UK Civil Aviation Authority

The National Private Pilot's Licence

and Instrument Meteorological Conditions Rating

Requirements and guidance

CAP 3181



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Revision history

Amendment	Date	Revision history
Original	Oct 2025	New CAP
Version 2	August 2026	New version. Reorganised chapters to simplify the structure of the CAP. Changes to NPPL(A) requirements to correct errors in original version and align with updated syllabi. Chapters 5 to 12 contain new content.

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Introduction

1. This Civil Aviation Publication (CAP) is the primary reference document relating to the National Private Pilot's Licence (NPPL). The CAP also includes requirements for the Instrument Meteorological Conditions (IMC) rating, towards endorsement on any appropriate flight crew licence in the aeroplane category.

2. The NPPL is issued by the CAA or other delegated authority under the provisions of the Air Navigation Order 2016 (ANO 2016). The NPPL is valid for flight in UK registered aircraft that are within the privileges of the licence and associated class ratings or other flying ratings that may be endorsed.

3. The NPPL is only issued in the aeroplane category, as the NPPL(Aeroplanes). The licence privileges are limited to aeroplanes of a maximum take-off weight of 2,000 kg, with no more than four people (including the pilot) onboard the aircraft.

4. Three class ratings are available for endorsement on the NPPL(A) – Single Engine Piston (SEP), Microlight aeroplane and Touring Motor Glider (TMG). Subject to the completion of appropriate differences training, the SEP rating includes the privileges of the Microlight class rating. Additional flying ratings include night, IMC and aerobatics.

5. The NPPL(A) is not issued in accordance with the standards and recommended practices of Annex 1 (Personnel Licensing) to the Convention on International Civil Aviation ("ICAO Annex 1") and is therefore not automatically valid for flight outside of the UK. International flight may be possible with the permission of the relevant foreign state. Flight in aircraft registered outside the UK must also be with the validation or permission from the relevant state of registry.

6. The minimum medical standard for flight as pilot in command (PIC) under the privileges of the NPPL or supervised solo flight training is a medical declaration made in accordance with article 163 of the ANO 2016 (a "Pilot Medical Declaration"). This CAP does not include the requirements for the Pilot Medical Declaration – for further information and to make a declaration, see the relevant pages of the CAA website.

7. This CAP does not address requirements for the gaining, revalidation or renewal of a licence issued in accordance with Part-FCL of UK Regulation (EU) 1178/2011 ("the UK Aircrew Regulation"). Details of the UK Aircrew Regulation may be found in the Aviation Regulatory Library of the CAA website.

Supplementary amendments

Supplementary amendments to CAP 3181 may be issued to:

- introduce a new subject or major change to existing requirements; or
- clarify an existing requirement.

Supplementary amendments will be incorporated at the next available opportunity.

Enquiries

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Editorial definitions

Throughout this document the following editorial definitions apply:

- "Shall" or "must" are used to indicate a mandatory requirement.
- "Expect" or "should" are used to indicate strong obligation.
- "May" is used to indicate discretion.
- "Examiner" is used to indicate a person who holds a valid examiner certificate or authorisation issued by the UK CAA.
- "Applicant" is used to indicate a person who is seeking the issue, revalidation or renewal of a licence, certificate or rating.

Regulatory definitions

Definitions are derived from relevant regulation such as the Air Navigation Order 2016 or the assimilated implementing rules adopted pursuant to UK Regulation (EU) 2018/1139 ("the UK Basic Regulation"). Reference should be made to the source text to confirm applicability in a specific context.

Word	Meaning
Aerobatic flight	An intentional manoeuvre involving an abrupt change in an aircraft's attitude, an abnormal attitude, or abnormal acceleration, not necessary for normal flight or for instruction for licences, certificates, or ratings other than the aerobatic rating.
Aeroplane	An engine-driven fixed-wing aircraft heavier than air which is supported in flight by the dynamic reaction of the air against its wings.
Aircraft	Any machine which can derive support in the atmosphere from the reactions of the air other than the reactions of the air against the earth's surface.
Airmanship	The consistent use of good judgement and well-developed knowledge, skills and attitudes to accomplish flight objectives.
Airship	A power-driven lighter-than-air aircraft, with the exception of hot-air airships, which are considered to be balloons.
Assessment of Competence	The demonstration of skills, knowledge and attitude for the initial issue, revalidation or renewal of an instructor or examiner certificate.
Balloon	A lighter-than-air aircraft which is not engine-driven and sustains flight through the use of either gas or an airborne heater.
Category of aircraft	A categorisation of aircraft according to specified basic characteristics, for example aeroplane, airship, helicopter, sailplane and balloon.

Class of aeroplane	A categorisation of single-pilot aeroplanes not requiring a type rating.
Cross-country	A flight between a point of departure and a point of arrival following a pre-planned route, using standard navigation procedures.
Dual instruction time	Flight time or instrument ground time during which a person is receiving flight instruction from a properly authorised instructor.
Error management	The process of detecting and responding to errors with countermeasures which reduce or eliminate the consequences of errors and mitigate the probability of errors or undesired aircraft states.
Flight time	For aeroplanes, touring motor gliders and powered-lift aircraft, it means the total time from the moment an aircraft first moves for the purpose of taking off until the moment it finally comes to rest at the end of the flight. For helicopters, it means the total time from the moment a helicopter's rotor blades start turning until the moment the helicopter finally comes to rest at the end of the flight, and the rotor blades are stopped.
Flight time under Instrument Flight Rules	All flight time during which the aircraft is being operated under the Instrument Flight Rules (IFR).
Flown solely by reference to instruments	That the pilots fly the aircraft without any external visual references, in simulated or actual instrument meteorological conditions (IMC).
Helicopter	A heavier-than-air aircraft supported in flight chiefly by the reactions of the air on one or more power-driven rotors on substantially vertical axes.
Night	The time from half an hour after sunset until half an hour before sunrise (both times inclusive), sunset and sunrise being determined at surface level.
Performance Based Navigation	Area navigation based on performance requirements for aircraft operating along an ATS route, on an instrument approach procedure or in a designated airspace.
Pilot in Command	The pilot designated as being in command and charged with the safe conduct of the flight.
Pilot in Command under Supervision	A co-pilot performing, under the supervision of the pilot-in-command, the duties and functions of a pilot-in-command.
Pilot Medical Declaration	A medical declaration made in accordance with Article 163(3) of the Air Navigation Order 2016 or Exemption (ORS 4 No.1629).
Powered Sailplane	A sailplane equipped with one or more engines that has, with engines inoperative, the characteristics of a sailplane.

Proficiency check	The demonstration of skill to revalidate or renew ratings or privileges, and including such oral examination as may be required.
Renewal	The administrative action taken after a rating or certificate has lapsed for the purpose of renewing the privileges of the rating or certificate for a further specified period consequent upon the fulfilment of specified requirements.
Revalidation	The administrative action taken within the period of validity of a rating or certificate which allows the holder to continue to exercise the privileges of a rating or certificate for a further specified period consequent upon the fulfilment of specified requirements.
Sailplane	A heavier-than-air aircraft which is supported in flight by the dynamic reaction of the air against its fixed lifting surfaces, the free flight of which does not depend on an engine.
Skill test	The demonstration of skill for a licence or rating issue, including such oral examination as may be required.
Solo flight time	Flight time during which a student pilot is the sole occupant of an aircraft.
Touring Motor Glider (TMG)	Unless otherwise specified following the certification process in accordance with Annex I (Part 21) to Regulation (EU) No 748/2012, a specific class of powered sailplanes that has an integrally mounted, non-retractable engine and a non-retractable propeller. It shall be capable of taking off and climbing under its engine power according to its flight manual.

Regulatory references

Reference	Legislation
ANO 2016	The Air Navigation Order 2016 (as amended), made pursuant to section 60 of the Civil Aviation Act 1982.
Part-FCL	Annex I (Part-FCL) to UK Regulation 1178/2011 (“the UK Aircrew Regulation”), detailing requirements for the licensing of flight crew.
Part-MED	Annex IV (Part-MED) to UK Regulation 1178/2011 (“the UK Aircrew Regulation”), detailing requirements for the issue of pilot medical certificates and aeromedical examiners (AME).
Part-NCO	Annex VII (Part-NCO) to UK Regulation No.965/2012 (“the UK Air Operations Regulation”), detailing requirements for the operation of other-than-complex aeroplanes and helicopters on non-commercial and flight training operations.
Part-SFCL	Annex III (Part-SFCL) to the UK Regulation 2018/1976 (“the UK Sailplane Regulation”), detailing requirements for the licensing of sailplane pilots.

