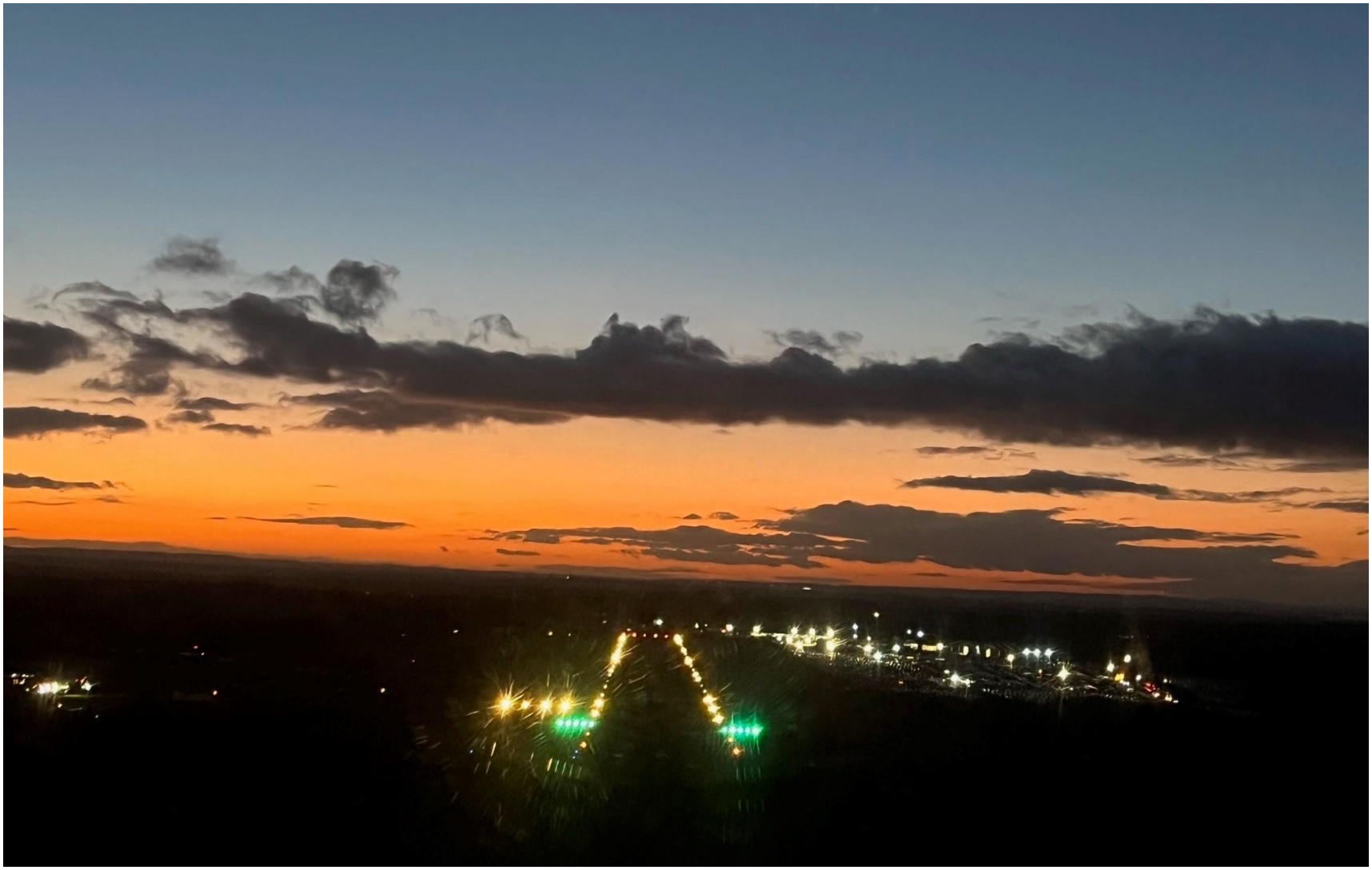
# Flight Instructor Course Handbook

## Volume 5: The Night Instructor Course



**A Study Guide by Steve Pells** **Optimised for iPad** Version 3.5 18Apr24

# Flight Instructor Course Handbook

The following volumes are available:

## Volume 1: FI Course
## Volume 2: Single Engine CRI Course
## Volume 3: Multi Engine CRI Course
## Volume 4: Instrument Instructor & IRI Course
## Volume 5: Night Instructor Course
## Volume 6: FIC Preparation Course
## Volume 7: MCCI Course
## Volume 8: Aerobatics Instructor
## Volume 9: CPL Instructor Guidance

Written by Steve Pells and produced by SDP Aviation:
**sdpells@hotmail.com**
+44 (0)7478 333367.
Please contact for details.

# Contents

# Abbreviations

| | | | | | |
|---|---|---|---|---|---|
| **(A)** | Aeroplane | **IFR** | Instrument flight rules | **SE** | Single-engine or Senior Examiner |
| **ACA** | Asymmetric committal altitude | **IMCR** | UK IMC Rating | **SEP** | Single-engine piston |
| **ACH** | Asymmetric committal height | **IMC** | Instrument meteorological conditions | **SFI** | Synthetic flight instructor |
| **AFM** | Aeroplane flight manual | **IR** | Instrument rating | **STI** | Synthetic training instructor |
| **AoC** | Assessment of competence | **IRE** | Instrument rating examiner | **SPA** | Single pilot aeroplane |
| **ATO** | Approved training organisation | **IRI** | Instrument rating instructor | **SPIC** | Student pilot in command |
| **CCC** | Course completion certificate | **IRR** | IR renewal & revalidation examiner | **SSEA** | Simple single-engine aeroplane |
| **CFI** | Chief flying instructor | **IR(R)** | Instrument rating (Restricted) | **SSR** | Standard stall recovery |
| **CPL** | Commercial pilot's licence | **LAPL** | Light aircraft pilot's licence | **TEM** | Threat & error management |
| **CRE** | Class rating examiner | **MCCI** | Multi crew co-operation instructor | **TK** | Theoretical knowledge |
| **CRI** | Class rating instructor | **ME** | Multi-engine | **TMG** | Touring motor glider |
| **CRM** | Crew resource management | **MEP** | Multi-engine piston | **TOC** | Top of climb |
| **CSU** | Constant speed unit | **MI** | Mountain rating instructor | **TOD** | Top of descent |
| **DTO** | Designated training organisation | **MP** | Multi-pilot or Manifold pressure | **TRI** | Type rating instructor |
| **EASA** | European Union Aviation Safety Agency | **MPL** | Multi pilot licence | **Ts & Ps** | Temperatures and pressures |
| **EFATO** | Engine failure after take-off | **Nm** | Nautical mile | **$V_{AT}$** | Threshold speed |
| **FCL** | Flight crew licencing | **NPPL** | UK national private pilot's licence | **VFR** | Visual flight rules |
| **FE** | Flight examiner | **OEI** | One engine inoperative | **VMC** | Visual meteorological conditions |
| **FFS** | Full flight simulator | **P1** | Pilot in command | **Vmc** | Minimum control speed |
| **FI** | Flight instructor | **P1/s** | Pilot in command under supervision | **Vmca** | Minimum control speed in the air |
| **FI (R)** | Restricted Flight instructor | **PIC** | Pilot in command | **VP** | Variable pitch |
| **FIC** | Flight instructor course | **PICUS** | Pilot in command under supervision | **Vr** | Rotate Speed |
| **FICI** | Flight instructor course instructor | **PoH** | Pilot's operating handbook | **$V_{REF}$** | Final approach reference speed |
| **FIE** | Flight instructor examiner | **PPL** | Private pilot's licence | **VS** | Vertical speed |
| **FNPT** | Flight navigation procedures trainer | **PuT** | Pilot under training | **$V_{S1}$** | Stall speed in a specific configuration |
| **FT** | Follow through | **QXC** | Qualifying cross country (defunct) | **$V_{S0}$** | Stall speed in landing configuration |
| **FTI** | Flight test instructor | **ROC** | Rate of climb | **Vtoss** | Take of safety speed |
| **G/A** | Go-around | **ROD** | Rate of descent | **Vx** | Best angle of climb speed |
| **(H)** | Helicopter | **RTO** | Rejected take-off | **Vxse** | Best angle of climb speed single engine |
| **HDG** | Heading | **RW R/W** | Runway | **Vy** | Best rate of climb speed |
| **HoT** | Head of Training | **S&L** | Straight and level | **Vyse** | Best rate of climb speed single engine |

# Introduction

This document is designed to assist an FI(A) Instructor through his/her journey to adding Night Instructional Privileges to the FI(A) certificate.

It contains lots of background imformation and suggested briefs and Air Exercises. It is by no means the only way of achieving the qualification.

In this document, for ease of writing, the generic student is referred to as ‘he’. This is not meant to imply that women cannot be taught to fly! It is just a recognition that by far the majority of flying students are male. In this document, the word ‘he’ should be taken to mean any student pilot (or instructor or examiner) of any gender, or no gender, or gender-fluid.

# Overview

The path from pilot to instructor is a journey. Long, and at times arduous, but worth the effort. Usually, before embarking on a journey, it is customary to know a bit about the destination.

In our case, the destination is the addition of night instructional privileges to an FI(A) certificate. Before getting there it is worth knowing a bit about what it is we are aiming for.

Since the UK left EASA on 31 December 2020, things have changed. Initially much remains the same other than terminology. However, over time, it is expected that the information in this guide will become out of date. It is hoped to keep it revised as much as possible.

# Part 1: Instructor Certificates

Instructor Certificates

**The Flight Instructor (FI) Certificate**

Flight Instructor (FI) Privileges

# Instructor Certificates

There are several diferent types of instructor certificate available. Subject to sucessful completion of an assessment of competence with a suitably qualified examiner, the CAA will issue an appropriate Flight Instructor Certificate. The various types are listed below:

**FI:** **Flight Instructor** - Required for ab-initio training to LAPL or PPL standard and beyond. Also required for instruction towards the Night Rating.

The following will not be covered in this document.

**CRI:** **Class Rating Instructor** – Allows the holder to train pilots who already hold a licence, but does not permit ab-initio flight training.

It Allows the holder to conduct training towards the issue of a class rating, refresher training, checkouts and differences/familiarisation training. It also allows the holder to train a LAPL holder for upgrade to a PPL.

Most of the different instructional privileges can be added to the CRI certificate except Instrument privileges (for which he can obtain a standalone IRI) or FIC privileges (the ability to teach flight instructor courses). The CRI cannot train towards the issue of a night rating.

**IRI:** **Instrument rating Instructor** – Allows the holder to instruct towards the issue of an EIR, IR or IR(R) in single engined aeroplanes unless the holder also has privileges to instruct for MEP. An IRI cannot instuct ab-initio students unless he also holds an FI certificate.

**MCCI:** **Multi Crew Co-Operation Instructor** – Allows the instructor to teach for multi crew operation in airliners, simulators etc

**SFI:** **Synthetic Flight Instructor:** Allows the holder to instruct in flight simulators for Single and Multi-Pilot aeroplanes.

**STI:** **Synthetic Training Instructor** - Allows the holder to instruct in flight simulators for the issue of a licence and for Single-Pilot aeroplanes.

**TRI:** **Type Rating Instructor** - Allows the holder to instruct towards the issue of a type rating for those aircraft which require one.

**MI:** **Mountain Rating Instructor** - Allows the holder to instruct towards the issue of a Mountain Rating

**FTI:** **Flight Test Instructor**

# The Flight Instructor FI(A) Certificate

Initially, once qualified, the instructor will be considered a 'restricted instructor' which means that they can only instruct under the supervision of an unrestricted instructor if training towards LAPL/PPL, Class Rating or Night/Aerobatic Ratings. This means an unrestricted instructor needs to be available at the airfield (or very close to) to support and mentor the restricted instructor at all times while teaching the above courses. Further, a restricted instructor may not send a student on his first solo or first cross-country solo flights. FCL.910.FI explains and not 905 as stated on the licence.

The restriction may be removed once the instructor has logged at least 100 hours of instruction and has, under supervision by an unrestricted FI(A), supervised 25 student solo flights (other than first solo or first cross-country solo). These flights should be recorded on CAA form **SRG 1133R** and sent as part of the application to remove restrictions.

| XII | Ratings, certificates and privileges |
|---|---|
| **Class/Type/IR** | **Remarks and Restrictions** |
| Instrument | Nil |
| B747 400 | LV |
| Night | Nil |
| SEP (land) | Nil |
| | **No Further Entries** |
| **Instructors** | **Remarks and Restrictions** |
| FI | Restricted/FCL.905.FI applies as in/(a)/(b)/FCL.945 |
| | **No Further Entries** |
| **Examiners** | |
| No Entries | |

After removal of restrictions, the instructor may instruct unsupervised, and supervise first solo and first solo cross-country flights. The only privileges that may be added to a restricted FI certificate are: Night & Aerobatics. All others must wait for the restriction to be removed.

SRG 1133R Issue 02

**RECORD OF SUPERVISED SOLO FLIGHTS OR AIR EXERCISES FOR REMOVAL OF SUPERVISORY RESTRICTION FROM AN INSTRUCTOR CERTIFICATE IN ACCORDANCE WITH PART-FCL**

Please complete this form online (preferred method) then print, sign and submit as instructed.
Alternatively, print, then complete in BLOCK CAPITALS using black or dark blue ink.

Unique No. (to be completed by CAA)

Civil Aviation Authority

**FALSE REPRESENTATION STATEMENT**
It is an offence under Article 256 of the Air Navigation Order 2016 to make, with intent to deceive, any false representation for the purpose of procuring the grant, issue, renewal or variation of any certificate, licence, approval, permission or other document. This offence is punishable on summary conviction by a fine up to £5000, and on conviction on indictment with an unlimited fine or up to two years imprisonment or both.

**1. RECORD OF SUPERVISED SOLO FLIGHTS/AIR EXERCISES TO REMOVE SUPERVISORY RESTRICTION FCL.910.FI** — **To be completed by applicant**

| | Date of flight | Students name | Students licence or reference number | Exercise Number of Air Exercise | Name of Supervising Flight Instructor | Signature of Supervising Flight Instructor | Licence Number of supervising Flight Instructor | Name of ATO Flight training conducted with and approving competent Authority |
|---|---|---|---|---|---|---|---|---|
| 1 | 21/04/19 | Mike Smith | 456789A | Ex18 | Jonathan Bloggs | J Bloggs | AT123456A | ABC Flying School |
| 2 | | | | | | | | |
| 3 | | | | | | | | |
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| 10 | | | | | | | | |

Page 1 of 2

# Flight Instructor (FI) Privileges

The basic privilege of an FI is to teach ab-initio students for the issue of a licence. Not all instructors are authorised to teach all subects (eg CPL, Multi-engine). Flight instructor privileges are shown on the licence in Section XII and are explained in FCL.905. In essence, there is a letter in brackets after the FI designation, and each letter denotes a different privelege.

In November 2019, the designation of flight instructor priveleges was amended. In order to determine the kinds of instruction an instructor may carry out requires reference to CAP 1854, which is summarised below.

## Licences Issued Up to 10Nov19

a: PPL, SPL, BPL and LAPL in the appropriate aircraft category.
b: Class and type ratings for single-pilot, single-engine aircraft, except for single-pilot high performance complex aeroplanes.
c: Type ratings for single or multi-pilot airship.
d: CPL in the appropriate aircraft category.
**e: The Night Rating**
f: Aircraft Towing or Aerobatic Rating
g: IR or EIR in the appropriate aircraft category.
h: Single pilot, multi-engine class or type ratings except for single-pilot high performance complex aeroplanes.
i: Training for FI, IRI, CRI, STI or MI.
j: MPL.

