**AIR CADET TRAINING ORDER (ACTO) 36**



**RAF AIR CADETS PILOT NAVIGATION TRAINING SCHEME AND RAF AIR CADETS AIR EXPERIENCE FLIGHT COURSE**

Amendment Sheet

|  |  |  |  |
| --- | --- | --- | --- |
| **Date** | **Amendment** | **Amended By** | **Version No** |
| 07/09/2017 | Insert Front Cover and Amendment Sheet | J Stones | 6.00 |
| 14/11/17 |  Insert DBS and Messing Contribution Requirement  | A Lee  | 7.00 |
| 31/05/18 | Inclusion of ACAEFC Regulation | A Lee  | 8.00 |
| 14/08/18 | Cadet Weight Requirements included Noise Limitations amended | A Lee | 9.00 |
| 11/09/18 | Revised AEF Clothing requirement Amended ACAEFC syllabus | A Lee | 10.00 |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |

**AIR CADET TRAINING ORDER INSTRUCTION NO 36**

**RAF AIR CADETS PILOT NAVIGATION TRAINING SCHEME AND**

**RAF AIR CADETS AEF COURSE**

**INTRODUCTION**

1. The aim of the RAF Air Cadets Pilot Navigation Training Scheme and the RAF Air Cadets AEF Course Schemes is to:

a. Provide a pinnacle of flying experience for selected cadets in pursuit of the primary objectives of the RAF Air Cadets (RAFAC).

b. Encourage cadets to remain in the RAFAC as they progress through young adulthood, thereby increasing the chances of them joining the Regular or Volunteer Services.

c. Encourage cadets to pursue a career in aviation.

1. **The Air Cadets Pilot Navigation Training Scheme (ACPNTS)** provides 8 hours flying

training at an RAF Air Experience Flight (AEF). This course does not include solo flight, but does expose the student to aspects of applied service flying and navigation.

3. **Air Cadet AEF Course (ACAEFC).** The ACAEFC comprises of 10 hours flying training at an RAF Air Experience Flight (AEF). This course does not include the potential for solo flight, but does expose the student to aspects of applied Service flying, including advanced handling.

**ELIGIBILITY**

4. To be eligible for the Schemes a cadet must:

1. Be a minimum of 17½ years of age at time of application. Cadets must be 18 years

of age or above and hold a current RAFAC DBS at the time of start of training. Due to Tutor noise exposure restrictions cadets will only be able to undertake a maximum of 4hrs flying training in a 7-day period.

b. Hold, or be predicted to pass, GCSE Grade C (grade 4 or 5 with effect from

Aug 17) or above in English Language and Mathematics, or the equivalent in

SCE. A BTEC in Aviation Studies is an acceptable alternative for the

Mathematics qualification.

1. For ACPNTS only, have passed the Air Navigation examination or be

assessed to be able to pass the examination during the ACPNTS (with tuition by AEF instructors).

d. Have their parent's or guardian's written consent if under 18 years of age at

the time of application.

e. Be able commute to an AEF location to complete the course objectives.

f. Cover the Cadet Contribution to Messing as directed by HQ RAFAC.

g. Fully understand the privilege of being awarded an ACPNTS, including the cost to

the RAFAC, commitment to completion, and ramifications of withdrawal post selection

h. Be an enrolled member of the ATC or CCF (RAF) until training is completed.

**APPLICATION AND SELECTION PROCEDURE**

5. HQ 2FTS will allocate places to ATC regions and CCF (RAF) pro-rata. Calculations are based on numbers of cadets of eligible age. The total number of courses available each year is dependent on availability at AEF locations.

6. ATC Cadets may apply at any time using the application proforma at [**2FTS Form 010**](https://sharepoint.bader.mod.uk/QM/Controlled%20Documents/2%20FTS%20Form%20011.docx?Web=1). CCF (RAF) Cadets should apply in September in accordance with CCF (RAF) Branch Routine Orders (BRO). Selection is made throughout the year but is completed by the end of January for courses to be flown in the next financial year. Final selection is made by Regional Headquarters (RHQ) for ATC cadets and by OC CCF (RAF) for CCF (RAF) candidates. The need for interviews or other selection tests is at the discretion of RHQs and OC CCF (RAF). Guidance on selecting cadets is at Annex A.