Abbreviations

Abbreviation	Definitions	Notes
ADF	Automatic Direction Finding	
AFM	Aircraft Flight Manual	
AGL	Above Ground Level	
AIC	Aeronautical Information Circular	
AIP	Aeronautical Information Publication	
AIS	Aeronautical Information Service	
AeMC	Aeromedical Centre	
AMC	Acceptable Means of Compliance	Normally associated with the assimilated (former EASA) regulations
AME	Aeromedical Examiner	
ANO 2016	Air Navigation Order 2016	As amended
AoC	Assessment of Competence	
ATC	Air Traffic Control	
ATIS	Automatic Terminal Information Service	
ATO	Approved Training Organisation	
ATPL	Airline Transport Pilot Licence	
ATSU	Air Traffic Service Unit	
BBAC	British Balloon and Airship Club	
BGA	British Gliding Association	
BITD	Basic Instrument Training Device	
BMAA	British Microlight Aircraft Association	
BPL	Balloon Pilot Licence	
CAA	Civil Aviation Authority	
CAP	Civil Aviation Publication	
CBM IR	Competence Based Modular Instrument Rating	
CDFA	Constant Descent Final Approach	
CDI	Course Deviation Indicator	

Abbreviation	Definitions	Notes
C of A	Certificate of Airworthiness	
C of R	Certificate of Revalidation	As part of the licence, where the validity of ratings and certificates is endorsed.
CPL	Commercial Pilot Licence	
CRI(A)	Class Rating Instructor (Aeroplane)	
CRE	Class Rating Examiner	
CRI	Class Rating Instructor	
DME	Distance Measuring Equipment	
DR	Dead Reckoning navigation	
DTO	Declared Training Organisation	
DVE	Degraded Visual Environment	
EFIS	Electronic Flight Instrument System	
FCL	Flight Crew Licensing	
FE	Flight Examiner	
FI	Flight Instructor	
FI(A)	Flight Instructor (Aeroplane)	
FI(B)	Flight Instructor (Balloon)	
FI(H)	Flight Instructor (Helicopter)	
FI Restricted	Restricted Flight Instructor	
FI(S)	Flight Instructor (Sailplane)	
FIE	Flight Instructor Examiner	
FNPT	Flight and Navigation Procedures Trainer	
FRTOL	Flight Radio Telephony Operators Licence	
FSTD	Flight Simulation Training Devices	
Ft	Feet	
FTD	Flight Training Device	
GM	Guidance Material	
GNSS	Global Navigation Satellite System	

Abbreviation	Definitions	Notes
GPS	Global Positioning System	
GST	General Skill Test	
hrs	Hours	
HoT	Head of Training	
ICAO	International Civil Aviation Organisation	
IFR	Instrument Flight Rules	
ILS	Instrument Landing System	
IMC	Instrument Meteorological Conditions	
IMC Rating	Instrument Meteorological Conditions Rating	
IR(A)	Instrument Rating (Aeroplanes)	
IRE	Instrument Rating Examiner	
IR(H)	Instrument Rating (Helicopters)	
IRI	Instrument Rating Instructor	
ISA	International Standard Atmosphere	
Kg	Kilogram	
LAPL	Light Aircraft Pilot Licence	
LNAV	Lateral Navigation	
M	Meter	
MEP	Multi Engine Pilot	
METAR	Meteorological Aerodrome Report	
MGIR	Motorglider Instructor Rating	
MTOM	Maximum Take-Off Mass	
NDB	Non-Directional Beacon	
NM	Nautical Miles	
NOTAM	Notice to Airmen	
NPA	Notice of Proposed Amendment	
NPPL	National Private Pilot Licence	

Abbreviation	Definitions	Notes
OAT	Outside Air Temperature	
PBN	Performance Based Navigation	
PIC	Pilot in Command.	
PICUS	Pilot in Command under Supervision	
PPL	Private Pilot Licence	
PUT	Pilot under Training	Sometimes referred to as Dual.
QDM	Magnetic heading (aircraft to station)	
QDR	Magnetic heading (station to aircraft)	
QFE	Atmospheric pressure at aerodrome elevation	
QFI	Qualified Flying Instructor	Only those B1 CFS Category or above for this document.
QGI	Qualified Gliding Instructor	Only those B1 CFS Category or above for this document.
QHI	Qualified Helicopter Instructor	Only those B1 CFS Category or above for this document.
QMP(A)	Qualified Military Pilot (Aeroplanes)	Fixed Wing Pilots in receipt of a Pilot Flying Badge.
QMP(H)	Qualified Military Pilot (Helicopters)	Rotary Wing Pilots in receipt of a Pilot Flying Badge.
QNH	Altimeter sub-scale setting	
RAF	Royal Air Force	
RAIM	Receiver Autonomous Integrity Monitoring	
RNAV	Radio Navigation	
RNP	Required Navigation Performance	
SE	Single Engine	
SEP	Single Engine Piston	
SID	Standard Instrument Departure	
SLMG	Self-Launching Motor Glider	
SPA	Single Pilot Aeroplane	An aeroplane certificated for operation by one pilot.

Abbreviation	Definitions	Notes
SPH	Single Pilot Helicopter	A helicopter certificated for operation by one pilot and which is not required to be operated with at least two pilots in accordance with Air Operations Regulation.
SPIC	Student PIC	Normally only used in association with an integrated course of flight training towards the issue of a CPL/IR.
SPL	Sailplane Pilot Licence	
SSR	Secondary Surveillance Radar	
TAF	Aerodrome forecast	
TEM	Threat and Error Management	
TK	Theoretical Knowledge	
TMG	Touring Motor Glider	
UAS	University Air Squadron	
UPRT	Upset Prevention and Recovery Training	
UTC	Universal Time Coordinated	
VFR	Visual Flight Rules	
VHF	Very High Frequency	
VMC	Visual Meteorological Conditions	
VNAV	Vertical Navigation	
VOLMET	Meteorological information for inflight	
VOR	VHF Omni-directional Radio Range	

Chapter 1

Common requirements and privileges

Minimum age

1.1 An applicant for an NPPL(A) shall be at least 17 years of age. The minimum age for solo flight is 16 years.

1.2 There is no minimum age for a person to receive flight training. Before commencing a training course, the instructor or training organisation must consider personal maturity, behaviours, and physical ability to use the flight controls and conduct an effective lookout from the aircraft.

1.3 Flight instructors and training organisations that offer flight instruction to persons under the age of 18 or to vulnerable persons must consider their safeguarding obligations.

Licence and rating validity

1.4 The NPPL(A) is issued with a lifetime validity. To exercise the privileges of the licence, a valid class rating must be endorsed on the certificate of revalidation page of the licence document. On initial issue of the licence, a class rating appropriate to the course of training undertaken will be endorsed.

1.5 Class ratings are valid for 24 months, from the end of the calendar month in which the relevant skill test or proficiency check was passed. If revalidating a class rating via proficiency check, the next validity period will start from the end of the current one, provided the check is passed within three months prior to the existing rating expiry date.

1.6 A flight instructor certificate valid for microlight aeroplanes may be endorsed on an NPPL. Flight instructor certificates are valid for 36 months from the end of the calendar month in which the appropriate flight test was passed.

Medical requirements

1.7 An applicant for an NPPL must have made a valid PMD or hold a valid UK Class 1, 2 or LAPL medical certificate. A student pilot flying solo under the supervision of an authorised instructor must also have made a PMD or hold an appropriate medical certificate.

1.8 The requirements for a PMD are detailed in article 163 of the ANO 2016. More information on medical requirements and certificates is available on the CAA website at Medical | UK Civil Aviation Authority, or discuss with an Aeromedical Examiner (AME).

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Flight training and experience

1.9 An applicant for an NPPL(A) must complete a course of flight training in an appropriate class of aeroplane. Details of the flight training and experience requirements are contained in Chapter 2.

Theoretical knowledge

1.10 An applicant for an NPPL(A) with SEP(Land), TMG or Microlight class rating shall pass either the five NPPL(A) examinations or the nine Part-FCL PPL(A) examinations.

1.11 The NPPL(A) examinations include:

- Air law
- Human performance
- Meteorology
- Navigation
- Aircraft technical

1.12 These examinations are all conducted in paper format. The ground examiner will mark the examination and debrief the candidate once complete, retaining records of examination passes and fails.

1.13 The syllabus and learning objectives for the examinations are contained in Chapter 9.

1.14 The Communications exam is required if the pilot is seeking to gain the FRTOL. This may be conducted either as a paper examination or as a separate examination on the eExams system.

1.15 The Part-FCL PPL(A) examinations include:

- Aircraft general knowledge
- Air law
- Communications
- Flight performance and planning
- Human performance
- Meteorology
- Navigation
- Operational procedures
- Principles of flight

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1.16 The Part-FCL examinations are conducted through the eExams system. The syllabus and learning objectives for the Part-FCL examinations are available on the CAA website at GA Theoretical Knowledge e-Exams | UK Civil Aviation Authority.

1.17 An applicant for an NPPL(A) with a Microlight class rating restricted to Powered Parachute aircraft must pass the NPPL(A) theoretical knowledge examinations.

1.18 An applicant for an NPPL(A) shall successfully pass all the examinations within 24 months prior to applying for the licence.

1.19 More information on the procedures for the NPPL and Part-FCL examinations is available on the CAA website at Standards Document 11: Procedures & Conduct for all GA Theoretical Knowledge e-Examinations | UK Civil Aviation Authority.

Skill test and proficiency checks

1.20 Applicants for an NPPL(A) shall pass a skill test with an authorised Flight Examiner prior to the issue of the licence. A subsequent test to revalidate or renew a class rating is known as a 'proficiency check'.

1.21 The skill test must be taken in the same aircraft class as that used in the associated flight training course – SEP (Land), TMG, Microlight (three-axis), Microlight (weight shift) or Microlight (powered parachute).

