints or spine.
  - (iv) Disease of the heart or lungs.
  - (v) Severe varicose veins or haemorrhoids.
  - (vi) Hernia.
  - (vii) Undescended testicle if in the canal or at the external abdominal ring.
  - (viii) Discharge from or disease of either ear.
  - (ix) Enlarged glands.
  - (x) Defective eyesight., hearing or teeth (see paragraphs 4, 5 and 6 for standards).
  - (xi) Kidney disease (see paragraph 9).
  - (xii) Vocal impediment, e.g. marked stammering.
  - (xiii) Flat foot (see paragraph 8).
- (d) A personal history of acute rheumatic fever, more than one attack of unconsciousness, bedwetting or asthma will require careful consideration at the time of the medical examination.

4. Standard of Visions. - The boy will be placed with his back to the light, and his visual acuity will be tested by means of test types placed in a good light at a distance from him of twenty feet. Each eye will be tested separately, with the eyelids normally open, according to the following standards:-

- (a) If he can read 6/12 or better, with each eye without Glasses at the above distance, both correctable to 6/6, he will be considered fit.
- (b) A boy whose vision requires him to wear glasses will not necessarily be rejected if otherwise fit, but his vision without glasses must be within the standard required by clause (a) above.
- (c) Each eye must have a full field of vision as tested by hand movement.
- (d) Visual acuity below 6/12 in either eye will debar an applicant from selection as airman pilot.
- (e) Defective colour vision is not a cause for rejection, but it will debar the applicant, if accepted, from certain trades (e.g. radio mechanic and fitter armourer) or as an airman pilot, and, in consequence, from obtaining a commission in the General Duties Branch.

5. Standard of Hearing:- The boy should be able to hear a forced whisper at twenty feet with either ear, the other being blocked. He should stand sideways, the ear under examination being the one nearer the examiner.

6. Teeth:- The boy must have sufficient sound natural teeth to enable him to masticate his food efficiently.

Nine deficient or nine defective teeth which cannot be rendered serviceable by treatment will disqualify.

He must also have a minimum "bite value" of 11 points, determined as follows:-

Each of the first five teeth on either side of the centre of the jaw, if biting correctly with its opposing tooth in the other jaw, is valued at 1 point, or 10 points in all.

Each of the two molars on either side, if biting correctly with its opposing tooth in the other jaw, is valued at 2 points, or 8 points in all.

A credit of 1 point for each pair of wisdom teeth (on the same side of the mouth), which usually have not appeared at this age, will be allowed, or 2 points in all.

The maximum number of points possible is therefore  
 $10 + 8 + 2 = 20$ .

The minimum standard required is 11 points,

7. Tonsils:- Enlarged and septic tonsils which, however, are not associated with definite disabling symptoms at the time of examination, are not necessarily a bar to acceptance provided that the parents or guardians, prior to acceptance, give their permission in writing for operations, should this become necessary.

8. Flat Foot:- This is not a cause for rejection provided the joints of the tarsus are flexible and the arch of the foot reappears when the candidate is in the knee-bending position. It is a cause for rejection if the foot is everted and the tarsal joints are stiff.

9. Urine:- Albuminuria is of frequent occurrence during adolescence and, though usually functional in origin and of no significance, is sometimes due to kidney disease. When albuminuria is found, therefore, a certificate should be obtained from the doctor to the effect that it is functional or "adolescent" in character, and is not due to disease. This certificate should be handed by the boy to the medical officer at the R.A.A.F. medical examination.

LIST OF NOMINATING AUTHORITIES  
APPROVED BY THE AIR BOARD.

All candidates are required, by paragraph 17. of this pamphlet, to obtain a nomination. The following authorities have been authorised to nominate candidates for the qualifying examination:-

- (a) The Commandant, Air Training Corps, in each State of the Commonwealth, if the candidate is a member of that Corps.
- (b) The Council of the Boy Scouts Association if the member is a Boy Scout.
- (c) Any serving commissioned officer of the three Services of a rank not lower than Squadron Leader, Lieutenant Commander or Major.
- (d) The Headmaster of any school.

DOCUMENTS REQUIRED BY CANDIDATES WHEN REPORTING FOR MEDICAL EXAMINATION AND APTITUDE TESTING.

1. Each candidate called up for medical examination etc~ will be required to produce the following documents:-

- (a) The consent, in writing, of his parent, guardian, or nearest relative to his entry as an apprentice Royal Australian Air Force, for a period of three years' training followed by twelve years' service. The signature of the parent or guardian must be on the form of consent (Form . . . . ) and must be witnessed by one of the following :-

Justice of the Peace or commissioner for declarations,  
Clergyman,  
Officer of H.M. Service (serving or retired) not below the relative rank of Squadron Leader,  
The Headmaster of a school.