7. Cadets selected for the ACPNTS or ACAEFC are required to hold a completed and countersigned RAF Form 6424 – Medical Declaration & Certificate of Fitness for RAF Air Cadet s Flying in accordance with Annex D.

8. Due to current Tutor noise exposure restrictions, unless fitted with CEPs, Cadets will only be able to undertake a maximum of 4 hours flying training in a 7-day period.

9. **Cadet Weight Requirements.** Passengers flying in the Tutor must comply with certain weight restrictions in order for the parachute to work satisfactorily. Escorting officers should note that cadets who are too heavy or too light will not be allowed to fly. At most sites, the weight of a fully clothed cadet (without flying clothing and helmet) must be between 28 kg and 110 kg. At sites where a life jacket is worn (Glasgow International Airport, Leuchars Station, MoD St Athan, RAF Woodvale and Cornwall Airport Newquay), the cadet should weigh between 25 kg and 107 kg.

**ACPNTS SYLLABUS**

10. The ACPNTS Syllabus is at Annex B.

**ACAEFC PROGRAMME OF TRAINING**

11. The ACAEFC programme of training can be found at Annex C.

**SUPERVISION OF CADETS ON ACPNTS AND ACAEFC**

12. During the working day, cadets on an ACPNTS are on duty under the command of the AEF Flt Cdr. Cadets are to be dressed in uniform or in flying clothing approved by the AEF Flt Cdr.

**BREVETS AND CERTIFICATES**

13. Brevets are presented to cadets on satisfactory completion of either ACPNTS or ACAEFC courses. Certificates are signed by Comdt RAFAC and forwarded from HQ 2FTS to the cadet’s WHQ or CCF (RAF) section.

**CLOTHING REQUIREMENTS**

14. Due to the potential for burns injury cadets should report for AEF flying wearing No.2 uniform with long cotton socks to be worn under the issued flying suit. In particular, female cadets are to wear No.2 trousers or combat trousers for the flight and are not to wear tights and the No.2 skirt. Cadets must also wear suitable lace-up footwear when flying.

**TRAVEL**

15. Subject to approval by WHQ, cadets may be issued with a travel warrant for travel between their home and the AEF. Arrangements for travel for CCF (RAF) cadets are to be made with Sqn Ldr CCF (RAF). Accommodation or messing may not be available at certain AEF locations. In these circumstances students will be responsible for seeking and funding alternative domestic arrangements.

**SCHEDULE OF EVENTS**

16. The schedule of events is at Annex D.

Annexes:

A. Guidance on Selecting Cadets for the ACPNTS and ACAEFC.

B. ACPNTS Syllabus.

C. ACAEFC Programme of Training.

D. ACPNTS and ACAEFC Schedule of Events.

E. Medical Fitness for Flying Training.

**ANNEX A TO ACTO No 36**

**GUIDANCE ON SELECTING CADETS FOR THE RAF AIR CADETS PILOT NAVIGATION TRAINING SCHEME (ACPNTS) AND RAF AIR CADETS AEF COURSE**

**(ACAEFC) SCHEMES**

1. Previous experience of flying in light aircraft or gliders is desirable. Ideally, the candidate should have sufficient experience of flying to be confident of working satisfactorily in an airborne environment.

2. There is no need to be overly restrictive; however, the following attributes should be considered:

 a. Candidate’s motivation for the scholarship.

 b. Candidate’s qualifications and academic record.

 c. Candidate’s intentions and desire to follow a career in aviation or regular and

 volunteer services.

 d. Candidate’s performance during the completion of a gliding scholarship (if

 applicable).

 e. Candidate’s commitment to their ATC Sqn or CCF (RAF) Section.

 f. The future value of the training to the candidates ATC squadron or CCF (RAF)

 section.

3. If applicable, copies of the student’s progress card for a gliding scholarship can be obtained from the Volunteer Gliding Squadron attended by the cadet.

4. Although the intention is to select high caliber candidates, cadets who have already completed an alternative flying scholarship including the RAF Air Cadets Pilot Scholarship (ACPS) or have completed solo flight in a single engine piston aircraft must not be chosen. Similarly LAPL, NPPL or PPL holders should not be selected. Cadets will be removed from ACPNTS or ACAEFC courses if erroneously put forward.