## Licences Issued After 11Nov19

a: PPL, SPL, BPL and LAPL in the appropriate aircraft category
b: Class and type ratings for single-pilot, single-engine aircraft, except for single-pilot high performance complex aeroplanes
c: Class and type ratings for single-pilot aeroplanes, except for single-pilot high-performance complex aeroplanes, in multi-pilot operations, provided that FIs meet certain conditions.
d: Type ratings for single or multi-pilot airship.
e: CPL in the appropriate aircraft category.
**f: The Night Rating**
g: Aircraft Towing or Aerobatic Rating
h: IR or EIR in the appropriate aircraft category.
i: Single pilot, multi-engine class or type ratings except for single-pilot high performance complex aeroplanes.
j: Training for FI, IRI, CRI, STI or MI.
k: Training for the MPL

Eventually, all licences will be updated to the new system, but until that time, it is important to check the date of licence issue.

Below is an example of a licence issued on 23Aug19:

| XII | Ratings, certificates and privileges |
|---|---|
| **Class/Type/IR** | **Remarks & Restrictions** |
| Instrument | PBN |
| Night | Nil |
| SEP (Sea) | Nil |
| B777/787 | Nil |
| MEP (Land) | SP |
| SEP (Land) | Nil |
| IR(Restricted) | Restricted to the privileges of the Instrument Meteorological Conditions Rating specified in the United Kingdom Air Navigation Order |
| **No Further Entries** | |
| **Instructors** | **Remarks & Restrictions** |
| FI | FCL.905.FI applies as in (a)/(b)/(d)/(e)(g)/(h)/FCL.945 |
| IRI | FCL.905.IRI(a) applies |
| **No Further Entries** | |
| **Examiners** | |
| See Certificate Number GBR.238514G | |

| | |
|---|---|
| I | State of Issue<br>**United Kingdom** |
| III | Licence Number<br>**GBR.FCL.AT.12345G.A** |
| IV | Last and first name of holder<br>Bloggs, Jonathan |
| IVa | Date of Birth<br>01/04/1979 |
| XIV | Place of Birth<br>Gatwick, UK |
| V | Address of holder<br>1 Aeroplane Road<br>Hangertown<br>**United Kingdom** |
| VI | Nationality<br>**British** |
| VII | Signature of holder<br>J Bloggs |
| VIII | Issuing competent authority<br>**UK Civil Aviation Authority** |
| X | Signature of issuing officer and date<br>23/08/2019 |
| XI | Seal or stamp of issuing authority |

So, looking at the first table, the instructor privileges can be worked out. (Note: the yellow arrows are not on the licence but provided for clarity)

As this licence was issued before 11 Nov 19, this instructor may instruct towards the issue of PPL & LAPL, SEP Class rating, CPL, Night Rating, IR/EIR & MEP Class rating.

# Part 2: Instructor Courses

## The Night Rating Instructor Course

There is no course to add night instructional privileges to an existing FI(A) certificate, just a demonstration flight to a suitable instructor.

### Pre-Entry Requirements

There are pre-entry requirements to become a Night Rating Instructor. The instructor requires a valid aircraft rating and a night rating. He need not be an unrestricted instructor. A CRI cannot instruct for the night rating. However, he may instruct at night if the student already has a night rating.

### Objective

The objective of the flight is to assess existing instructors for the proficiency necessary to instruct at night.

**A succesful candidate must have good knowledge of the Night Qualification course entry requirements, the training syllabus (ground and air) and the Night Qualification privileges.**

### Course Details

There is no training and no course, so no ATO is needed.
**Ground Training:** There is no specified course of ground instruction.
**Flight Training:** There is no specifically required flight training.
**Assessment:** There is a demonstration flight at the end conducted, unusually, by an Instructor with Flight Instructor Course/FIC & Night privileges FI(j) rather than an examiner. This typically lasts one hour. If performance is unsatisfactory, it is not a fail as such, but further assessment or training would be needed. On sucessful completion, the FIC instructor should complete **CAA 5018** – Instructor Course Completion Certificate which must be signed by the head of training at the ATO. An **SRG 1169** may also be completed but is not mandatory.

The applicant should then complete the on-line application form **SRG 2159**. The FIC instructor should make notes of what was covered and retain them for reference.

**Note:** Since the assessment is made by an FIC instructor rather than by an FIE, the temporary certificate **SRG 1100** cannot be issued. The instructor must wait for the CAA to process the application and send the new licence before exercising the privileges to instruct at night.

# Part 4: Student Ratings & Courses

## The Night Rating Course

### Pre-Entry Requirements

- For PPL holders, none.
- LAPL holders must have completed the basic instrument flight training required for the PPL.

### Course Details

Training may be conducted at an ATO or DTO.

**Ground Training:** Ground school as directed by the training facility.

**Flight Training:** The course consists of

- A total of 5 hours training by a suitably qualified FI (not CRI), both dual and supervised solo.
- At least 3 hours shall be dual instruction, including 1 hour of dual cross-country navigation at night with at least 1 dual navigation flight of at least 50 km.
- 5 supervised solo full-stop landings. These are generally flown as circuits, with a requirement for the student to vacate after landing, and taxy back for another circuit.
- The course must be completed in 6 months from the first training flight.
- The Night Rating Course Completion Certificate **SRG 5017** should be completed by the ATO/DTO.

**Assessment:** There is no skill test at the end of the training, just a recommendation from the training establishment and licence application to the CAA via online form **SRG 1126**, which will involve certified copies of relevant logbook pages being sent. And a fee, of course.

### Validity

The Night Rating is valid for life and does not expire. However, there are recency requirements to be observed in order to exercise the privileges of the rating.

### Recency Requirements

In order to exercise the privileges of the night rating to fly solo, there are no requirements beyond normal day recency requirements.
In order to exercise the privileges of the night rating to carry passengers, the PIC must

- Have carried out at least 1 take-off and landing at night in the same type or class of aeroplane (or approved simulator).
  Or
- Hold a valid IR

**Note:** If a pilot is not recent to carry passengers at night, but is 'day recent', then he only needs to carry out one night solo circuit before carrying passengers. In theory, this could be done immediately before the passenger flight.

## Revalidation & Renewal

Not Required. Once held, the night rating is valid for life.

## Privileges

The night rating allows the holder, subject to recency requirements, to fly during the hours of legal darkness. From the Skyway Code v3:

The UK allows VFR at night in accordance with a general permission. For VFR flights at night,

- The in-flight visibility and cloud separation requirements are the same as by day, except that the reduced visibility minima of 1500 m in class G airspace is not permitted.
- The cloud ceiling must be 1500 ft or more.
- When at or below 3000 ft AMSL, or 1,000 ft above terrain, whichever is the higher, you must be in sight of the surface, in all airspace classifications.
  You must fly at a level not less than 1000 ft above the highest obstacle within 8 km (5 NM) of the aircraft's position, except that under the UK permission, when at or below 3000 ft AMSL, you may fly:
    - In sight of the surface;
    - At a height of not less than 500 ft above the ground or water, or 500 ft above the highest obstacle within a radius of 500 ft from the aircraft; and
    - At a height not less than 1,000 ft above the highest obstacle within a radius of 600 m from the aircraft when over the congested areas of cities, towns or settlements or over an open-air assembly of persons.

VFR flights at night shall be conducted so that the aircraft is flown in conditions of visibility and distance from clouds equal to or greater than those specified in Table 1.

**Table 1 Visual Meteorological Conditions Criteria**

| Airspace Class | B | | C, D or E | | F or G | |
|---|---|---|---|---|---|---|
| | FL 100 or above | Below FL 100 | FL 100 or above | Below FL 100 | FL 100 or above | Below FL 100 |
| Distance from Cloud | Clear of cloud | Clear of cloud | 1,500 m horizontally and 1,000 ft vertically | 1,500 m horizontally and 1,000 ft vertically | 1,500 m horizontally and 1,000 ft vertically | 1,500 m horizontally and 1,000 ft vertically (See Note) |
| Flight Visibility | 8 km | 5 km | 8 km | 5 km | 8 km | 5 km (See Note) |

**NOTE:** Or if at 3,000 ft amsl or below: any aircraft: clear of cloud and with the surface in sight in a flight visibility of 5 km.

# Ex 20 – Night Flying

## Practical Considerations

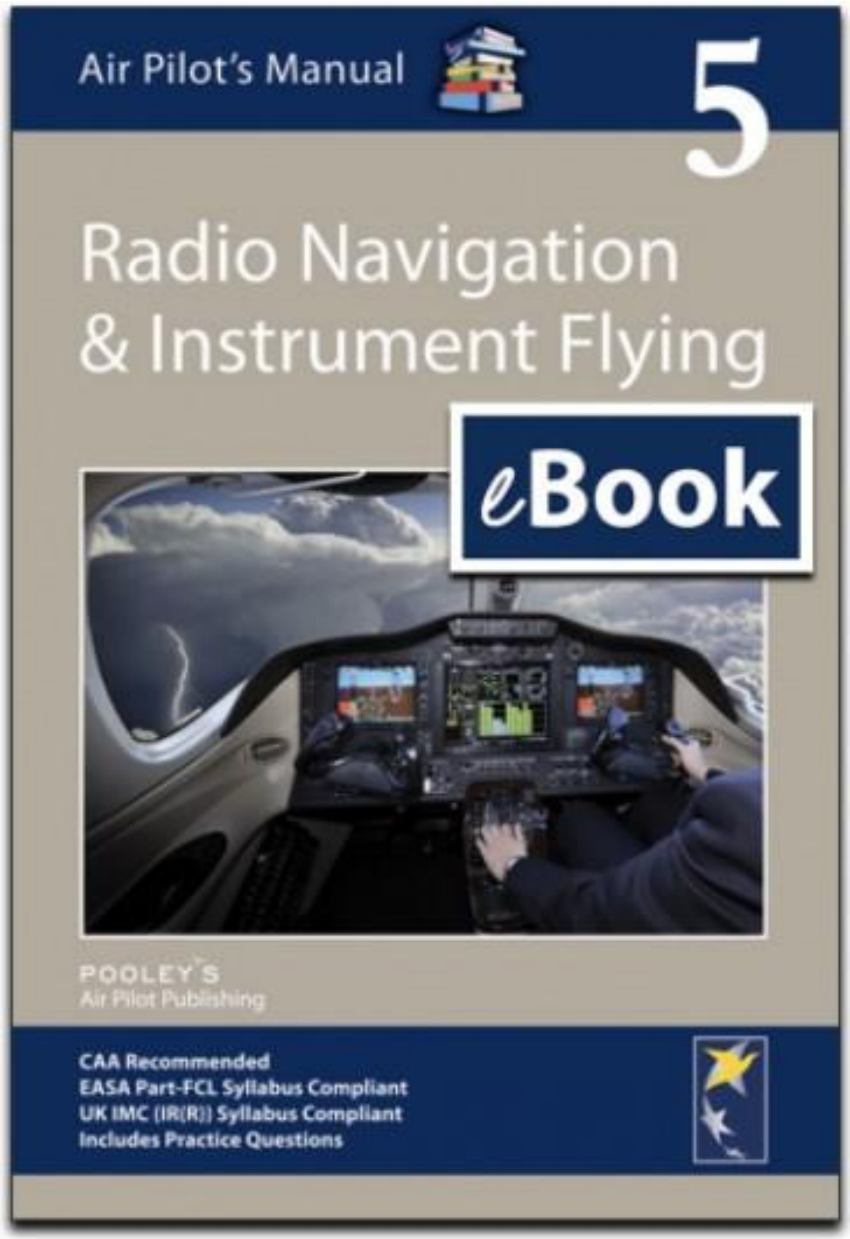
- This is best divided into 3 different lessons – Night Familiarisation & Circuits, Night Emergencies & Circuits, Night Navigation & Night Student Solo. I have unofficially called these lessons 20a, 20b, 20c & 20d.
- **VFR at night:** Under SERA, VFR flights at night are subject to additional requirements over those for day. They must also be authorised by the relevant state. Normally details of this can be found in ENR 1.2 of the AIP. The UK allows VFR at night in accordance with a general permission. Full details can be found in the ORS4 section within the CAA website www.caa.co.uk/ors4. For VFR flights at night:
    - The in-flight visibility and cloud separation requirements are the same as by day, except that the reduced visibility minima of 1500 m in class G airspace is not permitted.
    - The cloud ceiling must be 1500 ft or more.
    - When at or below 3000 ft AMSL, or 1,000 ft above terrain, whichever is the higher, you must be in sight of the surface, in all airspace classifications.
    - You must fly at a level not less than 1000 ft above the highest obstacle within 8 km (5 NM) of the aircraft's position, except that under the UK permission, when at or below 3000 ft AMSL, you may fly:
        - In sight of the surface;
        - At a height of not less than 500 ft above the ground or water, or 500 ft above the highest obstacle within a radius of 500 ft from the aircraft; and
        - At a height not less than 1,000 ft above the highest obstacle within a radius of 600 m from the aircraft when over the congested areas of cities, towns or settlements or over an open-air assembly of persons.
    - If leaving the vicinity of the aerodrome, a flight plan must be submitted. This may be an abbreviated plan submitted to an ATSU.
    - If an ATS is available, you must make use of it.
    - Special VFR at night is permitted in the UK.
- Enroute obstacles that are 150 m (490 ft) above ground level or higher must be lit at night. This is normally by a steady red light on the highest point.

## Long Briefing

A few hours' worth of groundschool provided by the ATO is a good way of starting the course.
This can be a lecture attended by all of the students who have a night rating coming up.

## Suggested Long Brief

The Air Pilot's Manual Vol 1 published by Pooley's provides excellent material for the long brief.




# Night Flying at an Aerodrome

Night flying involves a mixture of visual and instrument flying skills. The take-off run at night, for instance, is made with *visual reference* to the runway. But shortly after take-off, there may be no visible features at all to be seen, and transferring your attention from outside the cockpit to *the instruments* in the cockpit at or before that time is essential. In contrast, by day and in good weather conditions your attention can remain outside the cockpit.

*Protect your night vision. It takes a considerable time for your eyes to re-adjust to darkness after seeing bright light.*

### Adaptation of the Eyes to Darkness

Your eyes are very important when flying, and they should always be looked after. However, at night there are some special considerations regarding your vision. Since your attention during night flying will be both inside and outside the cockpit, care should be taken to ensure that eyes can function at near maximum efficiency. It takes the eyes some minutes to adapt to a dark environment, as most of us have experienced when walking into a darkened cinema, stumbling across other patrons in an attempt to find an empty seat.

The rate at which the eyes adapt to darkness depends to a large extent on the contrast between the brightness of light previously experienced, and the degree of darkness of the new environment.

While bright lighting within the previous few minutes has the strongest effect, that experienced for some period within the previous few hours will also have an effect. Bright lighting, therefore, is best avoided prior to night flying. Generally, this is difficult to achieve, since flight planning in a well-lit room and pre-flight inspection with a strong torch or on a well-lit tarmac will almost always be necessary. The best that can be achieved in many cases is to dim the cockpit lighting prior to taxiing, and to avoid looking at bright lights during those few minutes prior to take-off.

Night vision can also be affected by lack of oxygen, so ensure that you use oxygen when flying above 10,000 ft amsl. On a more mundane level, cigarette smoke will displace oxygen in your blood to some extent, and consequently reduce your night vision by an amount comparable to an extra 5000 ft in altitude.