1.22 All flight training requirements and theoretical knowledge examinations must be completed prior to the applicant undertaking the skill test, except that the applicant may complete a shortfall in the required supervised solo flight time after passing the skill test.

1.23 The skill test should be taken as soon as possible after the completion of training, and all sections of the test must be completed to pass the test. If the applicant does not pass all sections of the skill test at the first attempt, the section(s) which have been failed may be attempted in a further test. There is no limit to the number of tests that may be taken.

1.24 The skill test is valid for licence issue for 9 months from the date of a successful pass in all sections towards applying for the licence. The validity of the class rating endorsed on the licence is counted from the end of the month in which the skill test was passed. A delay in applying for licence issue therefore reduces the usable validity of the associated class rating.

1.25 Flight Examiners should not conduct a skill test or proficiency check if they feel that their objectivity may be affected. More guidance may be found in the Flight Examiner's Handbook, available on the CAA website.

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Flight radio telephony operator's licence (FRTOL)

1.26 Holders of a pilot licence who wish to operate the communications and transponder equipment installed in an aircraft must hold a FRTOL.

1.27 Student pilots while under training may operate the communications and transponder equipment installed in an aircraft under the supervision of a flight instructor. This includes during supervised solo flights.

1.28 Applicants for a FRTOL must pass the associated practical test and written examination in Communications. During the practical test, applicants will also be assessed for English language proficiency in accordance with Appendix 1 to ICAO Annex 1.

1.29 The FRTOL requirements are found in CAP 2325, available at CAP 2325: Guidance for FRTOL Practical Test Candidates | UK Civil Aviation Authority.

Licence application

1.30 Once the applicant has completed all required training and testing, the relevant flight instructor or training organisation should allocate time to assist the applicant in applying for their licence.

1.31 The instructor or training organisation should ensure that all validity periods for examinations, tests or medicals (if applicable) are valid, and that all minimum flight training and supervised solo requirements have been met.

1.32 The instructor or training organisation should supervise the applicant in completing the relevant application form/s for the licence, rating or certificate. The relevant forms are available on the websites of the BMAA or LAA.

1.33 Applications for the NPPL(A) with a Microlight class rating should be made to the British Microlight Aircraft Association (BMAA) using form 102 M.

1.34 Applications for the NPPL(A) with SEP or TMG class ratings should be made to the Light Aircraft Association (LAA) using the form "Grant of a NPPL with SEP or TMG classing rating".

1.35 Applications for the FRTOL must be made to the CAA using the online form SRG1106. There is no additional fee for the issue of the FRTOL if you hold or have applied for the issue of an NPPL. Form SRG1106 is available on the CAA website.

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Licence privileges

1.36 The holder of an NPPL(A) with a valid and appropriate class rating may act as PIC of a UK registered aeroplane within the scope of the rating(s) held.

1.37 Since the NPPL(A) is not issued in full accordance with the requirements of ICAO Annex 1 (Personnel Licensing), flight outside the UK normally requires the permission of the relevant foreign state.

1.38 The privileges and conditions of the NPPL(A) and associated class and flying ratings are as defined in Schedule 8 to the ANO 2016. For full details refer to the online version of the ANO 2016, available on the legislation.gov.uk website.

1.39 For reference, the licence privileges are reproduced below:

(1) The holder of a National Private Pilot's Licence (Aeroplanes) is entitled—

(a) in accordance with the remainder of this paragraph, to fly for the purposes of non-commercial operations as pilot in command of any aeroplane for which a class rating is included in the licence provided that the total number of persons carried (including the pilot) does not exceed four, and the maximum certified take-off mass of the aeroplane does not exceed 2,000 kg;

(b) with the permission of the competent authority for the airspace in which the aircraft is being flown, to fly such an aeroplane outside the United Kingdom;

(c) to fly such a microlight aeroplane or TMG for the purpose of commercial operation—

(i) which consists of instruction or flying examinations, provided that—

(aa) in the case of instruction, the licence includes an appropriate instructor certificate; and

(bb) in the case of flying examinations, the holder is authorised to conduct such examinations by the CAA; or

(ii) where the excepted flights condition is met;

(d) otherwise than as provided by sub-paragraph (c), to fly such an aeroplane for the purpose of commercial operation where the excepted flights condition is met;

(e) to fly as pilot in command when carrying passengers if—

(i) the recent experience condition is met; or

(ii) the recent experience exception is met;

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(f) to fly as pilot in command of any such aeroplane at night where the licence includes a night rating (aeroplanes);

(g) to fly as pilot in command of any such aeroplane under Instrument Flight Rules where the licence includes an instrument meteorological conditions rating; and

(h) to receive remuneration or other valuable consideration for services as a pilot on a flight if the remuneration condition is met.

(2) The holder of a National Private Pilot's Licence (Aeroplanes) may not fly—

(a) for the purpose of public transport or commercial operation (other than commercial operation permitted by sub-paragraphs (1)(c) or (1)(d));

(b) for remuneration or other valuable consideration (other than remuneration or other valuable consideration permitted by sub-paragraph (1)(h)); or

(c) other than as authorised by paragraph (1),

unless authorised to do so by the CAA.

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Chapter 2

Flight training and experience

Single Engine Piston (SEP) and Touring Motor Glider (TMG)

Flight training and experience requirements

2.1 An applicant for an NPPL(A) with SEP(Land) or TMG class rating shall have completed at least 32 hours flight time as pilot, appropriate to the class rating sought, in aeroplanes (excluding the skill test). The flight training syllabus is detailed in Chapter 11.

2.2 Training for the NPPL(A) SEP(Land) and NPPL(A) TMG training may be conducted at an Approved Training Organisation (ATO), Declared Training Organisation (DTO) or with an independent Flight Instructor (FI).

2.3 Training for the NPPL(A) SEP(Land) or TMG must include the following:

(a) Dual flight instruction as required to pass the licence skill test;

(b) ten hours supervised solo flight time which must include at least four hours of solo cross-country flight time, including one solo cross-country flight of at least 150 km (80 NM) during which a full stop landing at one aerodrome other than the point of departure shall be made.

Skill test

2.4 An applicant for an NPPL(A) with SEP or TMG class rating shall have demonstrated the ability to act as PIC in the relevant class of aeroplane and conduct the procedures and flight manoeuvres described in Chapter 10.

2.5 Prior to undertaking the skill test, the applicant for an NPPL(A) with SEP or TMG class rating shall have satisfactorily completed all the required flight training and theoretical knowledge examinations, with the exception that a shortfall in supervised solo flight time may be completed after passing the skill test.

2.6 The Communications examination shall be passed prior to the skills test if completing the Part-FCL examinations, or if completing the NPPL examinations and applying for the FRTOL.

2.7 The skill test must be completed in one aircraft class – SEP or TMG. The class on which the skill test is completed will be endorsed on the licence when issued.

2.8 The aircraft used for the skill test shall meet the appropriate requirements for training.

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Microlight aeroplane

Flight training and experience requirements

2.9 Flight training towards the NPPL(A) with Microlight class rating may be undertaken in microlight aeroplanes with three-axis flight controls, weight shift flight controls, or of a 'powered parachute' design.

2.10 Before operating a control type (three axis and weight shift) different from that previously flown, the licence holder must complete appropriate differences training (see Chapter 4) with a qualified flight instructor.

2.11 Applicants for an NPPL with Microlight class rating may obtain the licence either with or without operational limitations.

Three axis and weight shift microlight (with operational limitation)

2.12 Applicants must complete 15 hours flight training as pilot of microlight aeroplanes in accordance with the NPPL syllabus, including seven hours as PIC.

2.13 When an NPPL(A) with Microlight class rating is issued with operational limitations, it will impose the following constraints:

- **Limitation 1:**

  No person in addition to the pilot shall be carried in the aeroplane other than a qualified Flight Instructor in a microlight aeroplane equipped with dual controls, provided that where the pilot has gained not less than 25 hours experience on microlight aeroplanes, including not less than 10 hours as PIC and such experience has been entered in his/her personal flying logbook and has been certified by a person holding a Flight Examiner authorisation, then this Limitation shall cease to apply.

- **Limitation 2:**

  No flight shall commence or continue unless:

  (i) there is no cloud below 1000 feet above ground level over the take-off site and over the planned route including the landing site; and

  (ii) the flight can be conducted in a flight visibility of not less than ten KM.

- **Limitation 3:**

  The aeroplane shall not fly further than 8 NM from the take-off site.

2.14 Limitations 2 and 3 may be removed from the licence via application to the BMAA or CAA, after completion of 25 hours experience in microlight aeroplanes, to include navigation flying training as per paragraph 2.15.

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2.15 Five hours navigation flying training, including three hours of solo navigation, and completion of either (a) or (b):

(a) Two solo cross-country flights, and each must:

(i) be a minimum total distance of 40 NM;

(ii) include a landing at an aerodrome which is at least 15 NM (measured in a straight line) from the point of departure;

(iii) be flown over different routes and to different aerodromes.

(b) One solo cross-country flight of at least 80 NM total distance, during which a full stop landing is made at an aerodrome at least 15 NM (measured in a straight line) from the point of departure.