- (b) A certificate of good moral character signed by a responsible person.
- (c) Extract of Birth entry showing that the boy's age is in accordance with that required under paragraph 15 (c) of this Publication.
- (d) R.A.A.F. Form . . . Order of Preference in Choice of Trades,
- (e) R.A.A.F. Form P.M.40 Medical Interrogatory Form - Apprentices,
- (f) R.A.A.F. Form . . . Certificate as to Freedom from Infectious Diseases. This must be completed by the applicant's local Doctor immediately before the candidate leaves home.

NOTE: Forms P.M.40 . . . . . will be despatched to each candidate when instructions to report for medical examination are issued.

R.A.A.F. APPRENTICE TRAINING SCHEME - TECHNICAL.

(a) Attestation, Medical Examination, Drill, Kitting, etc.	4	weeks
(b) Technical Instruction	126	"
(c) Camp and General Service Training	6	"
(d) Central Trade Test Board and Disposal	2	"
(e) Leave (Xmas 4 weeks, Mid-year 2 weeks)	<u>18</u>	"
Total :	<u>156</u>	"

Recruit Training :

Hours

First week of course - Arrival, Quarters, Kitting, )  
 Medical Examination, Inoculations, S.S.O's and )  
 Routine applicable to apprentices ) 35

Drill:

2nd to 4th week 3 weeks x 21½ hrs, = 64½ hrs. )  
 Commencing 5th week - 126 weeks x 2 hrs. = 252 " ) 316½

Workshop Instruction:

Lectures and demonstrations by Instructor and practical  
 work by trainees - commencing 5th week - 126 x 22½ hrs. 2835

Education:

Educational subjects and technical theory in School.  
 Mathematics, Mechanics, Aeronautical Science, Drawing, 1038  
 English and General Knowledge  
 Commencing. 2nd week - 3 weeks x 10 hrs. = 30 hrs  
 Commencing 5th week - 126 " x 8" = 1008 hrs.

Physical Training:

Commencing 2nd week - 129 weeks x 2½ hrs. 322½

Hygiene and Sanitation:

Weeks 1 to 4 - 4 weeks x 1 hr. = 4 hrs. 29  
 Commencing 5th week - 40/60 hrs, per month - Time taken  
 from Wing disposal - 40/60 hrs x 30 months = 20 hrs.  
 During G.S, training camp - 5 periods x 1 hr. = 5 hrs.

Wing Disposal:

Parades - Marching to and from duties - C.O's weekly  
 parade - Pay parade - Clothing parades and Kit inspections, 792  
 Monthly Hygiene lecture by M.O. - 132 weeks x 6 hrs.

Central Trade Test Board and disposal - 2 weeks x 35 hrs. 70  
 Camp and G.S. Training - 6 weeks full time

Evening Study - Notes - Hobbies 774  
 129 weeks x 6 hrs.

WORKING ROUTINE -R.A.A.F. AIRCRAFT APPRENTICE TECHNICAL -3 YEAR COURSE ORGANISED ON 7 DAY WEEK -168 HOURS.

Free Time	Organised Time		Working Time	
	Non Working	Non Productive	Recruit Training first 4 wks.	After 4 weeks Training.
	Dressing ) Undressing ) 5 x 1 = 5 Bath )	Barrack Cleaning 5 x ¼ = 1¼	Drill ) 5 x 4½ ( 21½ )	<u>Workshop Instruction</u>
	Breakfast 5 x ½ = 2½	<u>Wing Disposal</u> Parades -Pay ) Clothing -Kit Inspection ) C.O's weekly parade ) 6 Marching (to and from ) duties ) Monthly Hygiene Lecture )	Hygiene Lectures ) ( 1 )	Theory & Practical 5 x 4½ = 22½ Education ) 5 x 2 = ( 8 )
	Dinner 5 x ¾ = 3¾	Sport	Education 5 x 2 = 10	Drill ) ( 2 )
	Sleep 5 x 8½ = 42½	5 x ½ = 2½		Physical Training 2½
	57½ hrs.	9¾ hrs.	35 hrs.	35 hrs.
11¾ Hrs.	67¼ Hours.		41 Hours.	
	<u>Routine -Week - ends.</u>		<u>Five Day Working Week</u> <u>Mon, to Fri.</u>	
	Dressing ) Undressing ) 2 x 1 = 2 Bath )	Barrack Cleaning 2 x ¼ = ½	<u>Seven Day Working Week</u> <u>Mon, to Mon.</u>	
	Breakfast 2 x ½ = 1	Organised Games 2½	Working Time 35 hrs.	35 hrs.
	Lunch 2 x ¾ = 1½	Saturday Church Parade and Religious Instruction 1	Evening Study and Hobbies 6 "	6 "
	Dinner 2 x ¾ = 1½		Organised Time 67¼ "	96¼ "
	Sleep 2 x 9½ = 19		Free Time 11¾ "	30¾ "
19 Hrs.	25 Hours.	4 Hours.	Total 120 Hours	<u>168 Hrs.</u>
	29 Hours.			