**ANNEX B TO ACTO No 36**

**ACPNTS SYLLABUS**

1. **Ground Instruction:**

a. Equipment, facilities, discipline and behaviour.

b. Maps and charts, navigation terminology.

c. Aircraft instruments.

d. Fuel planning and awareness.

e. Radio Bearings.

f. Safety Brief.

g. Local area.

h. Dalton computer.

i. Planning, Altimeter Setting Regions and Safety Altitudes. j. In-flight Techniques.

2. **Flying Exercises:**

Exercise 1 Familiarisation including instruction on aircraft instruments,

 effects of controls, layout of the airfield and local area. Practice

 map orientation and distance estimation. Effect of Wind 45

Exercise 2 Straight line out and back Navex. Demo map reading,

 Estimated Time of Arrival revision at half-way point of each let

 Demo standing closing angle 1:00

Exercise 3 Triangular route between 2000 ft and Flight Level 50.

 Practice techniques including regaining track by Standing

 Closing angle. Estimated Time of Arrival revision. Introduction

 of checks at turns. 1:00

Exercise 4 Triangular route. Introduction of fix point technique.

 Introduction of fuel monitoring. 1:00

Exercise 5 Triangular route, practising all techniques previously learned.

 Pilot demonstrates practice diversion on third leg, followed by

 Return to Base. 1:00

Exercise 6 Triangular Navex with legs at 500 ft and up to Flight Level

 50 (weather permitting). Pilot demonstrates lost procedure and

 Called for true bearings. Simulated weathered abort and cadet

 practices before Return to Base. 1:00

Exercise 7 Navex to consolidate as required. New routes, with cadet

 responsible for all Navigation. Practice all techniques learned.

 May be flown as land-away and Return to Base at Flight

 Commander’s discretion. 1:00

Exercise 8 Final Navigation test to include at least one leg between

 2000 ft and Flight Level 50. Sortie to include practice diversion

 and Return to Base. 1.15

**TOTAL 8:00**

**ANNEX C TO**

 **ACTO No 36**

**ACAEFC PROGRAMME OF TRAINING**

|  |  |  |  |
| --- | --- | --- | --- |
| **SORTIE** | **HR** | **CONTENT** | **REMARKS** |
| 1 | 0:30 | Ac and Local Area Famil |  |
| 2 | 1:00 | Effects of flying controls and S&L 1 | In accordance with UAS Syllabus Sorties 2, 3 and 4 |
| 3 | 1:00 | S&L 2, Climbing and Medium Turns  | In accordance with UAS Syllabus Sorties 5 and 6 |
| 4 | 1:00 | Circuit Turns | In accordance with UAS Syllabus Sortie 9 |
| 5 | 1:00 | Steep Turns, Aerobatics and Circuits |  |
| 6 | 1:00 | Medium Level Navigation | Not below 1000 ft agl |
| 7 | 1:30 | Medium Level Navigation and Landaway | Not below 1000 ft agl |
| 8 | 1:30 | Medium Level Navigation RTB | Not below 1000 ft agl |
| 9 | 1:00 | Aerobatics and Circuits |  |
| 10 | 1:00 | Instrument Flying and GH |  |
| **Total** | **10:30** |  |  |

 **ANNEX D TO**

 **ACTO No 36**

**ACPNTS AND ACAEFC – SCHEDULE OF EVENTS**

|  |  |
| --- | --- |
| DATE | EVENT |
| JAN - DEC | ATC and CCF (RAF) Cadets apply using application proforma 2FTS Form 010. ATC Sqn OC or CCF (RAF) Section Cdr support cadets application at Part 7 and forward to appropriate individual for further scrutiny. |
| JAN - DEC | Application is forwarded to OC ATC Wg or CCF (RAF) Contingent Cdr for comment at Part 8. RHQ may nominate alternative scrutiny panel. |
| DEC | HQ 2FTS allocates scholarship places on a pro-rata basis to RHQ and Wg Cdr CCF (RAF). Deadline advised for final submission of applications to HQ 2FTS. |
| JAN | RHQ and Wg Cdr CCF (RAF) select candidates and reserves and confirm at Part 9. |
| FEB | RHQ and Wg Cdr CCF (RAF) notify HQ 2FTS (SO2 CAPE) of succesful candidates. |
| APR | HQ 6FTS provides confirmation of number of scholarships available at each Air Experience Flight (AEF). |
| APR - MAY | HQ 2FTS contact succesful candidates. |
| APR - MAY | Succesful candidate contacts AEF and suitable training dates agreed. AEF promulgate Joining Instructions.  |
| UPON COURSE COMPLETION | AEF awards cadet appropriate certificate and Brevet. |