Three axis and weight shift microlight (without operational limitation)

2.16 An applicant shall complete a minimum of 25 hours training as pilot of a microlight aeroplane following the BMAA NPPL(A) syllabus, including ten hours supervised solo flight time and five hours navigation flying training.

2.17 The five hours navigation flying training must include three hours of solo navigation, and completion of either (a) or (b):

(a) Two solo cross-country flights, and each must:

(i) be a minimum total distance of 40 NM;

(ii) include a landing at an aerodrome which is at least 15 NM (measured in a straight line) from the point of departure;

(iii) be flown over different routes and to different aerodromes.

(b) One solo cross-country flight of at least 80 NM total distance, during which a full stop landing is made at an aerodrome at least 15 NM (measured in a straight line) from the point of departure.

Microlight (Powered Parachutes)

2.18 Pilots who undertake their training in a powered parachute microlight aeroplane will be granted an NPPL(A) with a “Microlight – Powered Parachute only” rating.

2.19 The training course must follow either the dual training syllabus for a two-seat aeroplane or the solo training syllabus for a single seat aeroplane – for more details contact the BMAA.

2.20 Holders of the powered parachute only rating (without operational limitation) may obtain a Microlight class rating not restricted to powered parachute aeroplanes by complying with the requirements in 2.16 and 2.17 (without operational limitation), or 2.12 (with operational limitation), and passing the NPPL(A) skill test in a microlight aeroplane with three axis or weight shift controls.

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Microlight (Powered Parachutes) with operational limitation

2.21 Applicants must produce evidence of having satisfactorily completed a course of training following the BMAA NPPL(A) powered parachute syllabus.

2.22 The syllabus of training must include a minimum of four hours of flight time in a powered parachute supervised by a flight instructor, to include:

(a) one hour as solo PIC;

(b) 25 take-offs and landings to a full stop, with six as PIC.

2.23 The skill test flight time may be included in the minimum four hours of flight training but does not form part of the one hour required as PIC.

2.24 The licence will be endorsed with the limitations listed in paragraph 2.13.

Microlight (Powered Parachutes) without operational limitation

2.25 Applicants must produce evidence of having satisfactorily completed a course of training following the BMAA NPPL powered parachute syllabus.

2.26 The syllabus of training must provide for a minimum of 15 hours of flight time in a powered parachute supervised by a flight instructor. The total must include not less than:

(a) six hours as PIC;

(c) 25 take-offs and full stop landings of which, with six as PIC;

(d) five hours training in navigation, to include three hours as PIC and two solo 25 NM cross country flights, during each of which the applicant landed at one other site 10 NM or more from the point of departure.

2.27 The two solo cross-country flights mentioned in 2.27 (c) must be flown over different routes and to different sites.

Skill test

2.28 An applicant for an NPPL(A) with Microlight class rating shall have demonstrated the ability to perform as PIC of a microlight aeroplane and conduct the procedures and flight manoeuvres described in Chapter 10.

2.29 Before attempting the NPPL(A) skill test, the applicant shall have successfully completed all theoretical knowledge examinations. The Communications exam must be passed if completing the Part-FCL examinations, or in addition to the other NPPL(A) examinations if applying for the FRTOL.

2.30 The skill test must be completed in one aeroplane class and with the same control system – weight shift, three-axis or powered parachute.

2.31 The microlight aeroplane used for the skill test shall be appropriate for training and testing.

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Chapter 3

Credits from other licences

Introduction

3.1 Applicants for an NPPL(A) with previous flying experience or other pilot qualifications may complete a reduced course of flight training and theoretical knowledge examinations, in accordance with this Chapter.

3.2 All crediting of previous experience is subject to training needs assessment and demonstration of competency as appropriate.

Flight radio telephony operator's licence

3.3 It is a requirement in the UK that all flight crew operating radio telephony equipment in an aircraft hold a valid flight radio telephony operator's licence (FRTOL). Student pilots operating the radio are considered to do so under the privileges of their instructor's FRTOL.

3.4 An applicant for an NPPL(A) also applying for a FRTOL must pass the theoretical knowledge exam in Communications and the practical FRTOL test. A previous pass in the theoretical knowledge exam may be credited.

3.5 The holder of an RAF Qualified Glider Instructor (QGI) rating applying for a FRTOL will be credited with the FRTOL practical test but must pass the Communications theoretical knowledge exam.

3.6 For full details of the FRTOL requirements please refer to CAP 2325: Guidance for FRTOL Practical Test Candidates | UK Civil Aviation Authority.

Aeroplane licences

Light Aircraft Pilot Licence (LAPL) to NPPL(A) with SEP or TMG class rating

3.7 The holder of a UK issued LAPL(A) with either SEP or TMG privileges and seeking to gain an NPPL(A) with an SEP or TMG class rating shall produce the licence document, which must be endorsed with a class rating valid in accordance with FCL.740.A of the UK Aircrew Regulation.

3.8 The NPPL(A) will be issued with a class rating of the same validity period as held on the existing licence.

3.9 If the applicant does not hold a current class rating, they may complete an NPPL skill test with an authorised Flight Examiner.

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Rotorcraft licences

3.10 Holders of the following UK rotorcraft licences may be credited previous flight experience and passes in theoretical knowledge exams:

- PPL (Gyroplane)
- CPL (Gyroplane)
- PPL (Helicopter) (issued in accordance with the ANO)
- Part-FCL LAPL (Helicopter)
- Part-FCL PPL (Helicopter)
- Part-FCL CPL or ATPL (Helicopter)

Rotorcraft licence to NPPL(A) with SEP class rating

3.11 Requirements for the holder of a licence included in 3.10 and wishing to obtain an NPPL(A) with SEP (Land) class rating are listed below.

3.12 Complete a pre-course assessment flight with the holder of a valid FI(A) to establish how much flight training would be required.

3.13 The required dual training should be set out in a training needs assessment. This training should cover the whole SEP syllabus, with specific emphasis on the following exercises:

- Ex 5, Taxiing
- Ex 6, Straight and level
- Ex 10a, Slow flight
- Ex 10b, Stalling
- Ex 11, Spin avoidance
- Ex 16, Forced landing without power and partial power loss
- Ex 17, Precautionary landings
- Ex 18b, Navigation problems at lower level and in reduced visibility
- Ex 19, Instrument appreciation

3.14 All emergency exercises should be covered during the training. Depending on the pre-course assessment, multiple exercises may be completed in a single flight.

3.15 Complete at least five hours of supervised solo flight, including one cross-country flight of at least 150 km (80 NM), during which a full stop landing is made at an aerodrome other than the point of departure.

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3.16 Pass either the NPPL(A) or Part-FCL theoretical knowledge examinations in the following subjects:

(a) NPPL examinations:

- Air law
- Aircraft (technical)

(b) Part-FCL examinations:

- Operational procedures
- Principles of flight
- Flight performance and planning
- Aircraft general knowledge

3.17 The NPPL(A) skill test must be passed in an SEP aircraft with an authorised Flight Examiner.

Rotorcraft licence to NPPL(A) with TMG class rating

3.18 Requirements for the holder of licence included in 3.10 and wishing to obtain an NPPL(A) with TMG class rating are listed below.

3.19 Complete a pre-course assessment flight with the holder of a valid FI(A) to establish how much flight training would be required.

3.20 The required dual training should be set out in a training needs assessment. This training should cover the whole TMG syllabus, with specific emphasis on the following exercises:

- Ex 3, Taxiing
- Ex 4, Straight and level
- Ex 8a, Slow flight
- Ex 8b, Stalling
- Ex 9, Take-off and climb to downwind position
- Ex 10, Circuit, approach and landing
- Ex 12, Stopping and restarting the engine inflight
- Ex 13, Forced landing without power and partial power loss,
- Ex 14, Precautionary landings
- Ex 15 a to c, Navigation, navigation problems at lower level and in reduced visibility, and radio navigation

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3.21 All emergency exercises should be covered during the training. Depending on the pre-course assessment, multiple exercises may be completed in a single flight.

3.22 Complete five hours of supervised solo flight, including one cross-country flight of at least 150 km (80 NM), during which a full stop landing is made at an aerodrome other than the point of departure.

3.23 Pass either the NPPL(A) or Part-FCL theoretical knowledge examinations in the following subjects:

(a) NPPL examinations:

- Air law
- Aircraft (technical)

(b) Part-FCL examinations:

- Operational procedures
- Principles of flight
- Flight performance and planning
- Aircraft general knowledge

3.24 Pass the NPPL(A) skill test in a TMG with an authorised Flight Examiner.

Rotorcraft licence to NPPL(A) with Microlight class rating

3.25 Requirements for the holder of licence included in 3.10 wishing to obtain an NPPL(A) with Microlight class rating are listed below.

3.26 Complete a pre-course assessment flight with the holder of a valid FI(M) or FI(A) entitled to instruct on microlight aeroplanes, to establish how much flight training would be required.

3.27 The required dual training should be set out in a training needs assessment. This training should cover the whole Microlight syllabus, with specific emphasis on the following exercises:

- Ex 5, Taxiing
- Ex 6, Straight and level
- Ex 10a, Slow flight
- Ex 10b, Stalling, and spin avoidance
- Ex 12, Circuit training
- Ex 13, Advanced take-off and landing techniques

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- Ex 16 a to f, Operational hazards, emergency procedures and unexpected/unplanned occurrences
- Ex 18 a to d, VFR Navigation

3.28 All emergency exercises should be covered during the training. Depending on the pre-course assessment, multiple exercises may be completed in a single flight.

