

**AIRBORNE ELECTRONICS ANALYST
(AEA)**

INFORMATION GUIDE

(General Entry/Remuster/Service Transfer Recruits)

‘The Eyes of Australia’

TABLE OF CONTENTS

Title	Page No
Introduction	2
Training	2
Pay	4
Length and Conditions of Service	4
What to Expect After Training as an AEA	4
Life as an AEA	7
Applying to become an AEA	8
AEA Selection Criteria	8

SURVEILLANCE AND RESPONSE GROUP – THE EYES OF AUSTRALIA

AIRBORNE ELECTRONICS ANALYST TRAINING

INTRODUCTION

1. This information guide is designed to give you background information on the career of an Airborne Electronics Analyst (AEA) in the Royal Australian Air Force (RAAF). During the selection process, you will be assessed on how much you know about the career you have chosen to pursue. You need to be aware of the intensive 13 month training program that you are applying to undertake and the commitment that will be required from you during that time and the years to follow. Should you have any further questions do not hesitate to contact your Careers Adviser, 292 Squadron or 2 Squadron AEA instructors listed at the end of this guide. Much of the information contained in this guide is available from the “Defencejobs” website.

2. An AEA has one of the most dynamic jobs available in the Air Force. You will be responsible for operating and managing electronic and acoustic sensor equipment on either the P-8A Poseidon or E-7A Wedgetail to collect, analyse and disseminate tactical or strategic information. One of your tasks might be to help monitor different kinds of shipping around Australia’s vast coastline or in one of South-East Asia’s busy shipping lanes, the next task could be identifying an array of fighter aircraft or ground based Surface to Air Missile systems scattered throughout the area you are operating in. You will be flying on board a P-8A Poseidon or E-7A Wedgetail aircraft with some of the latest and most sophisticated electronic sensors available. Your duties will include analysing and predicting electromagnetic, oceanographic, and meteorological conditions to assist with the detection and tracking of targets. You will operate on-board sensor equipment to gather data associated with detecting and tracking potential targets over land and water. Additionally you will assist other crew members in executing an aircraft’s mission requirements. The hours can be long in this demanding role; however, there are rewards including; job security, location stability, respectable salary and worldwide travel. During operational postings, to either 2 or 11 Squadron you can expect to be away from home for up to 5 months a year on Operations and Exercises ranging from numerous destinations in South East Asia, the United States of America, Pacific Islands, Europe and, of course, locations within Australia.

3. Applicants must have Australian citizenship and may initiate application process from 16 years and 6 months of age. Additional age, medical and fitness guidelines may also apply. You need to have completed Year 10 with passes in Maths, English, and one other STEM subject (preferably Physics focused). Alternatives to the minimum education requirements may be available and are mentioned in para 45. Applications are taken from General Entry civilians and serving military members from all three services. Think you have what it takes to fly for a living in one of the RAAF’s most operational aircraft? Then read on.

TRAINING

4. **Initial Training.** General Entry recruit training is undertaken at No 1 Recruit Training Unit, RAAF Base Wagga Wagga, NSW. The 10 week and 6 days recruit course is an intensive period of learning and adjustment to a military lifestyle. The aims of the course are to: provide an orderly transition from civilian to Air Force life; equip the recruit with the basic knowledge, skills and physical fitness to perform his/her future role in the Air Force; and instil in the recruit the motivation to become a dedicated and productive Air Force member.

5. **Aircrew Training.** Upon completion of their initial training, General Entrants are then posted to 292 Squadron C Flight (CFLT) along with Remusters and Service Transfers for approximately 7 months of internal and external courses before moving to either 292 Squadron B Flight or 2 Squadron Training Flight to complete their conversion training and graduation as a Corporal AEA. 292 Squadron CFLT Internal courses include Airman Aircrew Initial Course, NTS Foundations and AEA Initial Course. 292 Squadron CFLT external courses include Aviation Medicine Course, Combat Survival Course, 9mm SLP & Glock G19 Pistol Training and PME Level 1.

6. A breakdown of the courses to be undertaken is as follows:

a. **Recruit Course - RAAF Wagga**

Aim To familiarise recruits with the methods, traditions and regulations by which the RAAF operates.