Since bright lights will impair your outside vision at night, it is good airmanship to keep the cockpit lighting at a reasonably low level, but not so low that you cannot see your charts, or find the fuel selector.

# Ex 20a – Night Familiarisation & Circuits

## Practical Considerations

- This is probably the student's first time in a light aircraft at night, and it can be a very surprising experience. Stress that, of course, the aeroplane doesn't know it is night and will fly and respond in exactly the same way as it does during the day. The only difference is where you get your visual cues from.
- For this first lesson, make sure the student arrives before nightfall, so that the external checks can be done during daylight, and the taxi route and any obstructions can be seen. A good way to do this is to brief the student after they have done the external checks, while it is getting dark.
- Another way of conducting this lesson is to take-off before night fall and be airborne as it gets dark. This way the student is gradually introduced to the changes.
- Do not forget to take a torch to the aircraft! I personally take a hand help high power torch for external checks and a separate head-lamp for use inside the aircraft. These often have a choice of white or red lighting:

- It is important to be organised for night flights as dropped or misplaced items are very hard to find.
- Make sure the student is reasonably happy flying on instruments as they will have to transfer to them immediately after take-off.
- Students often taxi much faster at night due to reduced visual cues. Watch for this and be ready to intervene. If GNSS is fitted, the groundspeed readout can be used.
- During the flare, many students fixate on the part of the runway illuminated by the landing light leading to a poor touchdown. Remember to stress to them during final approach to look down the far end of the runway as they flare. One way to prevent this problem is to leave the landing light off for the first few landings.
- After demonstrating how the runway edge lights can be used to judge the glidepath, ask ATC to turn off any PAPIs. Many students will become anxious at this, until they realise how effectively the edge lights can be used.
- Make sure the instruments, particularly the AI are checked during taxi, as they will be needed straight after take-off.

## Long Briefing

To be Added

**Guidance from EASA Part-FCL:**

**Long briefing objectives:**

(1) Start Up Procedures;

(2) Local Procedures: including ATC liaison;

(3) Taxiing:

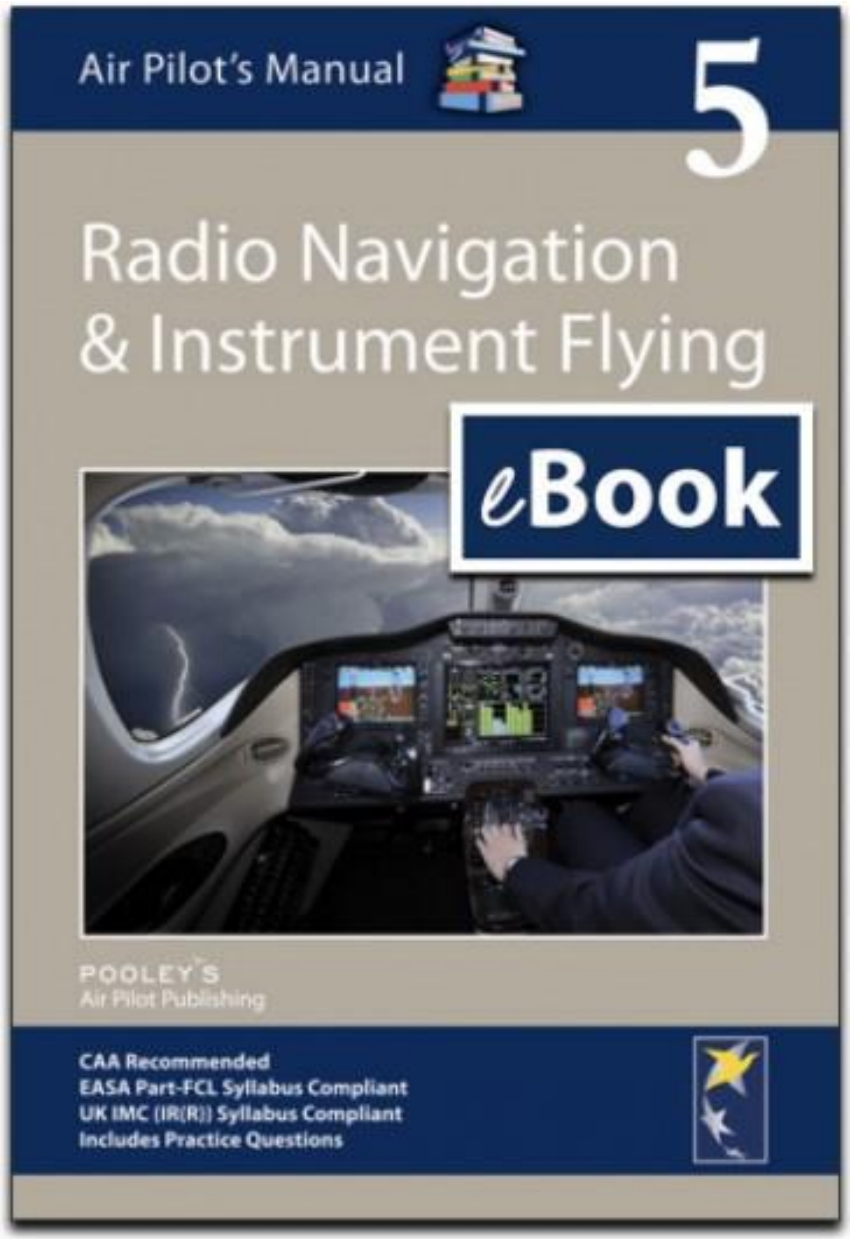
- (i) parking area and taxiway lighting;
- (ii) judgement of speed and distances;
- (iii) use of taxiway lights;
- (iv) avoidance of hazards: obstruction lighting;
- (v) instrument checks;
- (vi) holding point: lighting procedure;
- (vii) initial familiarisation at night;
- (viii) local area orientation;
- (ix) significance of lights on other aircraft;
- (x) ground obstruction lights;
- (xi) division of pilot attention: external or instrument;
- (xii) rejoining procedure;
- (xiii) aerodrome lighting: app, RW lighting, VASI & PAPI):
  - (A) threshold lights;
  - (B) approach lighting;
  - (C) visual approach slope indicator systems.

(4) Night Circuits;

- (i) Take-Off and Climb:
  - (A) line up;
  - (B) visual references during the take-off run;
  - (C) transfer to instruments;
  - (D) establishing the initial climb;
  - (E) use of flight instruments;
  - (F) instrument climb and initial turn.
- (ii) Circuit:
  - (A) aeroplane positioning: reference to runway lighting;
  - (B) the traffic pattern and look-out;
  - (C) initial approach and runway lighting demonstration;
  - (D) aeroplane positioning;
  - (E) changing aspect of runway lights and VASI (or PAPI);
  - (F) intercepting the correct approach path;
  - (G) the climb away.
- (iii) Approach and Landing:
  - (A) positioning, base leg and final approach;
  - (B) diurnal wind effect;
  - (C) use of landing lights;
  - (D) the flare and touchdown;
  - (E) the roll out;
  - (F) turning off the runway: control of speed.
- (iv) Missed Approach:
  - (A) use of instruments;
  - (B) re-positioning in the circuit pattern;

## Suggested Long Brief

The Air Pilot's Manual Vol 1 published by Pooley's provides excellent material for the long brief.




### The Night Circuit

The circuit pattern at night is usually the same as that by day, except that it is flown mainly by instruments, with reference to the aerodrome lighting to assist in positioning the aeroplane suitably. The normal techniques of attitude flying apply. There is often a tendency to overbank at night, so special attention should be paid to bank angle.

Once the aeroplane makes the first turn, the runway and aerodrome lights will be easily seen and should be referred to frequently. Well-lit landmarks may also be useful for positioning in the circuit.

Allow for drift on the crosswind leg, and level off using normal instrument procedures. Maintain height accurately and carefully scan outside before making any turn. A good lookout for other aircraft must be maintained at all times, and the usual radio procedures followed. Recognising the navigation lights of other aircraft, and responding with an appropriate heading change, will avoid collisions. This is covered in Chapter 2, Volume 2, of *The Air Pilot's Manual*.

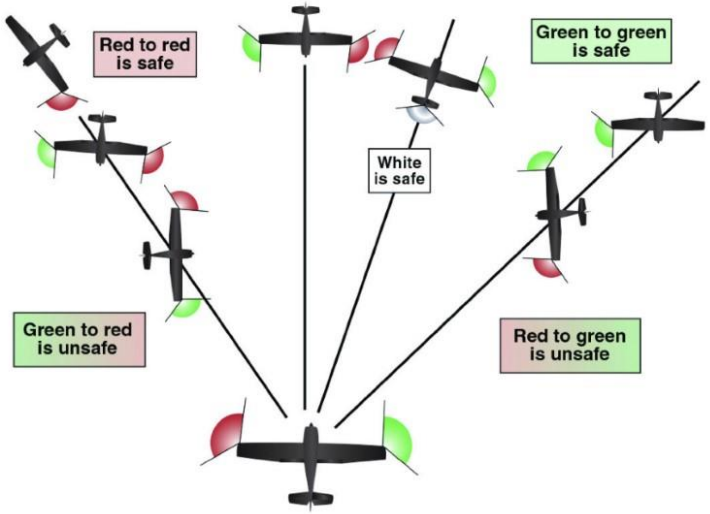



*Figure 26-2* ***Using navigation lights to avoid collision***

## Board Briefing

# Ex 20a - Night Familarisation + Circuits

28Feb22

**AIM:** To introduce flying at night, and to learn to fly a circuit at night.
**T&E:** Ground collision, other aircraft, disorientation, bad weather, engine overheat, engine failure
**M:** Aircraft lights, Lookout, Instruments, FREDA, Pre-flight planning, Altitude selection.

## Airex:

### 1: Pre-Flight Checks

**Personal:** Fitness
night vision
torch
clothing

**Aircraft:** Lights (in + out)
Controls by feel
cockpit organisation

### 2: Start-Up + Taxi

NAV lights
Clear Prop!
Taxi route clear
Taxi Speed
A/c spacing
Airfield lighting
Instrument checks, esp AI

### 3:Take-Off:

Find RW centreline
Memorise 'picture' for landing
Landing Light ON
Importance of keeping straight
Transfer to instruments after lift off
Call 'airborne' if required

### 4: Local Area Famil:

Looks very different
No natural horizon - use instruments
Built up areas obvious
Masts easy to spot
Motorways east to spot
Airfield hard to see
FREDA cx
Altitude selection
Cloud base hard to see

### 5: Rejoin:

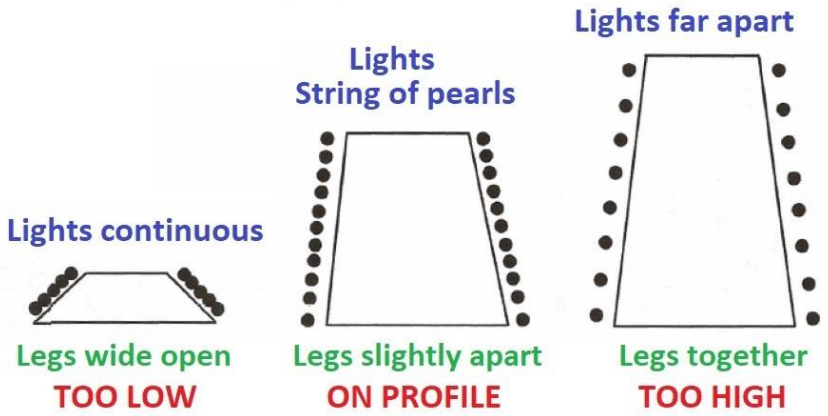
Landmarks hard to see
Other A/C hard to see
Circuit height/alt may be different

### 6: Night Circuit

**Exactly the same! But.....**
Circuit height/alt may be different
Circuit landmarks hard to see
RW hard to make out
Other traffic hard to see
May be more drift
Harder to judge profile
Remember landing 'picture'
Do not fixate on RW during flare
(landing lights OFF)

### 7: Glidepath Profile:

Without PAPIs, hard to judge
Use edge lights



## Skeleton Board Briefing

# Ex 20a - Night Familarisation + Circuits

28Feb22

**AIM:** To introduce flying at night, and to learn to fly a circuit at night.

**T&E:**

**M:**

**Airex:**

**1:**

**2:**

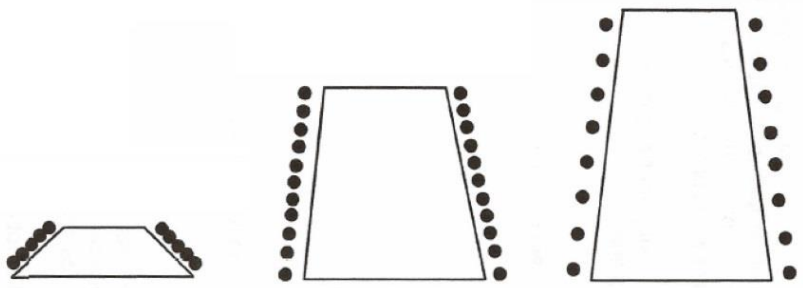
**3:**

**4:**

**5:**

**6:**

**7:**



## Air Exercise

To be added

## Flight Prompt Card

**Ex 20a: Night Famil & Circuits**

**AIREX:**

**1: A/C & Cockpit lights. Cockpit famil in dark.**
**2: Taxi – speed and spacing. Airfield Lighting**
**3: TEACH night take-off. Point out 'picture'.**
**4: Student takes control in climb. STUDENT PRACTICE**
**5: Local area: Show no natural horizon. Point out local features.**
**6: Rejoin circuit.**
**7: Teach night circuit. Use long final – show glidepath/edge lights. Touch & Go.**
**8: STUDENT PRACTICE circuit to go-around.**
**9: STUDENT PRACTICE circuit landing light OFF.**
**10: STUDENT PRACTICE circuit landing light ON.**
**11: STUDENT PRACTICE PAPIs OFF.**
**12: STUDENT PRACTICE consolidation.**
**13: STUDENT PRACTICE taxi & parking.**

## Debriefing

- Stress to the student that night flying is no different – it's just where to look to find what you need to see.

## Common Student Faults

- Most students will try to fly visually after take-off. This is almost impossible on a dark moonless night. Stress the need to look at the instruments – AI for wings level and the ASI for correct climbing speed.
- As previously mentioned, students will be tempted to stare at the piece of runway in front of them illuminated by the landing light during the flare. It is very hard to accurately judge the correct pitch attitude for landing this way. Stress that they should be looking at the far end of the runway, or turn off the landing light.