3.29 Complete five hours of supervised solo flights, to include either (a) or (b):

(a) Two solo cross-country flights, and each flight must:

(i) be a minimum total distance of 40 NM;

(ii) include a landing at an aerodrome which is at least 15 NM (measured in a straight line) from the point of departure;

(iii) be flown over different routes and to different aerodromes.

(b) One solo cross-country flight of at least 80 NM total distance, during which a full stop landing is made at an aerodrome at least 15 NM (measured in a straight line) from the point of departure.

3.30 Pass either the NPPL(A) or Part-FCL theoretical knowledge examinations in the following subjects:

(a) NPPL examinations:

- Air law
- Aircraft (technical)

(b) Part-FCL examinations:

- Operational procedures
- Principles of flight
- Flight performance and planning
- Aircraft general knowledge

3.31 Pass the NPPL(A) skill test in a Microlight aeroplane with an authorised Flight Examiner.

Sailplane Pilot Licence (SPL)

SPL without TMG privileges to NPPL(A) with SEP class rating

3.32 The holder of a valid UK issued SPL without TMG privileges who wishes to gain an NPPL(A) with SEP(Land) class rating shall complete the requirements listed as follows.

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3.33 Produce the SPL and show logbook evidence of recent flight experience in accordance with SFCL.160(a) of the UK Sailplane Regulation.

3.34 Complete a pre-course assessment flight with the holder of a valid FI(A) to establish how much flight training would be required.

3.35 The required dual training should be set out in a training needs assessment. This training should cover the whole syllabus, with specific emphasis on the following exercises:

- Ex 5, Taxiing
- Ex 6, Straight and level
- Ex 10a, Slow flight
- Ex 10b, Stalling
- Ex 16, Forced landing without power and partial power loss
- Ex 17, Precautionary landings
- Ex 18b, Navigation problems at lower level and in reduced visibility
- Ex 19, Instrument appreciation

3.36 All emergency exercises should be covered during training. Depending on the pre-course assessment, multiple exercises may be completed in a single flight.

3.37 Complete five hours of supervised solo flights, including one cross-country flight of at least 150 km (80 NM) during which a full stop landing at one aerodrome other than the point of departure shall be made.

3.38 Pass either the following NPPL(A) or Part-FCL theoretical knowledge exams:

(a) NPPL examinations:

- Air law
- Navigation
- Aircraft (technical)

(b) Part-FCL examinations:

- Operational procedures
- Principles of flight
- Flight performance and planning
- Aircraft general knowledge
- Navigation

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3.39 Pass the NPPL(A) skill test in an SEP (Land) aeroplane with an authorised Flight Examiner.

SPL with TMG privileges to NPPL(A) with SEP class rating

3.40 The holder of a valid SPL with TMG privileges in accordance with SFCL.150 of the UK Sailplane Regulation and seeking to gain an NPPL(A) with SEP (Land) class rating shall complete the requirements listed below.

3.41 Produce the SPL and show logbook evidence of recent flight experience in accordance with SFCL.160(b) of the UK Sailplane Regulation.

3.42 Complete a pre-course assessment flight with the holder of a valid FI(A) to establish how much flight training would be required.

3.43 The required dual training should be set out in a training needs assessment. This training should cover the whole syllabus with specific emphasis on the following:

- Ex 10a, Slow flight
- Ex 10b, Stalling
- Ex 16, Forced landing without power and partial power loss
- Ex 17, Precautionary landings
- Ex 18b, Navigation problems at lower level and in reduced visibility
- Ex 19, Instrument appreciation

3.44 All emergency exercises should be covered during training. Depending on the pre-course assessment, multiple exercises may be completed in a single flight.

3.45 Complete five hours of supervised solo flights, including one cross-country flight of at least 150 km (80 NM) during which a full stop landing at an aerodrome other than the point of departure shall be made.

3.46 Pass either following the NPPL(A) or Part-FCL theoretical knowledge exams:

(a) NPPL examinations:

- Air law
- Aircraft (technical)

(b) Part-FCL examinations:

- Operational procedures
- Aircraft general knowledge

3.47 Pass the NPPL(A) skill test in an SEP (Land) aeroplane with an authorised Flight Examiner.

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SPL with TMG privileges to NPPL(A) with TMG class rating

3.48 The holder of a valid UK issued SPL Licence with TMG privileges seeking to gain an NPPL(A) with TMG class rating shall produce the SPL with TMG privileges and show logbook evidence of recent flight experience in accordance with SFCL.160(b) of the UK Sailplane Regulation.

3.49 The NPPL(A) with TMG class rating will be issued with a validity period based on the day on which the application was made.

3.50 If the applicant does not comply with the recent flight experience in SFCL.160(b), they should either obtain compliance with that requirement or pass an NPPL(A) skill test in a TMG with an authorised Flight Examiner.

SPL without TMG privileges to NPPL(A) with Microlight class rating

3.51 The holder of a valid UK issued SPL Licence without TMG privileges who is seeking to gain an NPPL(A) with Microlight class rating shall complete the requirements listed below.

3.52 Produce the SPL and show logbook evidence of recent flight experience in accordance with SFCL.160(a) of the UK Sailplane Regulation.

3.53 Complete a pre-course assessment flight with the holder of a valid FI(M) or FI(A) entitled to instruct on microlight aeroplanes, to establish how much flight training would be required.

3.54 The required dual training should be set out in a training needs assessment. This training should cover the whole syllabus with specific emphasis on the following exercises:

- Ex 5, Taxiing
- Ex 6, Straight and level
- Ex 10a, Slow flight
- Ex 10b, Stalling, and spin avoidance
- Ex 12, Circuit training
- Ex 13, Advanced take-off and landing techniques
- Ex 16 a to f, Operational hazards, emergency procedures and unexpected/unplanned occurrences
- Ex 18 a to d, VFR Navigation

3.55 All emergency exercises should be covered during the training. Depending on the pre-course assessment, multiple exercises may be completed in a single flight.

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3.56 Complete five hours of supervised solo flights, to include either (a) or (b):

(a) Two solo cross-country flights, and each flight must:

(i) be a minimum total distance of 40 NM;

(ii) include a landing at an aerodrome which is at least 15 NM (measured in a straight line) from the point of departure;

(iii) be flown over different routes and to different aerodromes.

(b) One solo cross-country flight of at least 80 NM total distance, during which a full stop landing is made at an aerodrome at least 15 NM (measured in a straight line) from the point of departure.

3.57 Pass either the NPPL(A) or Part-FCL theoretical knowledge examinations in the following subjects:

(a) NPPL examinations:

- Air law
- Navigation
- Aircraft (technical)

(b) Part-FCL examinations:

- Operational procedures
- Principles of flight
- Flight performance and planning
- Aircraft general knowledge
- Navigation

3.58 Pass the NPPL(A) skill test in a microlight aeroplane with an authorised Flight Examiner.

SPL with TMG privileges to NPPL(A) with Microlight class rating

3.59 The holder of a valid UK issued SPL Licence with TMG privileges who is seeking to gain an NPPL(A) with Microlight class rating shall complete the requirements listed below.

3.60 Produce the SPL Licence and show logbook evidence of recent flight experience in accordance with SFCL.160(b) of the UK Sailplane Regulation.

3.61 Complete a pre-course assessment flight with the holder of a valid FI(M) or FI(A) entitled to instruct on microlight aeroplanes, to establish how much flight training would be required.

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3.62 The required dual training should be set out in a training needs assessment. This training should cover the whole syllabus with specific emphasis on the following exercises:

- Ex 10a, Slow flight
- Ex 10b, Stalling, and spin avoidance
- Ex 12, Circuit training
- Ex 13, Advanced take-off and landing techniques
- Ex 16a to f, Operational hazards, emergency procedures and unexpected/unplanned occurrences
- Ex 18a to d, VFR Navigation

3.63 All emergency exercises should be covered during training. Depending on the pre-course assessment, multiple exercises may be completed in a single flight.

3.64 Complete at least 5 hours of supervised solo flights, to include either (a) or (b):

(a) Two solo cross-country flights, and each flight must:

(i) be a minimum total distance of 40 NM;

(ii) include a landing at an aerodrome which is at least 15 NM (measured in a straight line) from the point of departure;

(iii) be flown over different routes and to different aerodromes.

(b) One solo cross-country flight of at least 80 NM total distance, during which a full stop landing is made at an aerodrome at least 15 NM (measured in a straight line) from the point of departure.

3.65 Pass either the NPPL(A) or Part-FCL theoretical knowledge examinations in the following subjects:

(a) NPPL examinations:

- Air law
- Aircraft (technical)

(b) Part-FCL examinations:

- Operational procedures
- Aircraft general knowledge

3.66 Pass the NPPL(A) skill test in a microlight aeroplane with an authorised Flight Examiner.

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RAF Qualified Gliding Instructor

Qualified Gliding Instructor (QGI) to NPPL(A) with SEP class rating

3.67 The holder of an RAF QGI rating and a valid Central Gliding School grading for Volunteer Gliding Squadrons who wishes to obtain an NPPL(A) with SEP(Land) class rating shall complete the requirements listed below.