Subjects covered:

Drill
Fire Fighting
Security
Administration

First Aid
Physical Training
Weapons Training
General Service Knowledge

SURVEILLANCE AND RESPONSE GROUP – THE EYES OF AUSTRALIA

b. Professional Military Education (PME) Level 1 – RAAF Edinburgh or RAAF Richmond

Aim PME Level 1 aims to prepare Airmen and Airwomen for promotion to the rank of Corporal, the first of the supervisory Airman ranks. PME Level 1 provides the link between the initial leadership skills gained at 1RTU during recruit training and those required to become a Non-Commissioned Officer (NCO).

Subjects covered:

Self-leadership	Managing performance
Team leadership	Personnel structures and processes
Junior leadership	Australian Air Power
Leadership styles	Australian national security
Complying with orders	

c. Aviation Medicine (AVMED) – RAAF Edinburgh

Aim To graduate prospective aircrew with an understanding of the medical and physiological problems associated with the aviation environment and a positive attitude toward the medical aspects of flight safety.

Subjects covered:

Altitude Physiology	Thermal Stress and Survival
Special Senses	Human Factors and Stress

d. Non-Technical Skills Foundation Course – RAAF Edinburgh

Aim To provide a common understanding of human factors and non-technical skills principles as well as to support the development of practical knowledge relevant to skilled performance.

Subjects covered:

Human performance	Communication
Error and violation	Managing stress and fatigue
Culture	Situation awareness
Decision making	Leading and working in teams

e. Airman Aircrew Initial Course - RAAF Edinburgh

Aim To provide the aircrew trainee with the basic aircrew skills necessary to undergo specialist and/or conversion training on fixed wing aircraft.

Subjects covered:

Aircraft Ground Handling	Mathematics
Aircraft Navigation and Control	Airmanship
Aircraft Engines, Auxiliary Components and Systems	Radio and Intercommunication Systems
Basic Meteorology	Terminology and Phraseology
Theory of Flight	Air Movements
	Navigation

f. AEA Initial Course - RAAF Edinburgh

Aim Theory and practical instruction is presented to achieve the aim of Radar/ESM system operation. Emphasis is on basic Radar interpretation and ESM signal analysis.

Subjects covered:

Electronic Theory	Identification Friend or Foe (IFF)
Acoustic Warfare (AW)	Oceanography
Electronic Warfare (EW)	Security
Radar Theory	Magnetic Anomaly Detection (MAD) Basics
Radar / Electronic Warfare Simulator (REWST)	Communications
Inverse Synthetic Aperture Radar (ISAR)	

SURVEILLANCE AND RESPONSE GROUP – THE EYES OF AUSTRALIA

h. **P-8A Conversion Course - RAAF Edinburgh**

Aim To graduate AEAs capable of performing the duties of a P-8A Poseidon Electronic Warfare Operator for the roles and tasks assigned to 92 Wing.

Subjects covered:

Aircraft Familiarisation	Radar / ESM / IFFI / EO System theory
Basic Maritime Warfare	Weapons Tactics Trainer Events (Radar/EW practical)
Tactical Development Phase	Flying Events (Radar, ESM, EO, Ordnance, Observer)

i. **E-7A ESM Operator Conversion Course (ESMO) – RAAF Williamtown**

Aim. To graduate AEAs capable of performing the duties of an E-7A Wedgetail Electronic Support Measures Operator (ESMO) for the roles and tasks assigned to 42 Wing.

Subjects covered:

Aircraft Familiarisation	Radar / ESM / IFF / Data Link System theory
Basic Air Battle Manager Warfare	Operational Mission Simulator Events (EW practical)
Crew Resource and Aviation Risk Management	Flying Events
Tactical Development Phase	Aviation Australia - Emergency and safety equipment

Of note, only one Conversion Course will be completed, either P-8A or E-7A. Actual placement will depend on service requirements.

g. **Aircrew Combat SERE Level C (COMSURV) – RAAF Townsville**

Aim To provide aircrew training in tactics, techniques and procedures that are applicable in an isolating event. Instruction will be provided across both permissive and hostile operating environments.

PAY

7. On graduation from 292 Squadron successful applicants will be entitled to CPL Pay Grade 5 Increment 0, currently this equates to a salary of approximately \$90,000.