## Common Instructor Faults

To be added

# Ex 20b – Night Emergencies & Circuits

## Practical Considerations

- To be added

## Long Briefing

To be Added

**Guidance from EASA Part-FCL:**

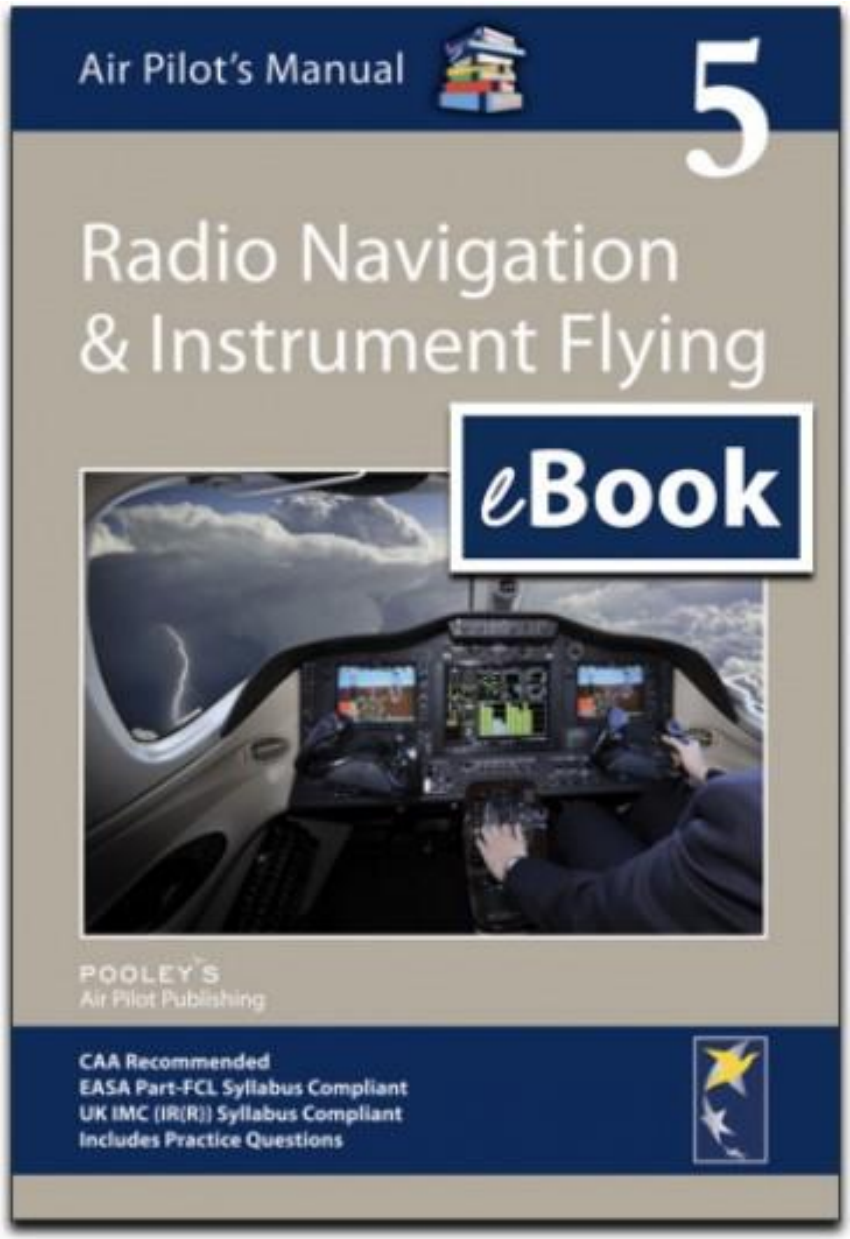
**Long briefing objectives:**

(6) Night Emergencies;
- (i) radio failure;
- (ii) failure of runway lighting;
- (iii) failure of aeroplane landing lights;
- (iv) failure of aeroplane internal lighting;
- (v) failure of aeroplane navigation lights;
- (vi) total electrical failure;
- (vii) abandoned take-off;
- (viii) engine failure;
- (ix) obstructed runway procedure.

(4) Night Circuits;
- (i) Take-Off And Climb:
  - (A) line up;
  - (B) visual references during the take-off run;
  - (C) transfer to instruments;
  - (D) establishing the initial climb;
  - (E) use of flight instruments;
  - (F) instrument climb and initial turn.
- (ii) Circuit:
  - (A) aeroplane positioning: reference to RW lighting;
  - (B) the traffic pattern and look-out;
  - (C) initial approach & RW lighting demo;
  - (D) aeroplane positioning;
  - (E) changing aspect of RW lights and VASI (or PAPI);
  - (F) intercepting the correct approach path;
  - (G) the climb away.
- (iii) Approach And Landing:
  - (A) positioning, base leg and final approach;
  - (B) diurnal wind effect;
  - (C) use of landing lights;
  - (D) the flare and touchdown;
  - (E) the roll out;
  - (F) turning off the runway: control of speed.
- (iv) Missed Approach:
  - (A) use of instruments;
  - (B) re-positioning in the circuit pattern;

## Suggested Long Brief

The Air Pilot's Manual Vol 1 published by Pooley's provides excellent material for the long brief.




### *Emergencies at Night*

#### Engine Failure

A forced landing at night away from an aerodrome is obviously a more dangerous event than by day, when better vision will allow the easier selection of a suitable field. Moonlight may help at night, but do not count on it! Normal daylight procedures should be followed if the engine fails at night, with the emphasis on keeping the aeroplane at flying speed and restarting the engine.

Flying the aeroplane at a low forward airspeed consistent with retaining full control will help achieve a lower rate of descent, and allow more time for remedial action and for carrying out a forced

## Board Briefing

# Ex 20b: Night Emergencies & Circuits

28Feb22

**AIM:** To learn to handle emergencies at night. To learn to fly different kinds of circuits at night.

**T&E:** Other aircraft, Engine overheat, loss of control.

**M:** Lookout, FREDA, Non-normal Checklist, Instruments.

**Airex:**

### 1: Revision: Normal Night Circuit

### 2: Night Flapless Circuit

Same Approach Profile
Higher Approach Speed
Higher Nose Attitude
Less flare required
Picture 'looks different'

### 3: Night Low-level Circuit

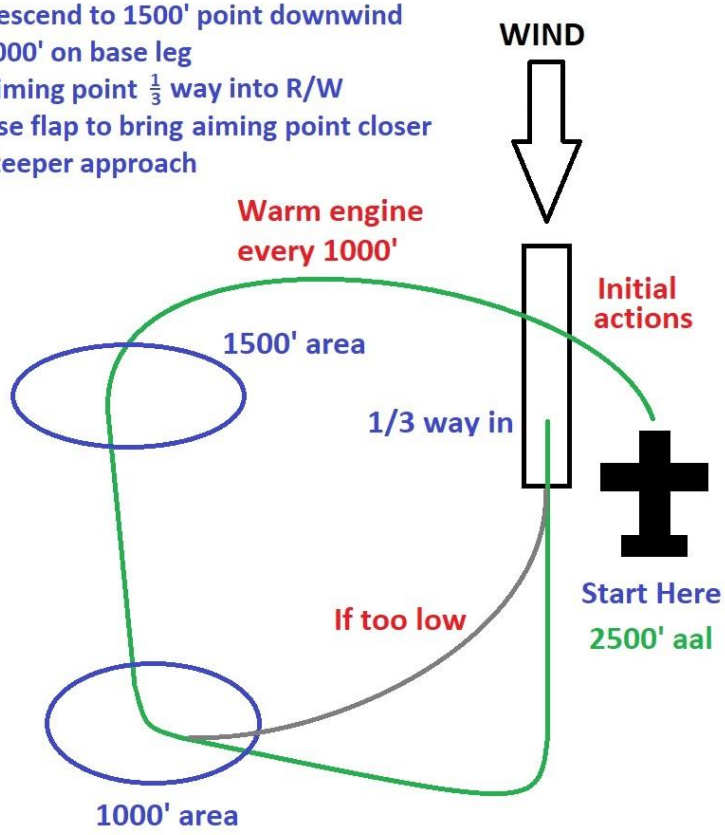
500' aal
Add power in turns
Circuit 'tighter' than normal
Fewer visual cues - Disorientation
Beware obstructions - Check altimeter
Descend on final

### 4: Night Glide Approach

Delay pwr reduction until sure of making R/W
Fly glide speed accurately
Aiming point $\frac{1}{3}$ way into R/W
Use flap to bring aiming point closer
Steeper approach

### 5: Night PFL from Overhead

Start 2500' abeam touchdown point into wind
Close throttle (CH)
Fly glide speed accurately
Checks
Descend to 1500' point downwind
1000' on base leg
Aiming point $\frac{1}{3}$ way into R/W
Use flap to bring aiming point closer
Steeper approach




### 6: Other Night Emergencies

EFATO - Pitch nose down
Fly glide speed
Identify landing site

Engine Failure in Cruise
As for PFL in daytime
Identify landing site

Aircraft Lights failure

Runway Lights failure

Radio failure

Total Electrical failure

## Skeleton Board Briefing

# Ex 20b: Night Emergencies & Circuits

28Feb22

**AIM:** To learn to handle emergencies at night. To learn to fly different kinds of circuits at night.

**T&E:**

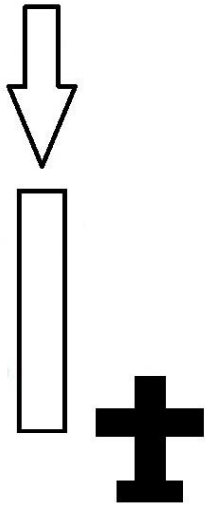
**M:**

**Airex:**

**1: Revision:** _____ **5:** _____ **6:** _____

**2:** _____

**3:** _____



**4:** _____

## Air Exercise

To be added

## Flight Prompt Card

**Ex 20b Night Emergencies & Circuits**

**AIREX:**

**1: Revision: STUDENT PRACTICE normal night circuit to touch & go.**
**2: Teach Night Flapless circuit to T&G.**
**3: STUDENT PRACTICE**
**4: Teach Night low-level circuit to T&G.**
**5: STUDENT PRACTICE**
**6: Teach Night Glide circuit to T&G.**
**7: STUDENT PRACTICE**
**8: Depart circuit to the deadside, climb to 2500' aal. Teach Night PFL to T&G.**
**9: STUDENT PRACTICE**
**10: Teach Night EFATO – climb away.**
**11: STUDENT PRACTICE circuit to T&G.**
**12: STUDENT PRACTICE Night EFATO & circuit.**
**13: STUDENT PRACTICE a/c lights failure.**

## Debriefing

- Stress to the student that night flying is no different – it's just where to look to find what you need to see.
- The student should be made aware of the added level of risk from engine failure at night.

## Common Student Faults

To be added

## Common Instructor Faults

To be added.

# Ex 20c – Night Navigation

## Practical Considerations

To be added

## Long Briefing

To be Added

**Guidance from EASA Part-FCL:**

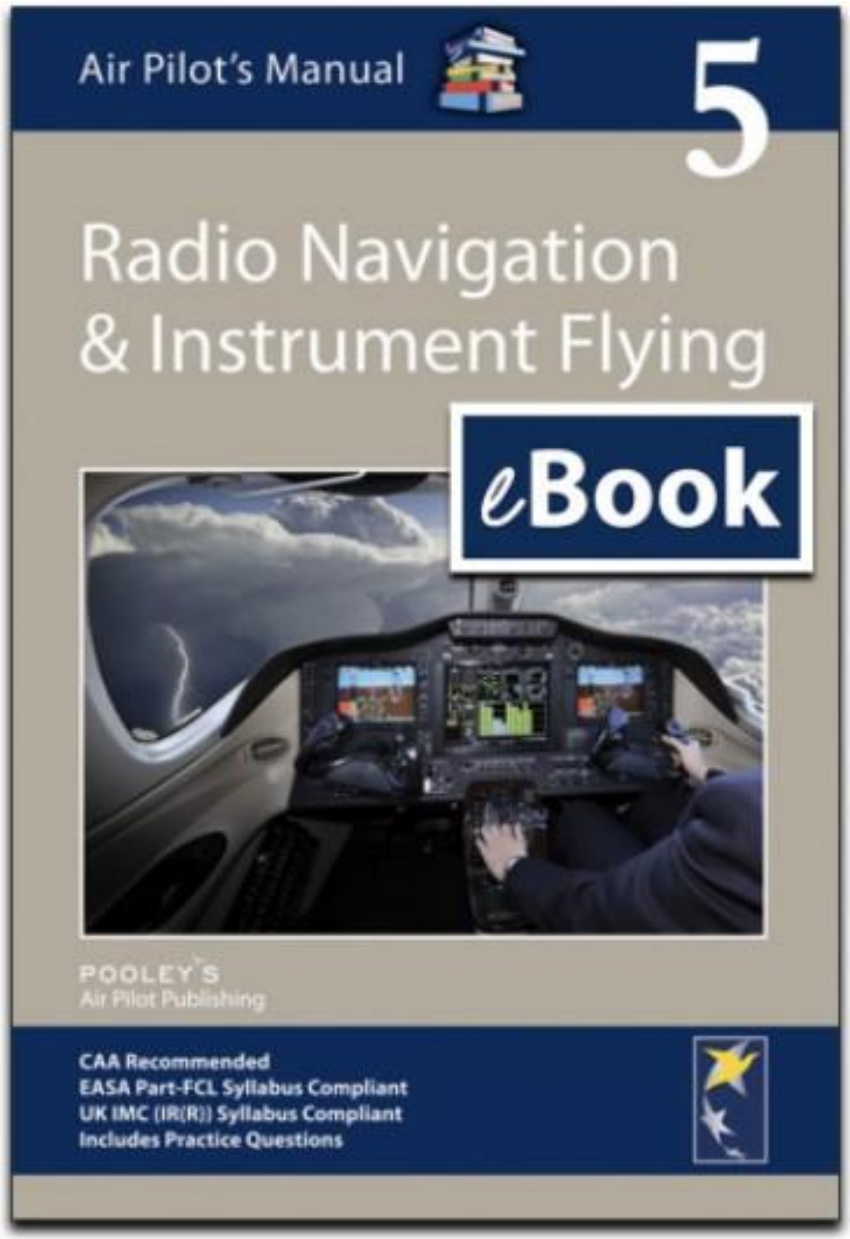
**Long briefing objectives:**

(5) Night Navigation:

- (i) particular emphasis on flight planning;
- (ii) selection of ground features visible at night:
  - (A) air light beacons;
  - (B) effect of cockpit lighting on map colours;
  - (C) use of radio aids;
  - (D) effect of moonlight upon visibility at night;
- (iii) emphasis on maintaining a 'minimum safe altitude';
- (iv) alternate aerodromes: restricted availability;
- (v) restricted recognition of weather deterioration;
- (vi) lost procedures;

## Suggested Long Brief

The Air Pilot's Manual Vol 1 published by Pooley's provides excellent material for the long brief.




# Night Navigation

Navigating at night follows the same basic principles as navigating by day, except that ground features are more difficult to see, distances are more difficult to estimate, and the likelihood of encountering unexpected cloud or areas of restricted visibility is greater.

**GROUND FEATURES.** The best ground features to use at night are usually the light patterns of towns, and the beacons of any nearby aerodromes. Cities like London and Manchester are generally too large for distinctive light patterns to be meaningful to a novice night flyer, but small towns, especially if they have areas of darkness around them, are generally good. Busy motorways delineated by a stream of car headlights may also be useful.

On moonlit nights, reflections off the surfaces of lakes and other large bodies of water may make them very visible (especially when viewed against the moon), but this should not be relied on for navigation in case clouds cover the sky unexpectedly.

**AERONAUTICAL LIGHT BEACONS,** which are installed at various civil and military aerodromes in the UK, are good landmarks. Provided that it is during the aerodrome's hours of operation, they can be expected to be on at night and by day in bad visibility. The different types include:

- **Identification beacons,** which flash a two-letter Morse code group every 12 seconds (*green* at civil aerodromes and *red* at military aerodromes); and
- **Aerodrome beacons,** which give an alternating-colour flash signal instead (usually *white/white* or less commonly *white/green*). They are not normally provided in addition to an identification beacon.

**MARINE BEACONS AND LIGHTSHIPS** may be useful if you are navigating near the sea by night. They appear on some aeronautical charts with a description of their lighting characteristics.