3.68 Complete a pre-course assessment flight with the holder of a valid FI(A) to establish how much flight training would be required.

3.69 The required dual training should be set out in a training needs assessment. This training should cover the whole syllabus with specific emphasis on the following exercises:

- Ex 5, Taxiing
- Ex 6, Straight and level
- Ex 10a, Slow flight
- Ex 10b, Stalling
- Ex 16, Forced landing without power and partial power loss
- Ex 17, Precautionary landings
- Ex 18b, Navigation problems at lower level and in reduced visibility
- Ex 19, Instrument appreciation

3.70 All emergency exercises should be covered during the training. Depending on the pre-course assessment, multiple exercises may be completed in a single flight.

3.71 Complete at least five hours of supervised solo flights including one cross-country flight of at least 150 km (80 NM) during which a full stop landing at one aerodrome other than the point of departure shall be made.

3.72 Pass either the following NPPL(A) or Part-FCL theoretical knowledge exams:

(a) NPPL examinations:

- Air law
- Navigation
- Aircraft (technical)
- Communications (see paragraph 3.73)

(b) Part-FCL examinations:

- Operational procedures

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- Principles of flight
- Flight performance and planning
- Aircraft general knowledge
- Navigation
- Communications (see paragraph 3.73)

3.73 If the applicant is also applying for a FRTOL, the holder of a QGI rating will be credited with the FRTOL practical test but must pass the Communications examination in either paper format or through eExams, unless otherwise credited in accordance with CAP 2325: Guidance for FRTOL Practical Test Candidates | UK Civil Aviation Authority.

3.74 Pass the NPPL(A) skill test in an SEP (Land) aeroplane with an authorised Flight Examiner.

QGI to NPPL(A) with TMG class rating

3.75 The holder of an RAF QGI rating with a valid Central Gliding School grading for Volunteer Gliding Squadrons who wishes to obtain an NPPL(A) with TMG class rating shall complete the requirements listed below.

3.76 Complete a pre-course assessment flight with the holder of a valid FI(A) to establish how much flight training would be required.

3.77 The required dual training should be set out in a training needs assessment. This training should cover the whole syllabus with specific emphasis on the following exercises:

- Ex 3, Taxiing
- Ex 4, Straight and level
- Ex 8a, Slow flight
- Ex 8b, Stalling
- Ex 9, Take-off and climb to downwind position
- Ex 10, Circuit, approach and landing
- Ex 12, Stopping and restarting the engine inflight
- Ex 13, Forced landing without power and partial power loss,
- Ex 14, Precautionary landings
- Ex 15 a to c, Navigation, navigation problems at lower level and in reduced visibility, and radio navigation

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3.78 All emergency exercises should be covered during the training. Depending on the pre-course assessment, multiple exercises may be completed in a single flight.

3.79 Complete at least five hours of supervised solo flights including one cross-country flight of at least 150 km (80 NM) during which a full stop landing at one aerodrome other than the aerodrome of departure shall be made.

3.80 Pass either the NPPL(A) or Part-FCL theoretical knowledge examinations in the following subjects:

(a) NPPL examinations:

- Air law
- Navigation
- Aircraft (technical)
- Communications (see paragraph 3.81)

(b) Part-FCL examinations:

- Operational procedures
- Principles of flight
- Flight performance and planning
- Aircraft general knowledge
- Navigation
- Communications (see paragraph 3.81)

3.81 If the applicant is also applying for a FRTOL, the holder of a QGI rating will be credited with the FRTOL practical test but must pass the Communications examination in either paper format or through eExams, unless otherwise credited in accordance with CAP 2325: Guidance for FRTOL Practical Test Candidates | UK Civil Aviation Authority.

3.82 Pass the NPPL(A) skill test in a TMG with an authorised Flight Examiner.

QGI to NPPL(A) with Microlight class rating

3.83 The holder of an RAF QGI rating with a valid Central Gliding School grading for Volunteer Gliding Squadrons who wishes to obtain an NPPL(A) with Microlight class rating shall complete the requirements listed below.

3.84 Complete a pre-course assessment flight with the holder of a valid FI(M) or FI(A) entitled to instruct on microlight aeroplanes, to establish how much flight training would be required.

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3.85 The required dual training should be set out in a training needs assessment. This training should cover the whole syllabus with specific emphasis on the following exercises:

- Ex 5, Taxiing
- Ex 6, Straight and level
- Ex 10a, Slow flight
- Ex 10b, Stalling, and spin avoidance
- Ex 12, Circuit training
- Ex 13, Advanced take-off and landing techniques
- Ex 16 a to f, Operational hazards, emergency procedures and unexpected/unplanned occurrences
- Ex 18 a to d, VFR Navigation

3.86 All emergency exercises should be covered during training. Depending on the pre-course assessment, multiple exercises may be completed in a single flight.

3.87 Complete at least five hours of supervised solo flights, to include either (a) or (b):

(a) Two solo cross-country flights, and each flight must:

(i) be a minimum total distance of 40 NM;

(ii) include a landing at an aerodrome which is at least 15 NM (measured in a straight line) from the point of departure;

(iii) be flown over different routes and to different aerodromes.

(b) One solo cross-country flight of at least 80 NM total distance, during which a full stop landing is made at an aerodrome at least 15 NM (measured in a straight line) from the point of departure.

3.88 Pass the following NPPL(A) or Part-FCL theoretical knowledge exams:

(a) NPPL examinations:

- Air law
- Navigation
- Aircraft (technical)
- Communications (see paragraph 3.89)

(b) Part-FCL examinations:

- Operational procedures

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- Principles of flight
- Flight performance and planning
- Aircraft general knowledge
- Communications (see paragraph 3.89)

3.89 If the applicant is also applying for a FRTOL, the holder of a QGI rating will be credited with the FRTOL practical test but must pass the Communications examination in either paper format or through eExams, unless otherwise credited in accordance with CAP 2325: Guidance for FRTOL Practical Test Candidates | UK Civil Aviation Authority.

3.90 Pass the NPPL(A) skill test in a microlight aeroplane with an authorised Flight Examiner.

Foreign pilot licences

3.91 When applying for any licence or rating on the basis of a licence issued by another state, verification of licence validity must be obtained from the original issuing national aviation authority (NAA). Information on the verification process is available on the CAA website.

3.92 If any details or privileges relating to the foreign pilot licence change whilst in the process of applying for a UK issued licence, a further verification confirming the latest details will be required.

Pilot licences issued in accordance with ICAO Annex 1

3.93 An applicant for an NPPL(A) holding a valid pilot licence issued by an ICAO Contracting State other than the UK, and in accordance with ICAO Annex 1 (Personnel Licensing), must comply with the requirements listed below.

3.94 Complete a pre-course assessment flight with the holder of a valid FI(A) to establish how much flight training may be required. For the NPPL(A) with Microlight class rating, the assessment flight may be conducted by a holder of a valid FI(M) or FI(A) entitled to instruct on microlight aeroplanes.

3.95 Complete the required dual training with an FI(A) or FI(M), as appropriate, in accordance with training needs assessment. The training should cover all elements of the applicable flight training syllabus, with special attention to the emergency and navigation exercises.

3.96 Pass either the NPPL(A) or Part-FCL theoretical knowledge exams in the following subjects:

(a) NPPL examinations:

- Air law

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- Human performance

(b) Part-FCL examinations:

- Air law
- Human performance

3.97 If the applicant is also applying for a FRTOL, the holder of an ICAO PPL with a valid radiotelephony licence issued in accordance with Article 37 of the International Telecoms Union (ITU) Radio Regulations is credited the written Communications exam but must pass the FRTOL practical test.

3.98 Pass the NPPL(A) skill test with an authorised Flight Examiner in the appropriate class of aeroplane.

Pilot licences not issued in accordance with ICAO Annex 1

3.99 An applicant for an NPPL(A) holding a valid pilot licence issued by an ICAO Contracting State other than the UK, but where the licence does not meet the standards of ICAO Annex 1 (Personnel Licensing), must comply with the requirements listed below.

3.100 The applicant must complete a pre-course assessment flight with an FI(A) on the class of aeroplane for which a rating is sought, to establish how much previous experience may be credited and how much further training may be required. Where a Microlight class rating is sought, the assessment flight must be conducted by an FI(M) or FI(A) entitled to instruct on microlight aeroplanes.

3.101 Complete the required dual training as set out in the training needs assessment. This training should cover all elements of the flight training syllabus with special attention to the emergency and navigation exercises.

3.102 Complete at least ten hours supervised solo flight time which, must include at least four hours of solo cross-country flight time, including one solo cross-country flight of at least 150 km (80 NM) during which a full stop landing at one aerodrome other than the point of departure shall be made.

3.103 Pass either the NPPL(A) or Part-FCL theoretical knowledge examinations in the following subjects:

(a) NPPL examinations:

- Air law
- Human performance
- Navigation
- Meteorology

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- Aircraft (technical)
- Communications (see paragraph 3.104)

(b) Part-FCL examinations:

- Air law
- Human performance
- Meteorology
- Navigation
- Principles of flight
- Operational procedures
- Flight performance and planning
- Aircraft general knowledge
- Communications (see paragraph 3.104)

3.104 If the applicant is applying for a FRTOL alongside the application for the NPPL(A), then the pilot must also pass the Communication examination and the FRTOL practical test.