LENGTH AND CONDITIONS OF SERVICE

8. General entry (GE) AEA applicants selected to join the RAAF will be required to enlist for a six year period and undergo recruit training. These requirements may be waived in the case of Service transfers from other Services. Carry over of service/superannuation benefits is normally approved but needs to be confirmed by applicants. After the six year period, you will have the option of leaving the RAAF or re-enlisting for a further period of service. With the security and benefits associated with the job, only a handful of AEAs have taken the option to leave after their initial Return of Service Obligation (ROSO).

9. A guide to the general conditions of service applicable for RAAF members is available from your Careers Adviser.

WHAT TO EXPECT AFTER TRAINING AS AN AEA

10. **Your Career.** After conversion training is completed you will be posted to an operational crew on either 2 or 11 Squadron. Should you be posted to 11 Squadron, following a couple of years of consolidation as an Electronic Warfare Operator (Radar & ESM stations), you may become eligible for post graduate conversion training as an Acoustic Warfare Operator. Promotion to Sergeant, Flight Sergeant and Warrant Officer is merit based, in competition with your peers and dependent upon performance, post graduate qualifications and available positions.

11. **P-8A Poseidon.** As an AEA in the RAAF you could be employed as a specialist aircrew member flying as part of a crew on a Boeing P-8A Poseidon. The P-8A is a Long Range Maritime Patrol Aircraft (LRMPA), and was introduced into RAAF service in 2016. It has an array of equipment used to perform the many roles assigned to

SURVEILLANCE AND RESPONSE GROUP – THE EYES OF AUSTRALIA

the crews of 92 Wing. It has digital data computers used to control navigation, communications, analysis of data gained by the sensor systems, and weapons delivery.

12. 92 Wing is situated at RAAF Base Edinburgh, about 30 kilometers north of Adelaide. The Wing performs maritime surveillance, anti-submarine warfare, anti-surface warfare, search and survivor supply, intelligence surveillance and reconnaissance and other tasks. Some of this work is done in the Australian region, but P-8A's more often than not fly much further afield. As previously stated, AEAs will be posted to 11 Squadron and assigned to a crew after completing their initial and conversion training at 292 Squadron. It is at 11 Squadron where the operational flying is performed to support 92 Wing's roles.

13. A Poseidon crew forms a specialist team utilising the aircraft's long range, endurance and many high technology sensors. The aircraft crew consists of Pilots, a Tactical Coordinator (TACCO), a Navigator/Communicator (COTAC) and a team of AEAs. The Pilots control and monitor performance of the aircraft. The TACCO employs the appropriate tactics and procedures to most effectively carry out the mission of the aircraft and its crew. The COTAC is responsible for navigating the aircraft and conducting tactical radio communication. The majority of tasks performed by the Poseidon involve the use of various sensors. The operation of these sensors is the responsibility of the crew's AEAs. A successful mission is a result of good teamwork.

14. **AEA Duties on a P-8A.** Initially, an AEA will be trained in the operation of the Radar, Identification Friend or Foe Interrogator (IFFI), Electro Optics (EO), Electronic Support Measures (ESM), as well as the Ordnance System and associated search stores including Sonobuoys. Post graduate training is completed on the Acoustic Warfare stations.

15. The Radar is the most commonly used sensor by the AEA requiring considerable skill to optimise its performance under varying conditions. It can be used for surface surveillance, contact identification, searching for small submarine targets such as periscopes or snorkel masts, weather and land avoidance and search and survivor supply. An AEA accepts a great deal of responsibility in the operation of the Radar as its correct operation is often imperative to flight safety and mission effectiveness.

16. IFFI works in conjunction with the Radar and is used by the AEA to identify airborne contacts for air traffic avoidance and safety. It can also be used to identify military vessels and aircraft.

17. The Electro Optics sensor is a passive sensor designed to operate both day and night and can greatly assist in visually identifying and tracking contacts of interest without alerting them to our presence. Electro Optics uses two techniques; high resolution camera producing excellent colour imagery and the other uses the Infrared light spectrum to produce a 'hot and cold' image.

18. The Electronic Support Measure (ESM) sensor is used to detect electromagnetic emissions such as those transmitted by Radar. Radars have many different characteristics which can be measured to classify their type and the platform using them and may be used tactically to confirm the presence of a ship or submarine. It may also be used in self defence to monitor whether a ship is targeting the aircraft with a missile system. Because there are so many different parameters for Radar, the ESM system uses complex computer software and a large library. The computer attempts to automatically classify a Radar type based on the parameters of a detected signal and match it to this library. Despite the computer support, the AEA must perform intelligent manipulation of the system and analyse data to gain an accurate tactical picture.