*Figure 27-1* ***Marine beacons on an aeronautical chart***

## Board Briefing

# Ex 20c Night Navigation

28Feb22

**AIM:** To learn to navigate safely at night.

**T&E:** Other aircraft, disorientation, getting lost, entering IMC

**M:** Lookout, A/c lights, instruments, pre-flight planning.

**Airex:**

- **The same as day navigation, but...**

### 1: Pre-Flight Planning

Do NOT use RED pen
Plan well-lit turning points
- Towns
- Motorway junctions
- Airfields
- Masts

Consider filing flight plan
Consider MSA
Choose higher altitude
Carry extra fuel
Check weather carefully

### 2: En-Route

Regular FREDA checks
Contact an ATSU
Fly a higher altitude
Continually assess diversion/PFL options
Use Radio Aids
Maintain planned hdg accurately
Listen to weather broadcasts
Cloud base hard to see
Ground features hard to see
Distance hard to judge

### 3: Lost Procedure

Maintain VMC
Climb above MSA
Talk to ATC
Use radio aids
Remain calm

### 4: Engine Failure

Mayday call ASAP
Adopt glide speed
Fly towards nearby airfield
Try to restart
All lights ON

## Skeleton Board Briefing

# Ex 20c Night Navigation

28Feb22

**AIM:** To learn to navigate safely at night.

**T&E:**

**M:**

**Airex:**

**1: Pre-Flight Planning** **2: En-Route** **3: Lost Procedure** **4: Engine Failure**

## Air Exercise

To be added

## Flight Prompt Card

**Ex 20c Night Navigation**

**AIREX**
**1: Teach En-route leg. Draw attention to**
**2: Altitude & MSA**
**3: Contact ATC**
**4: Cloud base & Weather reports**
**5: Contingency planning/nearby airfields**
**6: Fly accurately**
**7: STUDENT PRACTICE**

## Debriefing

- Stress to the student that night flying is no different – it's just where to look to find what you need to see.

## Common Student Faults

To be added

## Common Instructor Faults

To be added.

# Ex 20d – Night Student Solo

## Practical Considerations

To be added

**Board Briefing** (To be given only if needed)

# Ex 20d - Night Student Solos

28Feb22

**AIM:** To complete the required solo circuits for rating issue.

**T&E:** Other a/c, engine overheat, tiredness, weather.

**M:** Lookout, Checks, Personal well-being, Pre-flight planning.

**Airex:**

## 1: Requirements

Minimum of 5 solo circuits

No Touch + Go. Must taxi back.

Make sure to count, or ask ATC

## 2: Start + Taxi

Slow taxi speed

Give obstacles a wide berth

Follow taxiway centre-line

Power checks once only

## 3: After Full-stop landing

Request taxi back to holding point

No need for power checks

No need for before take-off checks

Check trim set for take-off

Check flaps set for take-off

## Skeleton Board Briefing

# Ex 20d - Night Student Solos

28Feb22

**AIM:** To complete the required solo circuits for rating issue.

**T&E:**

**M:**

**Airex:**

**1:** _____ **2:** _____ **3:** _____

## Air Exercise

To be added

## Flight Prompt Card

**Ex 20b Night Student Solo**

**TEM: Traffic Levels, Tiredness, Weather**
**1: Student has demonstrated 3 safe night landings recently.**
**2: Weather is suitable – wind, cloud base, visibility.**
**3: Student briefed on requirement to taxi back – no touch & go. Student familiar with taxi route.**
**4: Student briefed to check flaps & trim each time.**
**5: STUDENT PRACTICE**

## Debriefing

- Stress to the student that night flying is no different – it's just where to look to find what you need to see.

## Common Student Faults

- To be added

## Common Instructor Faults

- To be added.

# Night Rating Course Completion Certificate

This form is intended for use in the provision of evidence in support of an application made to the CAA using the CAA's online application service. Once completed the form should be scanned or photographed and uploaded by the applicant as part of an online application to the CAA.

Civil Aviation Authority

**FALSE REPRESENTATION STATEMENT**

It is an offence under the UK Air Navigation Order to make, with intent to deceive, any false representation for the purpose of procuring the grant, issue, renewal or variation of any certificate, licence, approval, permission or other document. This offence is punishable on summary conviction by a fine and on conviction on indictment with an unlimited fine or imprisonment or both.

**1. APPLICANT DETAILS**

CAA Personal reference number (if known): ☐☐☐☐☐☐☐ Date of Birth: .....

Title: ..... Forename(s): ..... Surname: .....

**2. NIGHT RATING COURSE DETAILS** **To be completed by ATO/DTO holding the course approval**

I certify that (name) ..... has satisfactorily completed a course of training in accordance with Part-FCL/Part-BFCL for the issue of the rating detailed below.

I certify that I have examined the applicants flying log and the entries in them meet in full the flying experience requirements for the grant of the rating in accordance with Part-FCL/Part-BFCL.

Night rating course completed in (select one)

Aeroplane ☐ Helicopter ☐ Balloon ☐ Airship ☐

Date course started: ..... Date course completed: .....

The course consisted of:

..... dual instruction at night

..... total hours experience at night

..... take-offs and landings completed as PIC

..... hours of dual cross-country instruction at night of at least 50 km (27NM) – Aeroplane and Airship only)

..... hours of dual cross-county instruction at night – (Helicopter only)

..... hours of dual instrument instruction time – (Helicopter only)

**(Balloon only)** The applicant has completed ..... instruction flights at night of at least one hour each.

Date of flight: ..... (please ensure this is clearly annotated in logbook)

Date of flight: ..... (please ensure this is clearly annotated in logbook)

Name of FI(B): .....

CAA reference number of FI(B): .....

**(LAPL only)** The LAPL holder has completed the basic instrument flight training required for the issue of the PPL before the completion of the night rating. Yes ☐ No ☐ Not applicable ☐

Name of Approved Training Organisation (ATO) / Declared Training Organisation (DTO)/FI(B):

.....

ATO/DTO approval number (if applicable): .....

Competent Authority issuing ATO/DTO approval (if applicable): .....

Name of Head of Training (if applicable): .....

Signature (Head of Training/FI(B)): ..... Date: .....

# Part 5: Appendices

# Appendix 1: Instructional Techniques

## Building Blocks

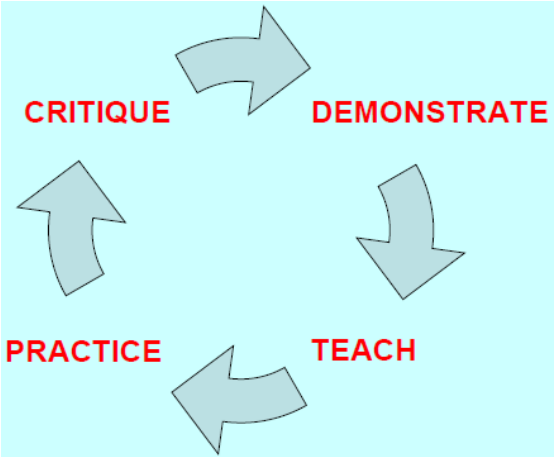
Several exercises can be broken down into smaller parts that can be mastered individually before being added together to create the finished product. Examples would be:

| | |
|---|---|
| **Turning, Climbing, Descending:** | Entry. Maintaining. Rollout |
| **Forced Landings:** | Initial Actions. Troubleshooting. Field Selection. Mayday. Approach Planning etc |
| **Circuits:** | Take-Off. Climb. Downwind. Base. Final. Go-Around etc |

## Known to Unknown

There is a huge amount of material that the student must absorb in the process of flight training, so it always a good idea to start with something that they are familiar with. For example, before teaching levelling out from a climb, make sure they are happy maintaining a climb first. Then you can add-on the new skill to the old. Afterwards, you can go back and teach the entry.

## Circle of Learning




A continuous loop, whereby the student learns by

- Watching a demonstration of the manoeuvre by the instructor.
- The instructor teaches that manoeuvre by breaking it down and pattering it.
- The student practices the manoeuvre.
- The instructor offers feedback, which may entail another loop.

## Following Through on the Controls

In the early lessons, it can be beneficial for the student to place their hands and feet lightly on the controls while the instructor demonstrates a manoeuvre. This way they can gauge the amound and rate of input required before having a go for themselves. A similar method can be used by asking the student to place one finger on the throttle, for example during stall recovery demonstrations. Remember to tell the student to 'Relax' when you no longer need them to follow you through.

## Work Cycles

There are several useful work cycles in basic flight training that can make life easier for both student and instructor. Do not hesitate to keep repeating them whenever reinforcement is needed.

**SELECT – HOLD – TRIM:** Used when learning to trim the aircraft. It stops the student flying by trimwheel and makes them look outside.

**LOOKOUT – ATTITUDE – INSTRUMENTS:** A very useful cycle used in Straight & Levl, Climbing, Descending and Turning. It forces the attention outside, and reminds them to glance at their instruments.

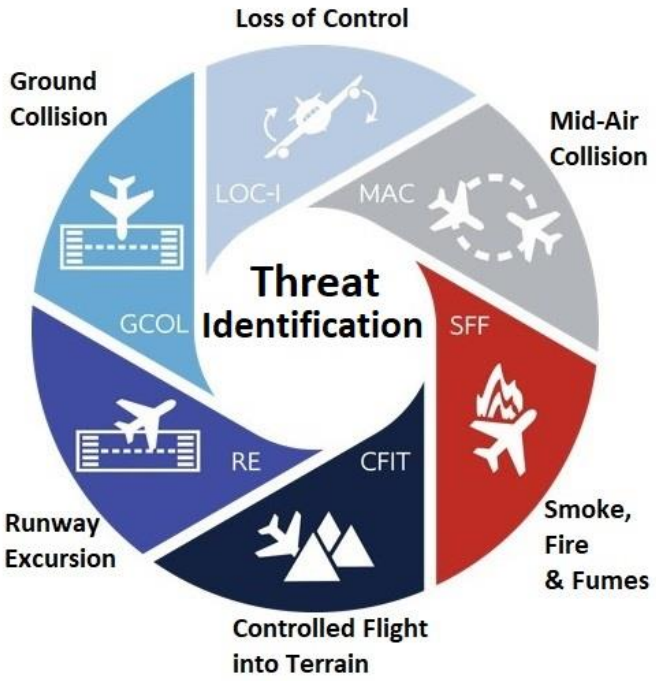
## Threat & Error Management (TEM)

Examiners now want to see a thorough culture of TEM from all instructors and will expect frequent reference to be made to it. Not only should TEM be mentioned in ground briefings, but should then be referred to again in the air as relevant topics arise.

Make sure the student understands the diference between threats and errors: Threats are generally external to us and are present in our operating environment. Errors are usually internal to us – so human error and mistakes.

**Threat Identification:**

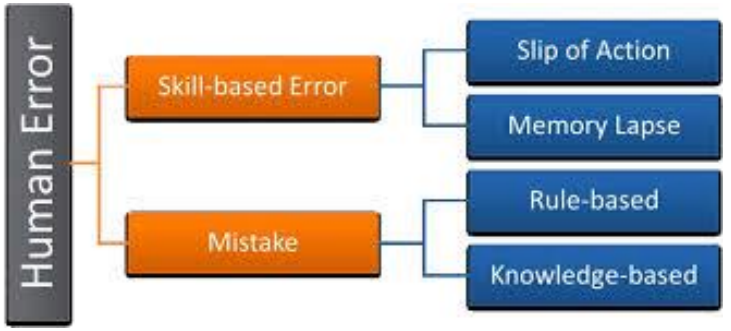
Try to **e**licit possible tnreats from the student either by asking open questions about the threats in the environment, or by guiding them with leading questions, or a model:



**Identification of Errors:**

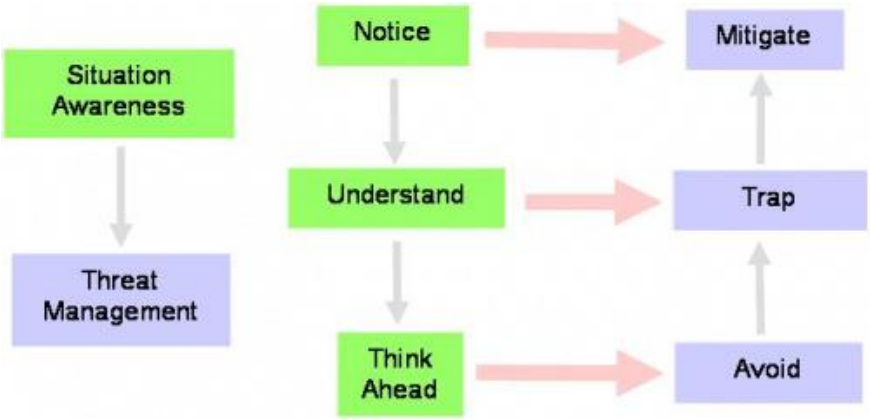
Depending on the experience of the student, it may be harder to identify errors. For example:

- Mis-set Altimeter or DI
- Airspace Infrincgement
- Forgetting to change fuel tanks
- Forgetting to carry out checks when required
- Forgetting to use Carb Heat on descent or forgetting to turn it off afterwards
- Joing for the wrong runway




**Management:**

Then when it comes to management of these threats and errors, it is important to suggest solutions. It is not enough to simply identify errors – they must be managed: avoided, trapped or mitigated. Once mentioned, try to revist these threats and errors frequently throughout the brief and flight. TEM can thus permeate the whole instructional process rather than just be a monotonous list at the beginning of a pre-flight brief.




**Negative Training:**

Avoid the use of negative training: Always tell the student what you want him to do, not what you DON'T want him to do. He may focus on these items instead of the primary task.

In the air, this can result in a poor instructional technique known as 'Instruction by Fault Analysis' where the instructor does not 'teach' the student what to do, he merely tells him that he is doing it incorrectly. This must be avoided at all costs.

Another example of negative training is flying around with the stall warner sounding during slow flight.

**Debriefing:**

- Debriefing is a very important, and often underused, part of the teaching process. It is important to consolidate the lerning objectives from the lesson before the student goes home and forgets. Just 5 minutes of debrief time can be invaluable.
- Make sure the student writes something down during the debrief. A student listening to a long list of importantpoints without a pen and paper is not going to improve.
- A facilatative approach to debriefing is often a good ide, especially with more advanced students. Questions like the following can prove enlightening: How did you feel that went? What could you have done differently? What were your best and poorest parts?
- Do not make a debrief a long, chronological list of student faults. Pick one or two good points, and a few negative points and debrief those.

# Appendix 3: Pre-Flight Briefings (Short Briefings)

## Introduction

The student has already either had a long brief on the subject, or self studied, so the purpose is not to teach the theory, but to provide a punchy overview of the entire flight that is about to take place, including pre-flight and post flight duties. It should leave the student in doubt about who will be doing what during the exercise.

In this regard, I am always reminded of the following limerick:

A gay man who lived in Khartoum,
Took a lesbian up to his room,
They argued a lot,
About who should do what,
And how, and with what, and to whom.