**ANNEX E to**

**ACTO No 36**

 References:

 A. RAF Form 6424

**MEDICAL FITNESS FOR ACPNTS AND ACAEFC TRAINING**

1. **Medical Examination.** Where medical fitness is in doubt and for courses involving solo gliding, ACAEFC and ACPNTS the cadet is to have been declared fit by a GP, using RAF Form 6424 (Medical Declaration & Certificate of Fitness for RAF Air Cadets Flying). The procedure for arranging this is as follows:

 a. The WHQ or CCF Section is to instigate the process by recording the cadet's Sqn number on Part A of F6424 and Annex A to F6424 (Medical Declaration & Certificate of Fitness for RAF Air Cadet Flying Claim Form for Doctor’s Fee). Further, Annex A to F6424 is to be authenticated with the Wg stamp and UIN before it is sent to the cadet’s Sqn Cdr. The Sqn Cdr is to enter the cadet’s name on Part A of F6424 and Annex A to F6424 before it is handed to the cadet.

 b. The form is then to be handed to the cadet together with an unsealed envelope addressed to the Sqn/Sect Cdr, and the cadet is to be told to take it by appointment to his or her GP. Current policy requires the written consent of the parent or guardian, or of the cadet personally if over 18 years of age, before a GP is allowed to discuss the cadet’s medical history with a third party. Therefore Part B of F6424 should be completed fully before the cadet attends any medical appointment.

 c. The GP should normally be able to complete the F6424 with reference to the cadet’s medical records. A medical examination should not, therefore, be necessary. Having completed the F6424, the GP will return it to the cadet. The GP will send Annex A to F6424 (Claim Form for Doctor’s Fee) to HQ RAFAC for payment.

 d. Provided the GP has signed the form without any reservations (see para 3) regarding the cadet's fitness (other than the need to wear ordinary corrective spectacles (such as would be acceptable for a vehicle driving licence), the Sqn/Sect Cdr is finally to complete the Certificate of Fitness to undergo Glider Pilot Training in the cadet's RAF Form 3822, adding if required, ‘Glasses to be worn when flying’.

 e. When completed, cadets should retain a copy of their F6424 and ensure that they present it to the Duty Instructor when they attend a scholarship course. Failure to be in possession of a valid F6424 will result in the scholarship place being withdrawn. The F6424 is not to be forwarded to HQ 2FTS unless specifically requested.

 2. **Period of Validity.** A F6424 clearance lasts 2 years unless further illness occurs in the meantime.

3. **Medical Fitness in Doubt.** If the GP discloses any medical condition, other than the wearing of ordinary spectacles as mentioned above, the Sqn/Sect Cdr is to send the original F6424 to CFMO (AIR38Gp-CAM-CFMOSO1@mod.uk) who will then decide on the cadet’s suitability for flying training.

**IMPORTANCE OF CORRECT INFORMATION**

 4. **Record of Service.** It is essential that Form 3822/F7537D is accurate and current. Sqn/Sect Cdrs are to make sure parents or guardians realise the importance of keeping the consent up-to-date and of declaring any change in the cadet's fitness level. AEFs are under orders not to fly cadets with incorrect documentation or medical clearance in view of the RAF legal responsibilities and duty of care.

**DISPOSAL OF MEDICAL FORMS**

5. Medical forms are to be returned to the escorting officer by the AEF. These are to be forwarded to the appropriate WHQ for archiving, or in the case of CCF (RAF) cadets to CCF (RAF) administration at HQ RAFAC. Documents will be retained for 7 years from the cadet’s 18th birthday or from the date when the individual leaves the RAFAC in accordance with Annex A to Data Protection Act Guidance Note 1 Reference CIO-3-27-1-2. The register of forms to accompany the RAFAC Av Med Form 1 is at 2FTS Form 006.