19. The Acoustic Warfare Sensors are also operated by AEA's. The operators for these stations monitor sonobuoys deployed from the Poseidon. Sonobuoys are cylindrical devices about one metre in length that deploy suspended hydrophones on a cable after splashing into the ocean. The hydrophones detect radiated noise sources from ships and submarines and then transmit this acoustic signature back to the aircraft. The transmitted information is processed by the aircraft acoustic processors with the resultant data being presented to the operators via a series of monitors. The acoustic operators analyse and interpret the acoustic signatures (grams) in order to classify the type of contact (e.g. submarine, ship, whale, etc). Other information can also be gained such as its mode of operation, course and speed. Once a submarine is detected, it may have to be tracked for several hours, while attempting evasive maneuvers. The skills required to competently analyse 'grams' takes considerable time and effort to develop. The entire success of a mission can depend on the operator's ability to correctly analyse the acoustic picture.

20. **E-7A Wedgetail.** In addition to the P-8A, an AEA could instead be employed as a specialist aircrew member flying as a part of a crew on an E-7A Wedgetail. The E-7A was introduced into the Australian inventory in 2010 and is a state-of-the-art Airborne Early Warning and Control (AEW&C) aircraft that conducts a multitude of Air Battle Management (ABM) functions. These roles include Offensive Counter Air, Defensive Counter Air, Maritime and

SURVEILLANCE AND RESPONSE GROUP – THE EYES OF AUSTRALIA

Surface Strike, Suppression of Enemy Air Defence, Joint Personnel Recovery, Intelligence Surveillance and Reconnaissance and Force Marshalling. The aircraft is fitted with one of the most advanced airborne Radar systems of its time; the Multi Electronically Scanned Array (MESA) Radar. Supporting this capability is a suite of advanced communications and data collection and dissemination systems.

21. 42 Wing is situated at RAAF Base Williamtown, approximately 20kms north of Newcastle, and is the parent unit of No 2 Squadron. No 2 Squadron is one of the oldest and most highly decorated Squadrons in the RAAF and was reformed in January 2000 as a part of the Wedgetail AEW&C project; today you can find an E-7A operating globally.

22. An E-7A crew consists of Pilots, a team of Air Battle Managers (ABMs) and, generally, one AEA. The Pilots are responsible for the flight safety and control of the Wedgetail aircraft itself. The team of ABMs consists of the Mission Commander (MC), a Senior Surveillance and Control Officer (SSCO), a Systems Officer (SO), a team of Surveillance and Control Officers (SCO) and an AEA (ESMO). The MC is responsible for the tactical employment of the aircraft, but more importantly the MC is the link between the higher Headquarters and all other aircraft in the operating area. The SSCO is responsible for the team of controllers who manage the airspace and tactics employed by fighter aircraft (such as the F-35 5th Generation fighter aircraft). The SO ensures all onboard mission systems are optimized and suitably configured for the specific mission. The AEA's primary task is the identification of threats such as Surface to Air Missiles, hostile fast-jet aircraft and naval combatants; information critical to the E-7A itself as well as the aircraft under its control.

23. **AEA Duties on an E-7A.** The AEA operates the E-7A's complex Electronic Support Measure (ESM) system that is used to detect electromagnetic emissions such as those transmitted by Radar. Radars have many different characteristics which can be measured to identify the platform; this may be used tactically to confirm the presence of an enemy aircraft or ship. It may also be used in self defence to monitor whether the E-7A is being targeted by a missile system; because there are so many different parameters for Radars, the ESM system uses complex computing software and large electronic libraries to automatically classify and identify a Radar type. Despite the computer's support, the AEA must perform intelligent manipulation of the system and analyse data to gain an accurate tactical picture.

24. Due to the expeditionary nature of the platform, the E-7A will often be the first aircraft in the Area of Operations. During this phase of the campaign, it is the role of the E-7A to conduct preparation of the battlespace. This is where you as the AEA will be required to collect, analyse, define and contribute the front line intelligence to higher Headquarters. You will be responsible for informing the Air, Land and Maritime commanders of enemy disposition and patterns of life; this will directly contribute to shaping the future battle plan.