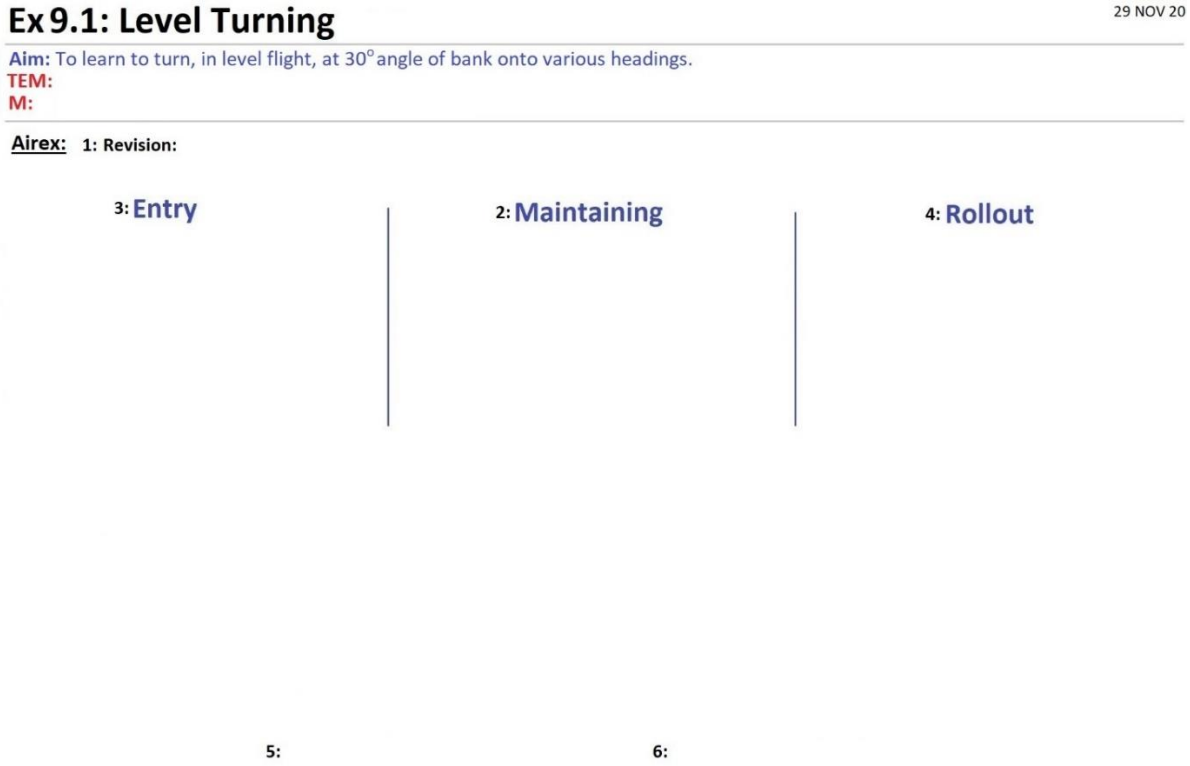
Although undoubtedly silly, it does get to the crux of the point of a short briefing! Note, not once do the participants use the word 'we'. 'How' is the most importand word of all.

*The briefing normally includes a statement of the aim and brief allusion to principles of flight only if relevant. An explanation is to be given of the air exercises which are to be taught by the instructor and practised by the student during the flight. It should include how the flight will be conducted with regard to who is to fly the aeroplane and with what airmanship, weather and flight safety aspects which currently apply. The nature of the lesson will govern the order in which the constituent parts are to be taught.*
*The four basic components of the briefing will be:*
*1. The aim*
*2. Principles of flight (briefest reference only)*
*3. Threat & Error Management TEM.*
*4. The air exercise(s) what, and why and how and by whom.*

## Preparation

Make sure everything you need to deliver the pre-flight brief is available. There is nothing worse than an instructor having to leave the room to look for models or other aids. Even if this means delaying the start of the briefing, get everything together and ready, including the notes you will be using during the briefing.

Before starting the briefing, write the first part of the briefing on the board. Leave marks and spacers where you will write the remaining text, otherwise crowding can occur.




Do this in silence. Remember, NEVER talk to the student(s) while your back is turned and you are writing.

For example in EX9.1 you could prepare this part and lead the students through what follows.

Writing in CAPITALS rather than *cursive script* can be more legible to a class, depending on how neat your writing is. But avoid too many capitals.

Do not under-estimate the effectiveness of <u>underlining</u> something.

Do not be afraid to use abbreviations on your board briefing, as long as they have been explained: eg: clb for climb, Att for Attitude etc. Little diagrams are helpful too such as a mini balance ball  for balance, or pair of eyes  for lookout. This will make the board look more appealing than one covered with words.

Use colour consistently, with **RED** being used for importand things or danger.

## <u>Build Up The Brief</u>

From Exercise 6 onwards, it can be a good idea to address the question as to WHY we are doing each lesson, as it is not always obvious to the student. 'Why are we learning to fly S&L?' 'Because when we are flying somewhere far away, the majority of our flying will be S&L.'

Make sure the student knows what the difference between a threat and an error is. Then, elicit the threats and possible errors from the students that you want, by guiding your questions: eg: 'what possible threat could we have on a busy weekend in the local area?' or 'what possible errors could we make when using the altimeter?' Just asking 'what threats are there today' could create all sorts of answers, many of them not relevant to the direcion you want to lead them. Then in the 'Management' row, add solutions to these threats and errors. It is not enough to simply identify errors – they must be managed: avoided, trapped or mitigated. Once mentioned, try to revist these threats and errors frequently throughout the brief and flight. TEM can thus permeate the whole instructional process rather than just be a monotonous list at the beginning of a pre-flight brief.

Outline how the flight will begin and who will do what to get the aircraft airborne. Use the words I and YOU (see below).

The use of colour on the board is important. Do not write everything in the same coulur. Have a system. **Red is useful for important or dangerous things.**

Then build up the rest of the board briefing by using building blocks. In this case begin with the 'Maintaining' building block. Then move onto the 'Entry' etc. Remember talk to the students, then turn and write in silence, then turn back and talk.

Remember to ask question regularly to prevent 'instructor drone-on'. An interactive and facilitative style is much preferable.

Talk about **HOW** things will be done, not just what will be done: 'I will enter the turn using co-ordinated input on the rudder and ailerons.'

Although it can be difficult at times, avoid the use of **WE** as much as possible. Use **I** and **YOU**. For example: 'I will fly the aircraft to the local area, where you will carry out a FREDA check. Then I will demonstrate how to carry out a HASELL check. You will then have a chance to practice.'

Make sure you use the word 'Teach' as appropriate. Many instructors say they will demonstrate a manoeuvre then the student will practice. There needs to be an element of teaching, after all, that is what an instructor does! Remember the Circle of Learning.

Avoid the use of negative training: Tell the student what you want him to do, not what you DON'T want him to do. He may focus on these items instead of the primary task.

## Use of Visual Aids

Try to incorporate models and visual aids as much as possible. Always use the airraft model for all pre-flight briefings, especially when under assessment.

When holding the aircraft model, always orient the model so that it appears the correct way round for the student rather than the instructor.

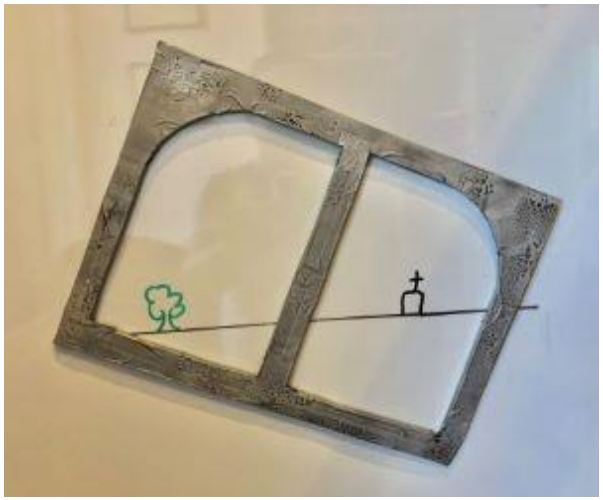
Which of these instructors has mastered the technique?

Actual aircraft instruments make very compelling teaching aids:

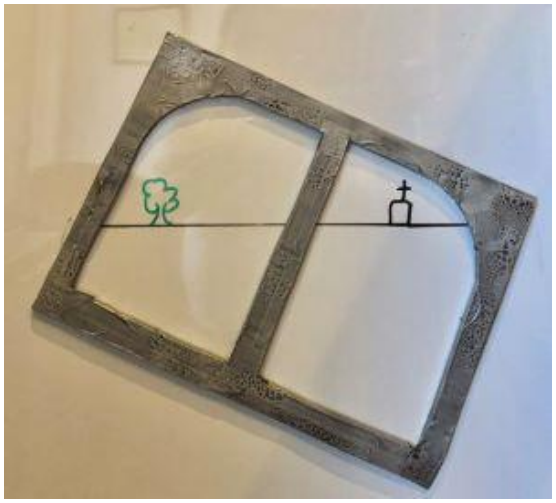

But having blown up diagrams of cut-away instruments allows you to explain their operation in more detail.

An aircraft window cutout can be used very effectively to show changing attitudes without having to redraw:

Straight & Level



Level turn to the right



Descending turn to the right

These can be made easily from cardboard, and if your whiteboard is magnetic, small magnets can be attached to the cutout to make it stay in place.

When showing changes in attitude using the cutout, be sure to exaggerate the changes to make them more visible to the student.

# Appendix 6a: Trainee Needs

It is important when training a student that their needs are covered. Not every student is the same and they each have differing needs. These needs can be summarised as follows:

- **Start from where I am.**
- **Let me know where I am going.**
- **Give me a reason to want to get there.**
- **Let me know how I am doing.**
- **Use *MY* experience.**
- **Progress at *MY* pace.**
- **Let me make the knowledge and skill my own.**
- **I acknowledge responsibility for my own learning.**

# Appendix 6b: Instructor Competencies

According to CAA Standards Document 10: **All instructors shall be trained to achieve the following competences:**


These will de dealt with in turn:

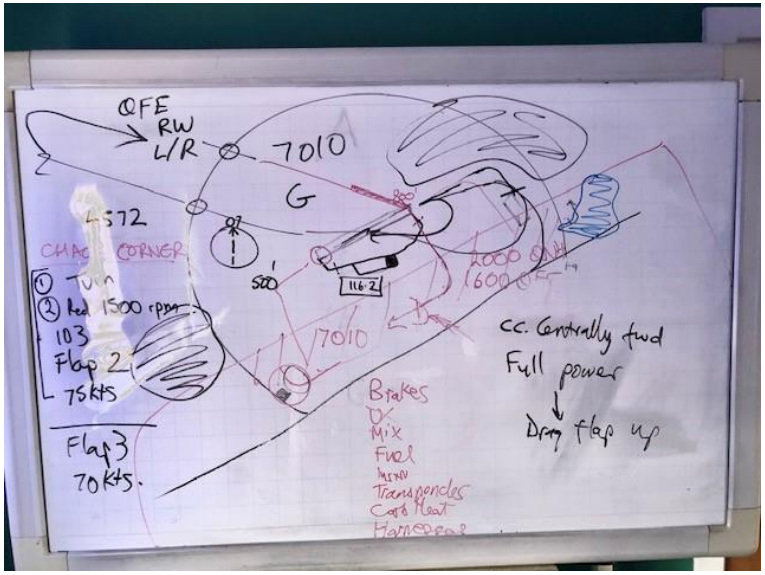
## Prepare Resources

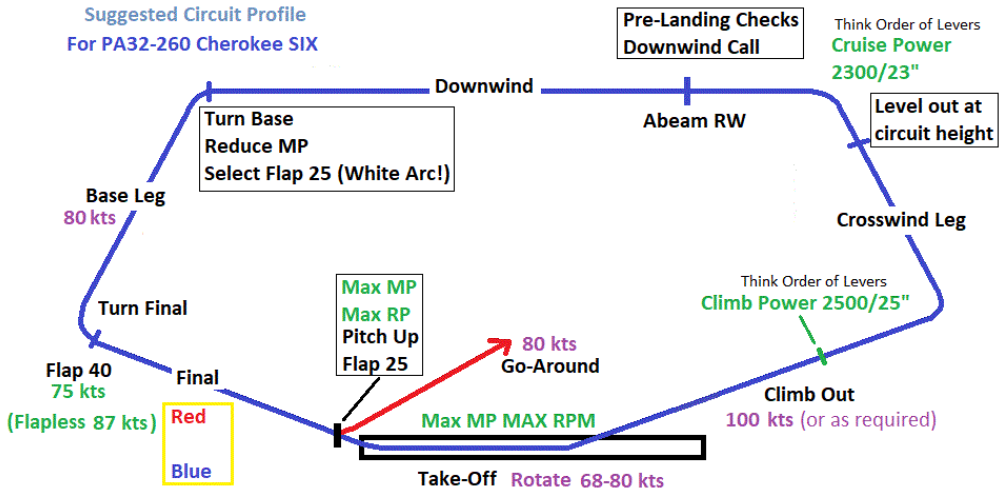
A lesson, be it ground or in the air requires considerable preparation on the part of the instructor. It will require:

- **A Framework:** The lesson should be structured in order to keep it concise and on track. This will usually begin with an aim, and then continue into the body of the lesson. At the end there should be a summary and time for questions.
- **Teaching Aids:** On the ground, these might include an airc4aft model, a white board and pens, aircraft instruments, video clips etc. There use should be integrated into the lesson. In the air, such items as IMC goggles, instrument covers, maps etc should all be ave to the instructed as and when needed. It does not inspire the student with confidence if the instructor cannot find or has forgotten to bring these items along.

- **Course Books:** It may be appropriate for the student to have been recommended or given a book, or other prepared documents (such as checklists or flight profiles) to guide them through a coure or lesson.

It is important to make sure any resiurces you use are effective. Consider the following example.




Which of these 2 teaching aids would you use?!

## Create a Climate Conducive to Learning

The learning environment is very important. This has several aspects:

- **Instructor Manner:** The instructor must be patient, approachable and unhurried in his behaviour. Many instructors allow insufficient time for lessons or briefings, and the result comes across negatively to the student who feels they are under pressure to learn and understand quickly. The general nature of the instructor here is also importance – appearance, professionalism and sense of humour are important.
- **Physical Climate:** The place where teaching is to take place (classroom, aeroplane or simulator) must be suitable in terms of temperature, light and other facilities needed. Briefing or teaching should never take place at a table in a crowded café.

## Present Knowledge

It sounds obvious, but learning is much about the transfer of knowledge (and skill) from instructor to student. It is important that this transfer happens.

## Integrate TEM & CRM

- **TEM:** It is a CAA requirement now to integrate Threat and Error Management into all aspects of aviation instruction. This begins in the classroom, and pre-flight briefings should already contain this element. One way to introduce this is to colour code as follows:

  **Aim:** To learn how to safely perform one engine inoperative turns, descents & climbs.
  **Threats:** Other aircraft, Terrain, Engine overheat.
  **Errors:** Loss of control, Infringement, fuel mismanagement
  **Management:** Lookout, Speed & bank angle awareness, Checklist discipline, Pre-flight planning, Altimeter checks.

  In this way, once the aim of the lesson has been established, there can follow a discussion about what the possible threats and errors are associated with that exercise. This then allows another discussion on how to manage those threats. It is not sufficient to just list the threats and then not continue to the management phase. Later in the flight, these threats, errors and management techniques should be pointed out as they occur to underline their importance.
- **CRM:** Crew Resource Management should be encouraged at all times, but it is particularly important in the aeroplane. The use of interactive briefings, verbalization and open questions will help guide the student in this matter. CRM is something that is best led by example. As an instructor, always try to display high levels of CRM at all times. Explain why you make the decision you did.