3.105 Pass the NPPL(A) skill test with an authorised Flight Examiner in the appropriate class of aeroplane.

Previous flight training

3.106 Flight time with an appropriate instructor in SEP aeroplanes, TMGs or microlight aeroplanes recorded as ‘pilot under training’ (PUT) or ‘dual’ may be credited towards the requirements for the NPPL(A). Previous supervised solo time logged as PIC or ‘P1’ may also be counted.

3.107 All flight experience must be recorded in a personal logbook in accordance with article 228 of the ANO 2016 or FCL.050 of Part-FCL.

3.108 An applicant for an NPPL(A) wishing to credit previous flight experience must complete a pre-course assessment flight with an FI(A), on the class of aeroplane for which a rating is sought, to establish how much further training may be required. Where a Microlight class rating is sought, the assessment flight must be conducted by an FI(M) or FI(A) entitled to instruct on microlight aeroplanes.

3.109 The applicant must comply with the minimum flight instruction and supervised solo experience in accordance with Chapter 2. This flight time may consist of a combination of previous experience and any further dual training and supervised solo time identified as being required from the pre-course assessment flight.

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3.110 All theoretical knowledge and skill test requirements appropriate to the class rating sought must be met in full.

3.111 If the applicant is applying for a FRTOL, they must also pass the Communications examination and the FRTOL practical test.

Theoretical knowledge from balloons and airships

3.112 Holders of a UK issued Balloon Pilots Licence (BPL) issued in accordance with Part-BFCL, or a PPL(As) issued in accordance with Part-FCL, will be credited with the following theoretical knowledge examinations towards the NPPL(A):

(a) NPPL examinations:

- Human performance
- Meteorology
- Communications (see paragraph 3.113)

(b) Part-FCL examinations:

- Air law
- Human performance
- Meteorology
- Communications (see paragraph 3.113)

3.113 If the applicant is applying for a FRTOL, then the written Communication examination is credited but they must pass the FRTOL practical test.

Crediting of military experience

3.114 Refer to the Military Accreditation Scheme (CAP 2254) for all the terms and credits relating to those individuals serving or who have served as commissioned or non-commissioned officers of HM Forces of the United Kingdom, or attested members of a University Air Squadron.

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Chapter 4

Additional ratings

Class ratings

4.1 The holder of an NPPL(A) with a valid class rating seeking another class rating for endorsement on the licence must complete appropriate flight and theoretical knowledge training with an FI(A) or CRI. In the case of the Microlight class rating, the training may be conducted by an FI(M).

4.2 Operational limitations endorsed on an NPPL(A) with a Microlight class rating must be removed before commencing the training to add another rating or an instructor certificate.

SEP class rating

4.3 For the addition of SEP class rating, the flight instruction should at least cover the following exercises in accordance with Chapter 11:

- Ex 5, Taxiing
- Ex 6, Straight and level
- Ex 10a, Slow flight
- Ex 10b, Stalling
- Ex 16, Forced landing without power and partial power loss
- Ex 17, Precautionary landings
- Ex 18b, Navigation problems at lower level and in reduced visibility
- Ex 19, Instrument appreciation

4.4 All emergency exercises should be covered during the training. More than one exercise may be covered in a single flight.

4.5 The aircraft used to deliver the flight training must be authorised and equipped for the required exercises and manoeuvres.

4.6 Theoretical knowledge instruction should at least cover the following topics:

- Use of the aircraft Pilots Operating Handbook (POH) and/or Aircraft Flight Manual (AFM). Emphasis on any operational limitations and emergency procedures.
- The different flight characteristics and handling between aircraft currently flown and the aircraft being used for flight training.

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- The importance of calculating mass and balance using the POH or FM. Including loading and Centre of Gravity calculations.
- The importance of take-off, climb and enroute performance calculations.
- The importance of flight planning and the integration of moving map devices.
- The different aircraft systems installed in the aircraft used for flight training for example landing gear, fuel systems, electrics, engines and propellers and instrumentation and avionics.

4.7 On satisfactory completion of the training, the instructor must sign the applicant's logbook to indicate that the training specific to the aircraft class has been completed to a satisfactory standard.

4.8 The applicant should apply to the Light Aircraft Association (LAA) for the endorsement of the SEP class rating.

TMG class rating

4.9 For the addition of TMG Class Rating, the flight instruction should at least cover the following exercises in accordance with Chapter 11:

- Ex 3, Taxiing
- Ex 6, Descending (note the effect of air brakes and spoilers)
- Ex 8a, Slow flight
- Ex 8b, Stalling
- Ex 9, Take-off and climb to downwind position
- Ex 10, Circuit, approach and landing (note the use of airbrakes, flaps, slats and spoilers (as applicable)
- Ex 12, Stopping and restarting the engine inflight
- Ex 13, Forced landing without power and partial loss of power,
- Ex 14, Precautionary landings
- Ex 15 a to b, Navigation, navigation problems at lower level and in reduced visibility, and radio navigation

4.10 All emergency exercises should be covered during the training. More than one exercise may be covered in a single flight.

4.11 The aircraft used to deliver the flight training must be authorised and equipped for the required exercises and manoeuvres.

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4.12 Theoretical knowledge instruction should at least cover the following topics:

- Use of aircraft Pilots Operating Handbook (POH) and/or Flight Manual (FM). Emphasis on any operational limitations and emergency procedures.
- The different flight characteristics and handling between aircraft currently flown and the aircraft being used for flight training.
- The importance of calculating mass and balance using the POH or FM. Including loading and Centre of Gravity calculations.
- The importance of take-off, climb and enroute performance calculations.
- The importance of flight planning and the integration of moving map devices.
- The different aircraft systems installed in the aircraft used for flight training for example landing gear, fuel systems, electrics, engines and propellers and instrumentation and avionics.

4.13 On satisfactory completion of the training, the instructor must sign the applicant's logbook to indicate that the training specific to the aircraft class has been completed to a satisfactory standard.

4.14 The applicant should apply to the Light Aircraft Association (LAA) for the endorsement of the TMG Class rating.

Microlight class rating

4.15 For the addition of Microlight class rating or applicable differences training, the flight instruction should cover the following exercises:

- Ex 5, Taxiing
- Ex 6, Straight and level
- Ex 10a, Slow flight
- Ex 10b, Stalling, and spin avoidance
- Ex 12, Circuit training
- Ex 13, Advanced take-off and landing techniques
- Ex 16 a to f, Operational hazards, emergency procedures and unexpected/unplanned occurrences
- Ex 18 a to d, VFR Navigation

4.16 All emergency exercises should be covered during the training. More than one exercise may be covered in a single flight.

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4.17 The aircraft used to deliver the flight training must be authorised and equipped for the required exercises and manoeuvres.

4.18 Theoretical knowledge instruction should at least cover the following topics:

- Use of aircraft Pilots Operating Handbook (POH) and/or Flight Manual (FM).
- The different flight characteristics and handling between aircraft currently flown and the aircraft being used for flight training.
- The importance of calculating mass and balance and performance, using the POH or FM.
- The importance of flight planning and the integration of moving map devices.
- The different aircraft systems installed in the aircraft used for flight training.

4.19 On satisfactory completion of the training, the instructor must sign the applicant's logbook to indicate that the training specific to the aircraft class has been completed to a satisfactory standard.

4.20 If required, the applicant should apply to the British Microlight Aircraft Association (BMAA) for the endorsement of the Microlight class rating.

Differences training for control types within the Microlight class rating

4.21 Before operating a control type (three axis and weight shift) different from that previously flown, the licence holder must complete appropriate differences training. The control type training is also applicable to holders of the SEP class rating who have completed microlight aeroplane differences training.

4.22 If the Operational Limitation is still endorsed on the NPPL(A), this continues to apply to both control types the pilot is qualified on.

4.23 The flight and theoretical knowledge training must be delivered by the holder of a valid FI(M), FI(A) or CRI(SE) who has the privilege to deliver training on microlight aeroplanes.

4.24 Theoretical knowledge training should consist of the following:

- Familiarisation of the control differences and any other systems;
- The different flight characteristics and handling between aircraft currently flown and the aircraft being used for flight training. Special consideration must be given to the opposite flight control system;
- Pre-flight checks, assembly and rigging (if applicable), in accordance with the POH or AFM;

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- The importance of calculating mass and balance and performance, using the POH or AFM;
- The importance of flight planning and the integration of VFR moving map devices for navigation;
- The different aircraft systems installed in the aircraft used for flight training.

4.25 Flight training should cover the following exercises.

- Ex 5, Taxiing
- Ex 6, Straight and level
- Ex 10a, Slow flight
- Ex 10b, Stalling, and spin avoidance
- Ex 12, Circuit training
- Ex 13, Advanced take-off and landing techniques
- Ex 16 a to f, Operational hazards, emergency procedures and unexpected/unplanned occurrences
- Ex 18 a to d, VFR Navigation

4.26 All emergency exercises should be covered during the training. More than one exercise may be covered within a single flight.

4.27 On satisfactory completion of the differences training, the instructor must sign the pilot's logbook to indicate that the required training has been completed to a satisfactory standard.