25. During the execution phase the E-7A will transition to a more tactical role, where the AEA will be the one responsible for identifying enemy threats and collating intelligence data that they will then communicate to all Friendly assets in the region; through the use of various voice and/or data communication networks. An AEA will often find himself working very closely with the intelligence community and other air platforms such as the F/A-18G 'GROWLER' and RC-135 'RIVET JOINT' aircraft.

26. The AEA onboard an E-7A is, in most cases, required to operate independently and provides the critical link between the information coming into the aircraft and its subsequent dissemination amongst the crew and the outside world; the role the AEA performs is vital to overall mission success.

27. **What's expected of every AEA?** With the array of complex sensors on each aircraft, an AEA must be very adaptable to changing environmental and tactical conditions, so that equipment settings can be optimised. All of the AEA's analysis and decision making is carried out in real time, often in uncomfortable flying conditions. Thus it can be seen that an AEA has substantial responsibility within the crew environment to ensure both the safety of the aircraft and effectiveness of the mission. A high degree of self discipline is required to perform airborne duties under adverse conditions, often without direct supervision. There is plenty of scope for an AEA to exercise their judgment and initiative, which in turn makes the job very rewarding. Another skill or attitude which is essential for an aircrew member is that of situational awareness. Situational awareness refers to the operator's ability to accept and process a diverse range of information simultaneously whilst still performing the primary task. An AEA is expected to have a high degree of situational awareness, not getting tunnel vision or task focused on a particular event whilst more important situation develops in the dynamic environment.

28. Despite the high technology and processing assistance, the AEA must have a comprehensive knowledge of the theory associated with each sensor, as well as being skilled in their actual operation. When not flying, an AEA is expected to maintain theory based knowledge, learning the characteristics of those ships and aircraft against which they are tasked. The target knowledge expected of an AEA is substantial and requires frequent revising. Both

SURVEILLANCE AND RESPONSE GROUP – THE EYES OF AUSTRALIA

knowledge and skills are regularly assessed by Squadron training officers. Other duties performed on the ground include preflight preparation that may involve collecting appropriate information on the operating area and aircraft/vessels involved. Other mission preparation duties include ordering specific mission media and storage devices together with photographic equipment.

29. From an appreciation of the role of a flying crew, comes an understanding of the importance of team-work. Each crew member has an important role to play within the overall team effort. It is their capacity to work together, managing the different aircraft stations, and coordinating their individual efforts that will be the measure of their success and safe operation. For this reason there is a strong bond between aircrew.

30. AEA responsibilities extend beyond the airborne environment. On graduation from conversion training, an AEA will hold the rank of Corporal, a Junior Non-Commissioned Officer rank, requiring the AEA to be a leader and capable of setting an example to subordinates.

31. In addition to a high level of professional competence, a high degree of fitness is required. A typical operational sortie may last for 8-10 hours, during which time aircrew may be subjected to uncomfortable conditions associated with flying at low altitudes, in the middle of the night and in a tactical environment. A 16 hour day is not uncommon due to preparation that is required before an aircraft actually gets airborne and the post flight duties. Such working days are not governed by 'normal' working hours so fatigue is a real factor to overcome. Airsickness may occur, particularly when first commencing flying, but generally retracts once you become accustomed to flying and get your 'air legs'.

LIFE AS AN AEA

32. Both 2 and 11 Squadron have a proud history of achievement during wartime and in peace. The work they perform in peacetime is essentially the same as they would in time of tension. Their achievements are respected not only by the Australian forces but also by our allies.

33. Regular exercises are conducted overseas in which AEAs have the opportunity to work closely with American, British, New Zealand, Canadian and other peers. An example is RIMPAC; regularly conducted against the exotic backdrop of the Hawaiian Islands. You'll work directly with a US battle group or Fighter Command, hunting both with and against the most sophisticated naval forces and aircraft in the world.

34. Nationally, crews regularly train with the Royal Australian Navy (RAN) and Australian Regular Army (ARA) on both the east and west coasts of Australia, working both with and against naval and land forces to hone their skills. Squadron crews also deploy to Butterworth, Malaysia. Butterworth lies opposite the island of Penang, the 'Pearl of the Orient'. On these missions, crews monitor merchant shipping of the world, naval warships and aircraft of our regional neighbours and often naval and air forces from further afield. Travel is an exciting and glamorous aspect of Squadron life. Not all crew sorties involve such exciting locations and targets. Squadrons can be tasked with continuous 24 hour days, 7 days a week operations, thus weekend and late night work is not uncommon. Crews are also tasked with fisheries surveillance; monitoring our waters and those of our South Pacific neighbours for illegal fishing boats. Such sorties usually facilitate travel around Australia and the South Pacific.