## Manage time to achieve Training Objectives

During the lesson, there is usually only a limited time available. This may be due to aircraft or instructor availability, airport operating hours etc. It is important that the time available is used to best manage the training requirements. If a student needs more practice, it may become necessary to drop a later exercise in order to properly practice the troublesome section.

## Facilitate Learning

Not all students learn in the same way. Some grasp ideas quickly, others need more time. Some students are very 'visual' and rapidly understand concepts when diagrams are used. Sime like mathematical formulae – others don't! It is your job as an instructor to find a way to make that student learn as best he can.

## Assess Trainee Performance

Obviously, the student's performance must be continually assessed in order to ensure that progress is being made. This assessment is important to the student, the instructor and the training establishment. This is done partly in the post flight debrief, but should also be recorded in student records. Traditionally, such records were handwritten, but increasingly, ATOs are using on-line training records. Such records should also be available to the student.

Report writing is an integral part of any instructor's daily activity. It is a skill that may require development. This section offers suggestions for use by instructors as guidance material to produce accurate reports.
All reports must reflect the debrief. Instructors should avoid writing comments that have not been discussed during the debrief.

An accurately written report can serve the following purposes:

- As a written hand-over to the next instructor
- To provide the trainee with an overview of how the training is progressing
- To provide the trainee with tips for improvement
- To allow the HoT to analyse progress or areas for development
- To allow the HoT to deal with poor performance in a structured and fair manner

Use CAP (Commentary, Appraisal, Pointers):


### Commentary

Detail how much of the lesson has been completed and to what overall standard has been achieved. Phrases to describe the standard might include; "to standard, below standard, good standard, very good standard and excellent standard".

### Appraisal

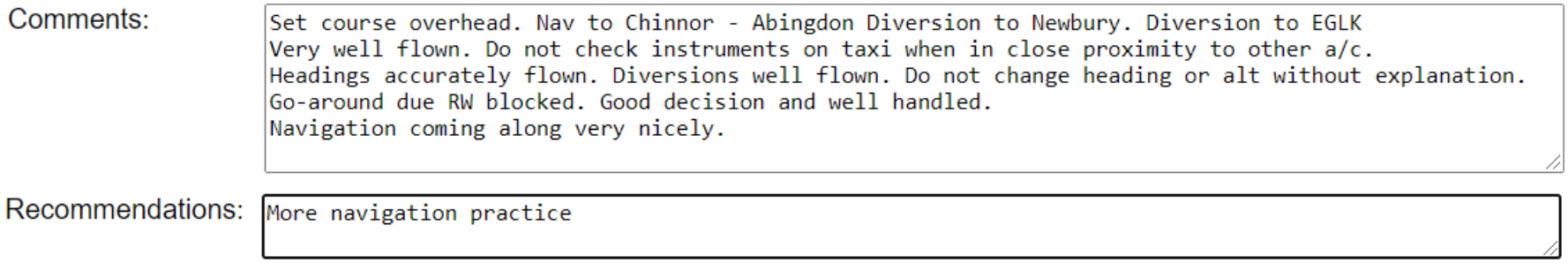
Write a phrase or phrases to discuss where the student is in more detail. For example; "X continues to overbank in turns, 30 degrees AoB as a maximum! S&L flight is improving now that X trims effectively. Checklist usage needs further study though.

### Pointers

List a couple of Main Points and a couple of Minor Points for improvement going forward. The Main Points would have formed the main part of the debrief. The exact number of Pointers is unimportant but would probably be between 1 and 4. Pointers can of course be positive! Ensure that remedies are offered where possible.

**Signing Off the Report**

Instructors should remember that student confidence is vital. Positive reinforcement is more powerful and aim to leave them with a word of encouragement. For example: “X is a pleasure to teach, keep up the hard work”




Giving positive feedback is a task most instructors enjoy. However, it is equally important to deliver negative feedback too. Negative feedback can be hard to handle and, when poorly delivered, unhelpful. We have all been on the receiving end of criticism - it is neither easy to give nor take. And yet, if appropriate, timely, and well wrapped, feedback can be a positive experience. While negative feedback might suggest a focus on the worst, it creates an immense opportunity for improvement when viewed in the right light. After all, an insightful critique provides a chance to grow and excel.

There are several points to think about before giving a student feedback:

- Harsh feedback may be counterproductive. Deliver feedback carefully and respectfully. If given too frequently and without regard to feeling, the student may revert to defense mode – possibly losing confidence, self-esteem, and motivation.
- Feedback isn’t always negative. Don’t persistently focus on what isn’t working or isn’t being done right. Attending to what is going well can support a student’s growth and steer their development in the right direction.
- Feedback isn’t always positive. On the other hand, don’t always focus on strengths. If you only address the positives, the student will return to what they were doing, believing they have nothing to improve. Nevertheless, they will be delighted as they appear to be doing almost everything right. The balance between the points above is essential.
- Providing a fix may not be the answer. Ask facilitative questions that encourage reflection. Such open support can lead the student to understand what they did well, or poorly.
- Avoid wrapping negative feedback in praise. The feedback sandwich (there are more colloquial names for it), while popular, may not always be appropriate. The standard compliment/critique/compliment can give a false view of how someone is performing. Two positives outweigh one negative and, therefore, might suggest successful performance.
- Constructive criticism. Identifying the problem, then coming up with a plan to fix it is a powerful development tool. Help the student find ways to avoid making the same mistake while learning a new skill.
- Be honest and sincere. Students are often aware of their underperformance, so the feedback should not be a surprise. Make it clear you are keen to help them improve, rather than find fault.

- Be direct and clear. At the end of the feedback, don't let the student walk out of the room thinking 'what just happened?' State the feedback clearly and directly, without being rude or uncaring.
- Be specific. Don't overgeneralize or drift into other issues. Focus on the point(s) of feedback.
- Don't become personal. Do not confuse the person with their actions. Being personal may lead the student to shut down. They will be less likely to act on, or learn from, the points shared.
- Be consistent. Depending on the feedback frequency, the student shouldn't be surprised by what you have to say. Regular interaction can help avoid lengthy, negative, and unexpected feedback.
- Keep feedback fresh. Avoid a long gap between the lesson and providing feedback. The discussion should be current so that no one is trying to remember what happened.
- Always provide feedback in private, rather than in a public area.
- Always make a note of the feedback given so that any trends can be identified early.

## Monitor and Review Progress

In much the same way as assessing trainee performance (above), the instructor should conduct a longer-term review of the student's progress to check for any undesirable trends. These should be communicated to the student as soon as possible.

## Evaluate Training Sessions

It is important to find out if the training has been successful as soon as possible afterwards, or even during the training. Ask questions to find out if the lesson objectives and aims have been met.

## Report Outcome

Make it clear to the student whether or not they have met the aims and objectives of the lesson using the same techniques as for feedback.

# Appendix 7: CAA Forms & Documents (Click to visit)

Example forms are shown on the following pages, with guidance notes. Visit links for latest versions

**SRG 2159:** On-line Form for Application, the issue, renewal, revalidation or variation of an instructor certificate.
**SRG 5017:** Night Rating Course Completion Certificate
**SRG 5018:** Instructor Course Completion Certificate

Other Useful Documents

**CAA Standards Document 10:** Assessment of Competence for Instructor Certification
**CAP 804:** Flight Crew Licensing - For Guidance Only

## Full List of CAA Forms (Click to visit)

# SRG5 5017: Night Rating Course Completion Certificate

## Night Rating Course Completion Certificate

This form is intended for use in the provision of evidence in support of an application made to the CAA using the CAA's online application service. Once completed the form should be scanned or photographed and uploaded by the applicant as part of an online application to the CAA.

Civil Aviation Authority

**FALSE REPRESENTATION STATEMENT**

It is an offence under the UK Air Navigation Order to make, with intent to deceive, any false representation for the purpose of procuring the grant, issue, renewal or variation of any certificate, licence, approval, permission or other document. This offence is punishable on summary conviction by a fine and on conviction on indictment with an unlimited fine or imprisonment or both.

**1. APPLICANT DETAILS**

CAA Personal reference number (if known): ☐☐☐☐☐☐☐ Date of Birth: .....

Title: ..... Forename(s): ..... Surname: .....

**2. NIGHT RATING COURSE DETAILS** **To be completed by ATO/DTO holding the course approval**

I certify that (name) ..... has satisfactorily completed a course of training in accordance with Part-FCL/Part-BFCL for the issue of the rating detailed below.

I certify that I have examined the applicants flying log and the entries in them meet in full the flying experience requirements for the grant of the rating in accordance with Part-FCL/Part-BFCL.

Night rating course completed in (select one)

Aeroplane ☐ Helicopter ☐ Balloon ☐ Airship ☐

Date course started: ..... Date course completed: .....

The course consisted of:

..... dual instruction at night

..... total hours experience at night

..... take-offs and landings completed as PIC

..... hours of dual cross-country instruction at night of at least 50 km (27NM) – Aeroplane and Airship only)

..... hours of dual cross-county instruction at night – (Helicopter only)

..... hours of dual instrument instruction time – (Helicopter only)

**(Balloon only)** The applicant has completed ..... instruction flights at night of at least one hour each.

Date of flight: ..... (please ensure this is clearly annotated in logbook)

Date of flight: ..... (please ensure this is clearly annotated in logbook)

Name of FI(B): .....

CAA reference number of FI(B): .....

**(LAPL only)** The LAPL holder has completed the basic instrument flight training required for the issue of the PPL before the completion of the night rating. Yes ☐ No ☐ Not applicable ☐

Name of Approved Training Organisation (ATO) / Declared Training Organisation (DTO)/FI(B):

.....

ATO/DTO approval number (if applicable): .....

Competent Authority issuing ATO/DTO approval (if applicable): .....

Name of Head of Training (if applicable): .....

Signature (Head of Training/FI(B)): ..... Date: .....

# SRG 5018: Course Completion Certificate for an Instructor Course

**CAA5018 Instructor Training Course Completion Certificate in Accordance with Part-FCL**

**This form is intended for use in the provision of evidence in support of an application made to the CAA using the CAA's online application service. Once completed the form should be scanned or photographed and uploaded by the applicant as part of an online application to the CAA.**

**FALSE REPRESENTATION STATEMENT**
It is an offence under the UK Air Navigation Order to make, with intent to deceive, any false representation for the purpose of procuring the grant, issue, renewal or variation of any certificate, licence, approval, permission, or other document. This offence is punishable on summary conviction by a fine and on conviction on indictment with an unlimited fine or imprisonment or both.

## GUIDANCE NOTES

### GUIDANCE NOTE 1: Authorised signatories

An authorised signatory acts as a representative of the Head of Training, authorised by the Head of Training or through approved procedures to confirm that the stated training has been conducted by the Approved Training Organisation (ATO). The ATO must maintain a record of those so authorized.

### GUIDANCE NOTE 2: Which sections of the course completion to complete

You are only required to complete and print the sections relevant to your application.

| Application applied for | Sections to be fully completed |
|---|---|
| FI initial issue | 1, 2, 3, 5 |
| FI/CRI/IRI variation | FI - 1, 6(i) or 6(ii) / CRI - 1, 6(vi) / IRI - 1, 6 (vii) |
| FI/CRI/IRI renewal or revalidation | 1, 5(v), 5(vi) |
| CRI/IRI/FTI initial issue | 1, 2, 5(ii), 5(iii), 5(iv) |
| MCCI initial issue or renewal | 1, 4, 7 |
| MCCI revalidation | 1, 7 |
| MCCI variation | 1, 6(v), 7 |
| FTI revalidation | 1, 5(v) |
| FTI renewal | 1, 5(v) |
| Mountain rating instructor initial issue | 1, 2, 3, 5 |
| TRI / SFI / STI initial issue | 1, 2, 5 |
| TRI / SFI renewal | 1, 2, 5 |
| TRI / SFI revalidation | 1, 5 |
| TRI / SFI variation | 1, 2, 6 |
| STI renewal | 1, 5 |

**1. APPLICANT DETAILS** — To be completed by the Training Provider

CAA Personal Reference number (if known): ..... Date of Birth: .....

Title: ..... Forename(s): ..... Surname: .....

**This application is for (please select all that apply):** Initial issue ☐ Renewal ☐ Revalidation ☐ Variation ☐

**2. PRE-REQUISITES** — To be completed by the Training Provider

I certify that (name) ..... has met the pre-requisites for (certificate(s)) .....

I further certify that I have examined the Pilot's logbook and confirm they have met the pre-requisite hours requirements: Yes ☐ No ☐ N/A ☐

The following hours have been flown and verified in the pilot's logbook (please provide a summary of total hours as per the requirements in the regulation):

**Training Provider Details:**

Name of Approved Training Organisation (ATO) (if applicable): ..... ATO number (if applicable): .....

Competent Authority issuing approval (if applicable) : .....

Name of Head of Training (or authorised signatory): .....

Signature of Head of Training or authorised signatory: ..... Date: .....

**3. Flight or Mountain Rating Instructor (FI/MI) Pre-Entry Flight Test** — To be completed by the Instructor

I confirm the pilot has satisfactorily completed a pre-entry flight test on (date): .....

I recommended the pilot for the specified course (select one): Flight Instructor (FI) ☐ Mountain Rating Instructor (MI) ☐

Name of FI/MI who conducted the flight test: .....

Instructor reference number: ..... Competent authority issuing certificate: .....

Signature of Instructor: ..... Date .....



**4. MCCI Course Instructor (if applicable)** — To be completed by the Training Provider

I can confirm that I have reviewed the pre-entry requirements alongside the applicant's experience and can confirm that the applicant meets Part-FCL.915.MCCI pre-entry requirements and FCL.930.MCCI a1) + a2) and/or FCL.940.MCCI (where appropriate) and therefore propose that the applicant proceed to formal observation by CAA or a nominated deputy.

**Training Provider Details:**

Name of Approved Training Organisation (ATO) (if applicable): ..... ATO number (if applicable) : .....

Competent Authority issuing approval (if applicable) : .....

Name of Head of Training (or authorised signatory): .....

Signature of Head of Training or authorised signatory: ..... Date .....

**5. TRAINING COURSE DETAILS** — To be completed by the Training Provider

**5)i) Theoretical knowledge** — To be completed by the Training Provider

..... hours of theoretical knowledge (TK) instruction

The applicant has satisfactorily completed: *(select one)*: Full TK training ☐ Reduced TK training ☐ Not applicable ☐

The applicant has completed reduced course of TK training on the basis of: (if applicable)

**5)ii) Teaching and learning** — To be completed by the Training Provider

..... hours of teaching and learning completed

The applicant has satisfactorily completed: *(select one)* Full teaching and learning ☐ Reduced teaching and learning ☐ Not applicable (exempt) ☐

The applicant has completed a reduced course of teaching and learning in accordance with FCL.915(c)(1) on the basis of: (if applicable)

**5)iii) Technical training (IRI, CRI initial issue)** — To be completed by the Training Provider

The applicant has satisfactorily completed ..... hours of technical theoretical training

**5)iv) Flight training** — To be completed by the Training Provider

I confirm the pilot has satisfactorily completed an approved course of training in accordance with Part-FCL for the following:

i) FI(A) ☐ FI(H) ☐ FI(AS) ☐ FCL.900C FI(A) ☐ FCL.900C FI(H) ☐

ii) Class Rating Instructor CRI SE ☐ ME ☐

iii) Instrument Rating Instructor IRI(A) ☐ IRI(H) ☐ IRI (AS) ☐

iv) Flight Test Instructor ☐

v) Mountain Rating Instructor (FCL.930.MI(a)) ☐

vi) Type Rating Instructor TRI(A) (Please specify type): .....

vii) Type Rating Instructor TRI(H) (Please specify type): .....

viii) Type Rating Instructor TRI(PL) (Please specify type): .....

ix) Type Rating Instructor issued in accordance with FCL.725(e) (Please specify type) .....

x) Synthetic Flight Instructor SFI (Please specify type): .....

xi) Synthetic Flight Instructor SFI (SPA) ☐ (MPA) ☐ (H) ☐ (PL) ☐

xii) Synthetic Training Instructor STI A ☐ H ☐

Course start date: ..... Course end date: .....