35. At home, crews maintain their expertise in all fields by regularly conducting exercises in a sophisticated trainer that simulates the sensor stations of each aircraft. They also maintain high standards by personal study and interaction with other members of the crew and Squadron. Regular briefing is conducted by Squadron members and guest lecturers. Aircrew are examined annually on all areas of their employment and as such there is always continuous improvement.

36. Whilst employed on operational duties, crews can expect to be away from home for up to five months of the year. The length of individual deployments varies, typically in the order of two or three weeks but may be longer. Because of extra demands placed on their time during deployments and routine operations, the RAAF grants active aircrew members an extra two weeks leave in addition to the annual four week entitlement.

37. As an AEA on a Squadron, you will become an integral member of an operational crew. During this time you will continue to learn about the operation of the Poseidon or Wedgetail. With an increase in your level of experience, you will move to more challenging positions with greater responsibility using various courses to facilitate this change. These positions do not only exist within the crew structure, but also in equally important and demanding ground positions. You may work within the training and categorisation section (Combat Assurance) where the most experienced and qualified aircrew ensure the highest standard of professionalism is achieved. Another possible posting may be to either 292 Squadron or 2 Squadron Training Flights instructing future AEAs,

SURVEILLANCE AND RESPONSE GROUP – THE EYES OF AUSTRALIA

using your experience to help them gain the qualifications that you have mastered. Alternatively you may find yourself becoming involved with the research and development aspects of your profession.

38. The opportunity to apply for a commission is an option that is available to all Airmen or Airwomen. This essentially means that a wider potential career path is available, not only within the aircrew environment, but also encompassing staff positions of higher ranks where policy decisions are made. Commissioning as an officer also means potential for higher promotion, with associated greater responsibilities and pay. Certain conditions need to be met before an Airman will be considered for commissioning, however, this opportunity exists for those who meet that criteria and desire this career option.

APPLYING TO BECOME AN AEA

39. **Prerequisite Experience** Having gained an insight into the AEA job, you may wonder if you need some experience in computer operation to be accepted for training. It is desirable but the simple answer is “no”. The equipment the AEA operates is specialist (i.e. not a Windows PC) and integrated with the aircraft central computer. The AEA manipulates the sensor equipment directly, rather than interfacing with the computer. AEAs are system operators, although some interaction with software development is part of the job.

40. **How to Apply** General Entrants apply through Defence Force Recruiting centers. Service transfers apply through their respective career managers. RAAF remusters apply on a standard application form through their Chain of Command. Not every applicant can be accepted to fulfill this demanding career. The RAAF selects only those who it feels will be able to complete the training, both physically and mentally. In order to help with the selection process, a number of tests have been devised to ascertain your aptitude to be trained as an AEA.

41. You will be given the opportunity to undertake these tests after your application has been processed. Your orderly room and Selection, Enlistments, Appointments and Transitions (SEAT – within Director Personnel (DP)) will advise you of all aspects relating to attendance at these tests. During the application process, a medical examination will also have to be undertaken to ensure that you meet the physical requirements of entry.

42. Providing you are reasonably fit, and suffering no debilitating illness or injury, you should be suitable for consideration. You will also be interviewed by a Psychologist and a Recruiting Officer. Upon their recommendation, you will be presented to a Selection Board at a later date to discuss your employment. This is similar to a job interview, where the Board has a chance of seeing you first hand and making a personal assessment of your suitability for AEA training.

43. If you have met all aptitude testing, Psychologist and Recruiting Officer interview requirements and having been recommended by the Selection Board, you will then be rated against the other successful applicants. Upon selection you will be joining an organisation that prides itself in offering a life full of exciting and rewarding challenges to the men and women who become the *‘Eyes of Australia’*.

AEA SELECTION CRITERIA

44. **Physical Attributes** It is essential that the applicant:

- a. be medically and physically fit,
- b. have some swimming proficiency, you are required to pass the RAAF Swimming proficiency test prior to attending Combat Survival Training School for Aircrew SERE C training.
- c. be at least 17 years old (at time of enlistment), and
- d. be able to work under conditions that can contribute to physical discomfort, including fatigue and nausea.

45. **Educational Attainment** Completed Year 10 with passes in Maths, English, and one other STEM subject (preferably Physics focused). Applicants without the minimum educational qualification may be considered if they possess relevant work experience or tertiary qualifications, and an Alternative Education Equivalency (AEE) assessment may be considered in certain circumstances. Remuster applicants that do not possess the requisite education entry standard may choose to complete maths and physics bridging courses external to defence and provide evidence of successful completion with the remuster application.

SURVEILLANCE AND RESPONSE GROUP – THE EYES OF AUSTRALIA

Note: For remuster applicants, in addition to successful completion of the above Maths & Physics Bridging Modules, the successful completion of Year 10 English is also required.

46. **Abilities and Aptitudes** It is essential that the applicant:

- a. undergo aptitude testing and be assessed as suitable for AEA training;
- b. be able to work independently and with minimum supervision;
- c. is able to communicate clearly and concisely;
- d. has demonstrated some consistency in study habits or application to school or training;
- e. is able to orient his or herself in three dimensions;
- f. is able to allocate priorities against competing sources of incoming information;
- g. is able to perform basic mental arithmetic operations quickly and accurately;
- h. be assessed as able to comprehend instructions and remember directions accurately;
- i. be assessed as able to work effectively under pressure; and
- j. possesses problem solving skills.

47. **Personal Qualities** It is essential that the applicant:

- a. is able to cooperate, gain cooperation and work effectively in a team environment;
- b. is able to work independently and with minimum supervision;
- c. be assessed as having, or capable of developing whilst undergoing training, the personal qualities appropriate to an airman/airwoman of CPL rank;
- d. be assessed as having a high level of self motivation and initiative;
- e. be assessed as having confidence in own ability;
- f. be assessed as having a sense of responsibility; and
- g. be assessed as capable of coping with an unstructured, unpredictable and changeable lifestyle.

48. **Experience** It is desirable that the applicant has had some experience with electronics and/or with operation of a computer (experience in programming not necessary). Some experience with flying would be an advantage.

49. **Interest** It is essential that the applicant:

- a. be assessed as having an adequate interest in, and a realistic understanding of, AEA training and duties,
- b. have a demonstrable interest in a flying career.

50. It is desirable that the applicant:

- a. has an interest in Information Technology,

SURVEILLANCE AND RESPONSE GROUP – THE EYES OF AUSTRALIA

- b. has an interest in electronics.

51. **Circumstances** It is essential that the applicant:

- a. be an Australian citizen, or be eligible for Australian Citizenship and sign an undertaking to apply for citizenship after three months Defence Force service (as outlined in the Australian Citizenship Act, 1948);
- b. is able to be security cleared to the appropriate level;
- c. be assessed as able to cope with separation from family and friends; and
- d. be assessed as able to adjust to the requirements of military life.

52. **Selection Board Preparation** It is expected by the board that you would have carried out as much research as possible into the role of an AEA, the roles of both the P-8A Poseidon and E-7A Wedgetail and each aircraft sensor equipment fit. The board will also assess your personal qualities and leadership aptitude.

53. In addition to this, you will be tested on your Mental Dead Reckoning (mathematics agility). The job relies heavily on the ability to quickly and accurately perform mental arithmetic. It is strongly recommend that you practice the mental arithmetic exercises in preparation for your interview. An example is, calculating distance travelled; eg if the airspeed of an aircraft is 360 knots, how many nautical miles travelled in 20 minutes? (120nm) 1 knot = 1 nautical mile distance travelled per hour, eg 60 knots = 60 nautical miles travelled per hour.

The following websites are a useful source for further mental arithmetic exercises:

<http://www.speeddistancetime.info/>

<http://arithmetic.zetamac.com/>

54. It is recommended that you practice the mental arithmetic process by using another person to verbally ask you the questions. Responding to a verbal question is different than responding to a written question, it requires significant practice, and is the primary 'trouble spot' for the majority of candidates not recommended by the selection interview board.

The following process is strongly recommended when responding to a mental arithmetic question.

- a. Verbalise the arithmetic process, i.e. explain the process you are going through as you calculate the answer.
- b. Implement a gross error check, i.e. explain the process you are using to confirm that your answer is correct.