The applicant has satisfactorily completed: (select one) Full flight training ☐ Reduced flight training ☐ Not applicable ☐

The applicant has completed a reduced course of flight training on the basis of: (if applicable)

The course consisted of ..... hours of flight instruction of which ..... hours instrument ground time in a FTD 2/3 or FNPT I or FNPT II/III or FFS.

FSTD identification number of simulator used (which must be issued in accordance with UK Regulation No. 1778/2011) .....

Competent Authority issuing qualification certificate for the simulator: .....

**Training Provider Details:**

Name of Approved Training Organisation (ATO) (if applicable): ..... ATO number (if applicable) : .....

Competent Authority issuing approval (if applicable) : .....

Name of Head of Training (or authorised signatory): .....

Signature of Head of Training or authorised signatory: ..... Date .....

**5)v) Instructor refresher training course** — **To be completed by the Training Provider**

I confirm the pilot has satisfactorily completed the instructor refresher training course on ..... (date).

For the revalidation ☐ or renewal ☐ of an instructor Certificate in accordance with Part-FCL

**Training Provider Details**

Name of Approved Training Organisation (ATO): (if applicable) ..... ATO number (if applicable): .....

Competent Authority issuing approval (if applicable) : .....

Name of Head of Training (or authorised signatory): .....

Signature (Head of Training): ..... Date: .....

**5)vi) Instructor revalidation/renewal information** — **To be completed by the Examiner**

I can confirm that the pilot has met the requirements of Part-FCL for the revalidation/renewal of the following Instructor:

FI(A) ☐ FI(H) ☐ FI(As) ☐ CRI ☐ IRI ☐ SFI ☐ STI ☐ TRI ☐ MCCI ☐ MI ☐

The Certificate of Revalidation has been signed and the rating/certificate is valid until (date) .....

Examiner's Name: ..... Examiner's Number: .....

Competent Authority issuing Examiner's Certificate: .....

Signature (Examiner): ..... Date: .....

**6. Training Course/Information Details** — **To be completed by the Training Provider**

**6)i) Flight instructor variation (course)**

I certify that the pilot has satisfactorily met the variation hours requirement(s) in accordance with Part-FCL for the following:

Extend privileges to flight instructor certificate to include:

FCL.905.FI(h) IR ☐ FCL.905.FI(h) IR(R) ☐ FCL.905.FI(i) SPA ME ☐

**Please note section 5 iv) must be completed with the relevant course information**

**Training Provider Details:**

Name of Approved Training Organisation (ATO) (if applicable): ..... ATO number (if applicable): .....

Competent Authority issuing approval (if applicable) : .....

Name of Head of Training (or authorised signatory): .....

Signature of Head of Training or authorised signatory: ..... Date .....

**6)ii) Flight instructor variation (other)** — **To be completed by the Instructor**

I certify that the pilot has satisfactorily met the variation requirement(s) in accordance with Part-FCL for the following:

Extend privileges to flight instructor certificate to include:

FCL.905.FI(c) Flying multi-pilot operations on a single pilot aircraft ☐ FCL.905.FI(e) CPL ☐ FCL.905.FI(j) FI, IRI, CRI, STI or MI ☐

Signature of Instructor: ..... Date .....

I certify that the pilot has satisfactorily met the variation requirement(s) in accordance with Part-FCL for the following:

Extend privileges to flight instructor certificate to include:

FCL.905(k)(1) MPL ☐

I certify that the pilot has satisfactorily completed at least 500 hours of flight time as a pilot in aeroplanes, including at least 200 hours of flight instruction

Signature of Instructor: ..... Date .....

I certify that the pilot has satisfactorily met the variation requirement(s) in accordance with Part-FCL for the following:

Extend privileges to flight instructor certificate to include:

FCL.905(k)(2) MPL ☐

I certify the pilot holds a multi-engine aeroplane IR and the privilege to instruct for an IR ☐ And

I confirm the pilot has satisfactorily completed at least 1500 hours of flight time in multi-crew operations ☐ or

Is already an FI qualified to instruct on ATP(A) or CPL(A)/IR integrated courses and has completed a structured course consisting of the following training ☐ :

MCC qualification

Observation of five sessions of flight instruction in Phase 3 of an MPL course

Observation of five session of flight instruction in Phase 4 of an MPL course

Observation of five operator recurrent line-oriented flight training sessions

The content of the MCCI course

Signature of Instructor: ..... Date .....



I certify that the pilot has satisfactorily met the variation requirement(s) in accordance with Part-FCL for the following:

FCL.905.FI(f) Night ☐ FCL.905.FI(g) Banner Towing ☐ FCL.905.FI(g) Glider Towing ☐ FCL.905.FI(g) Aerobatic ☐

Date of demonstration flight: .....

Name of Instructor: ..... Instructor Reference Number: .....

Competent Authority issuing Instructor's Certificate: .....

Signature of Instructor ..... Date .....

**6)iii) TRI variation** — **To be completed by the Training Provider**

I certify that the pilot has satisfactorily met the variation requirement(s) to extend privileges of TRI in accordance with Part-FCL for the following:

FCL.905.TRI(2) ☐ FCL.905.TRI(3) (SPH PA) SP to MP ☐

FCL.910.TRI(b)/(c) (please specify type): .....

FCL.910.TRI(a) FSTD ☐ FCL.910.TRI(a) Line Flying (LIFUS) ☐ FCL.910.TR (b) Aircraft ☐

FCL.910(c)(2) TRI SPH to MPH ☐ FCL.910.TRI(a) Aircraft Takeoffs and Landings only ☐

**Training Provider Details:**

Name of Approved Training Organisation (ATO) (if applicable): ..... ATO number (if applicable): .....

Competent Authority issuing approval (if applicable) : .....

Name of Head of Training (or authorised signatory): .....

Signature of Head of Training or authorised signatory: ..... Date .....

**6)iv) SFI variation** — **To be completed by the Training Provider**

I certify that the pilot has satisfactorily met the variation requirement(s) to extend privileges of SFI in accordance with Part-FCL for the following:

FCL.905.SFI(b) (SPHPA) SP to MP ☐

FCL.910.SFI (please specify type): .....

**Training Provider Details:**

Name of Approved Training Organisation (ATO) (if applicable): ..... ATO number (if applicable): .....

Competent Authority issuing approval (if applicable) : .....

Name of Head of Training (or authorised signatory): .....

Signature of Head of Training or authorised signatory: ..... Date .....

**6)v) MCCI variation** — **To be completed by the Training Provider**

I certify that the pilot has satisfactorily met the variation requirement(s) to extend privileges of MCCI in accordance with Part-FCL for the following:

FCL.910.MCCI (please specify type): .....

**Training Provider Details:**

Name of Approved Training Organisation (ATO) (if applicable): ..... ATO number (if applicable): .....

Competent Authority issuing approval (if applicable) : .....

Name of Head of Training (or authorised signatory): .....

Signature of Head of Training or authorised signatory: ..... Date .....

**6)vi) CRI variation** — **To be completed by the Training Provider**

I certify that the pilot has satisfactorily met the variation requirement(s) to extend privileges of CRI in accordance with Part-FCL for the following:

FCL.905.CRI (Please specify class or type): .....

FCL.905.CRI(a) Banner Towing ☐ FCL.905.CRI(a) Glider Towing ☐ FCL.905.CRI(a) Aerobatic ☐

FCL.905.CRI(ba) Flying multi-pilot operations on a single pilot (please specify class or type): .....

Date of demonstration/assessment flight: .....

Name of Instructor/Examiner ..... Instructor/Examiner reference number .....

Signature of Instructor/Examiner ..... Date .....

| 6)vii) IRI variation | | To be completed by the Training Provider |
|---|---|---|
| I certify that the pilot has satisfactorily met the variation requirement(s) to extend privileges of IRI in accordance with Part-FCL for the following: | | |
| FCL.905.IRI(b) (upgrade to MPL) ☐ | FCL.915.IRI(a) (adding ME privileges in aeroplanes) ☐ **Note: Must also complete section 5(iv)** | FCL.915.IRI(b) (adding ME privileges in helicopters) ☐ **Note: Must also complete section 5(iv)** |
| **Training Provider Details:** | | |
| Name of Approved Training Organisation (ATO) (if applicable): ..... ATO number (if applicable): ..... | | |
| Competent Authority issuing approval (if applicable): ..... | | |
| Name of Head of Training (or authorised signatory ): ..... | | |
| Signature of Head of Training or authorised signatory: ..... Date..... | | |

| 6)viii) Mountain Rating Instructor variation | To be completed by the Training Provider |
|---|---|
| I certify that the pilot has satisfactorily met the variation requirement(s) to extend privileges in accordance with Part-FCL for the following: | |
| FCL.930.MI(a) Mountain Rating Instructor (wheels) ☐ | |
| FCL.930.MI(a) Mountain Rating Instructor (skis) ☐ | |
| FCL.930.MI(a) Mountain Rating Instructor (wheels and skis) ☐ | |
| **Training Provider Details:** | |
| Name of Approved Training Organisation (ATO) (if applicable): ..... ATO number (if applicable): ..... | |
| Competent Authority issuing approval (if applicable) : ..... | |
| Name of Head of Training (or authorised signatory ): ..... | |
| Signature of Head of Training or authorised signatory: ..... Date..... | |

| 7) Observation Report Form for Multi-Crew Co-Operation Instructor (A/H/PL) | | | To be completed by the Examiner |
|---|---|---|---|
| FSTD Qualification Number: ..... Aircraft Represented: ..... | | | |
| Date: ..... Start time: ..... Finish time:..... Duration: ..... | | | |
| | **Assessment** | | **Remarks** |
| a) | Prepare Resources | ☐ | |
| b) | Create a climate conducive to learning | ☐ | |
| c) | Present knowledge | ☐ | |
| d) | Integrate threat and Error management (TEM) and crew resource management | ☐ | |
| e) | Manage time to achieve training objectives | ☐ | |
| f) | Facilitate learning | ☐ | |
| g) | Assess trainee performance | ☐ | |
| h) | Monitor and review progress | ☐ | |
| i) | Evaluate training sessions | ☐ | |
| j) | Report outcome | ☐ | |

I confirm that the Applicant detailed in Section 1 above has conducted at least 3 hours of flight / MCC instruction under my supervision and to my satisfaction, in accordance with Part-FCL.920, Part-FCL.930.MCCI and / or Part-FCL.940.MCCI and should therefore be issued with the following authorisation.

Initial Authorisation ☐ Revalidation/Renewal ☐ Variation ☐

Multi-Crew Co-Operation Instructor (A) ☐

Multi-Crew Co-Operation Instructor (H) ☐

Multi-Crew Co-Operation Instructor (PL) ☐

**Examiner Details**

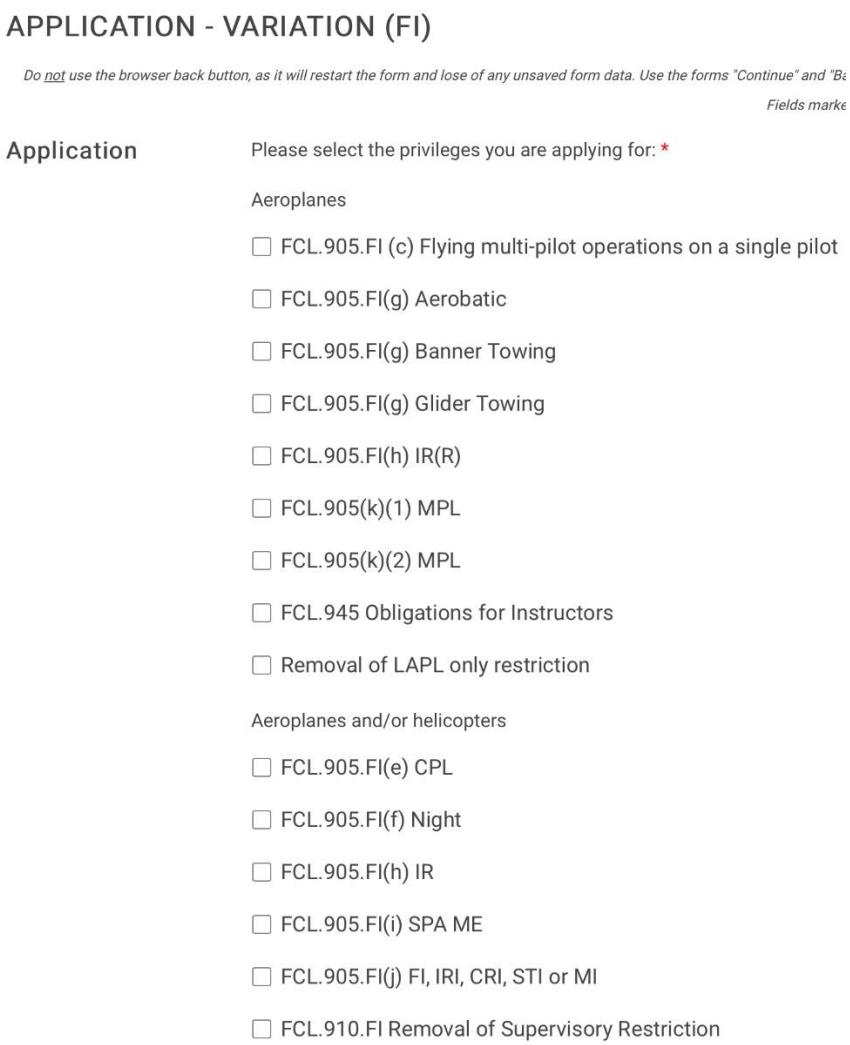
Name of Examiner: ..... Examiner reference number: .....

Competent Authority issuing Examiner's Certificate: .....

Signature of Examiner: ..... Date.....

**SRG 2159 Application for the issue, renewal, revalidation or variation of an instructor certificate (on-line form)**

Below is a screen-shot of what can be applied for using this on-line form.



APPLICATION - VARIATION (FI)

*Do not use the browser back button, as it will restart the form and lose of any unsaved form data. Use the forms "Continue" and "Ba*

*Fields marke*

Application

Please select the privileges you are applying for: *

Aeroplanes

- ☐ FCL.905.FI (c) Flying multi-pilot operations on a single pilot
- ☐ FCL.905.FI(g) Aerobatic
- ☐ FCL.905.FI(g) Banner Towing
- ☐ FCL.905.FI(g) Glider Towing
- ☐ FCL.905.FI(h) IR(R)
- ☐ FCL.905(k)(1) MPL
- ☐ FCL.905(k)(2) MPL
- ☐ FCL.945 Obligations for Instructors
- ☐ Removal of LAPL only restriction

Aeroplanes and/or helicopters

- ☐ FCL.905.FI(e) CPL
- ☐ FCL.905.FI(f) Night
- ☐ FCL.905.FI(h) IR
- ☐ FCL.905.FI(i) SPA ME
- ☐ FCL.905.FI(j) FI, IRI, CRI, STI or MI
- ☐ FCL.910.FI Removal of Supervisory Restriction