Differences training for variants within a class rating

4.28 Schedule 8 or the ANO 2016 requires that before operating an aircraft with certain features or equipment (known as 'variants'), the holder of an NPPL(A) and applicable class rating undertake differences training with an appropriate flight instructor.

4.29 If the licence holder has not acted as PIC with a particular variant for more than two years, the CAA recommends they receive appropriate refresher training, prior to exercising their privileges again on that variant.

4.30 Variants applicable to the Microlight class rating:

(a) MTOW of more than 475 kg (or 495 kg in the case of an amphibian or floatplane);

(b) tricycle undercarriage;

(c) tailwheel;

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(d) supercharger or turbocharger;

(e) variable pitch propeller;

(f) one or more Electronic Flight Information Systems;

(g) autopilot;

(h) more than one engine;

(i) an electric engine;

(j) maximum continuous cruising speed in excess of 140 kts IAS; and

(k) operation from water.

4.31 Variants applicable to the SEP rating:

(a) a tricycle undercarriage;

(b) a tailwheel;

(c) a supercharger or turbo-charger;

(d) a variable pitch propeller;

(e) retractable landing gear;

(f) cabin pressurisation system; and

(g) maximum continuous cruising speed in excess of 140 kts IAS.

4.32 The holder of an SEP rating may also fly a microlight aeroplane, subject to completion of appropriate differences training. When exercising privileges within the scope of the Microlight class rating, the holder of an SEP rating must complete differences training for any features listed in 4.30. Differences training for autopilot and EFIS in SEP aircraft is strongly recommended.

4.33 More details of the theoretical knowledge learning objectives and flight training syllabus for common variants is available in Part-FCL, GM2 to FCL.710 Class and type ratings – variants.

4.34 On satisfactory completion of the differences training, the instructor must sign the pilot's logbook to indicate that the required training has been completed to a satisfactory standard.

Aerobatic rating

4.35 The aerobatic rating may be endorsed on an NPPL(A) with a valid SEP or TMG class rating.

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4.36 The holder of an NPPL(A) or other aeroplane licence first issued under the ANO 2016 after 30th September 2025 must obtain an aerobatic rating before conducting aerobatic manoeuvres as PIC.

4.37 Applicants shall complete a course of theoretical knowledge and flight training through a training organisation or with an independent FI(A) or CRI entitled to instruct for the aerobatic rating. The course shall consist of:

(a) At least five hours of aerobatic flight instruction in an SEP or TMG flown with engine power in accordance with the syllabus in Chapter 12; and

(b) Theoretical knowledge instruction in accordance with the syllabus in Chapter 12.

4.38 The privileges of the aerobatic rating shall be limited to aerobatic flight in either aeroplanes or TMGs flown with engine power, depending on the class in which the flight training was conducted. This limitation shall be lifted upon application if the pilot has successfully completed at least three dual training flights in aeroplanes or TMGs flown with engine power, as applicable, covering the full aerobatic training syllabus.

IMC rating

4.39 The Instrument Meteorological Conditions (IMC) rating is issued in accordance with the ANO 2016 and may only be endorsed on an aeroplane pilot licence issued by the CAA.

4.40 The IMC rating may only be endorsed on an NPPL(A) that includes a valid SEP or TMG class rating. The IMC rating may be endorsed on a PPL(A) issued in accordance with the ANO 2016 that includes a valid SEP, TMG or Multi-Engine Piston (MEP) class rating.

4.41 The IMC rating may be endorsed on a Part-FCL PPL(A), CPL(A), MPL or ATPL(A) that includes a valid SEP, TMG or MEP class rating.

Privileges

4.42 The IMC rating privileges are defined in Schedule 8 of the ANO 2016:

An instrument meteorological conditions rating (aeroplanes) entitles the holder of the licence to act as pilot in command or co-pilot of an aeroplane flying under the Instrument Flight Rules except—

(a) in Class A airspace; or

(b) when the aeroplane is taking off or landing at any place where the flight visibility below cloud is less than 1,500 metres.

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4.43 The IMC rating is not issued in accordance with Annex 1 (Personnel Licensing), so the privileges are normally limited to acting as PIC or co-pilot in UK registered aeroplanes and within UK airspace.

4.44 The holder of an IMC rating may be permitted to exercise the privileges of the rating within UK airspace in an aeroplane registered outside the UK with the permission of the relevant state of registration.

4.45 The holder of an IMC rating may be permitted to exercise the privileges of the rating while flying a UK registered aeroplane in a foreign state, provided the permission of that state has been obtained.

4.46 IMC ratings endorsed onto a Part-FCL licence prior to 1st October 2025 would have been endorsed as 'Instrument Rating (Restricted)'. There is no difference in rating privileges.

Requirements

4.47 An applicant for an IMC rating shall have 25 hours flight experience as pilot of SEP, microlight aeroplanes (with three axis controls) or TMGs, post initial issue of either an NPPL(A) or PPL(A). Ten of the hours must be as PIC, including five hours as PIC on cross-country flights.

4.48 Holders of an NPPL(A) with a valid SEP or TMG Class rating shall complete Ex18c, radio navigation, as required for the Part-FCL PPL(A), prior to commencing the IMC rating course.

4.49 Applicants shall complete a course of theoretical knowledge and flight training with an FI(A) entitled to instruct for the IMC rating or an Instrument Rating Instructor (IRI), in accordance with the syllabus in Chapter 12. The course shall consist of at least 15 hours dual training in instrument flying, including ten hours of flying by sole reference to instruments.

4.50 All training towards the rating must be completed in an SEP or TMG aeroplane, appropriately equipped for instrument flying training. Five hours of training during the IMC rating course may be completed in a CAA approved FSTD device qualified BITD, FNPT I, FNPT II.

4.51 Where an applicant wishes to be tested for the IMC rating on a single-pilot multi-engine aeroplane (PPL, CPL or ATPL only) the flight instructor must ensure that the applicant is capable of:

(a) maintaining stable flight in a multi-engine aircraft in the event of an engine failure at climb power;

(b) climbing the aircraft at the recommended single engine climb speed; and

(c) executing the normal range of flight manoeuvres under asymmetric power.

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4.52 The syllabus for the IMC rating requires training and testing of proficiency in two different types of instrument approach procedure (IAP). IMC rating holders are strongly advised to undergo further training with an appropriately qualified instructor before attempting to fly a type of IAP not previously trained.

4.53 Training for the IMC rating is permitted outside the UK provided that it is conducted by an organisation approved by the UK CAA for such purposes.

4.54 Applicants for the IMC rating must hold a valid UK issued FRTOL. Details on how to obtain the FRTOL can be found in CAP 2325 Guidance for Flight Radiotelephony Operator's Licence (FRTOL) candidates.

Theoretical knowledge examinations

4.55 Unless credited in accordance with Chapter 6, the applicant for an IMC rating shall pass a written theoretical knowledge examination covering subjects drawn from the course syllabus – including questions on the planning and execution of a typical flight under IFR.

4.56 The IMC rating examination is valid for 24 months from the date of the successful pass towards applying for issue of the rating.

Flight test

4.57 Unless credited in accordance with Chapter 6, an applicant for the rating must complete the required training and have passed the theoretical knowledge examination before taking a flight test with an authorised Flight Examiner.

4.58 The IMC rating flight test includes full and limited panel instrument flying, use of radio navigation aids whilst flying by sole reference to instruments, instrument approach procedures, bad weather circuits and landings. In the case of a multi-engine aeroplane, it includes flight with asymmetric power. Detailed contents of the test are available in Standards Document 25 (A): Notes for the guidance of applicants taking the Initial Skill Test or revalidating the Instrument Meteorological Conditions Rating (Aeroplanes) | UK Civil Aviation Authority.

4.59 An applicant shall pass all the relevant sections of the flight test. If any item in a section is failed, that section is failed. Failure in more than one section will require the applicant to take the entire test again.

4.60 An applicant failing in only one section shall repeat the failed section. For the purposes of repeating the failed section, the applicant will be expected to fly the test profile as required to position the aircraft to a point from which the failed section may be repeated. Failure in any section of the retest flight, including sections previously passed, requires the applicant to take the full test again.

4.61 All relevant sections of the flight test shall be completed within 6 months. Failure to achieve a pass in all sections of the test in two attempts will require further training. There is no limit to the number of flight tests that may be attempted.

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4.62 If the initial flight test is conducted in an aeroplane without a separate turn coordinator or turn needle, then the limited panel items on the test schedule must be carried out on a separate flight in a suitably equipped aeroplane, or in a UK Part-STD device qualified FNPT 1 or FNPT 2. This flight will count as part of one of the three allowable test flights. During renewal or revalidation test flights, if no separate turn coordinator or turn needle is fitted, limited panel exercises may be carried out using a standby attitude indicator.

4.63 Examiners should not conduct the flight test if they feel that their objectivity may be affected.

4.64 A pass in the IMC rating flight test is valid towards rating issue for 12 months.

Validity periods

4.65 The IMC rating is revalidated or renewed via a proficiency check. The rating is valid for a period of 25 months after the last day of the month in which the test or check was passed, or 25 months from the end of the previous validity period if a proficiency check to revalidate the rating was taken within three months of the rating's expiry date.

Night rating

4.66 The Night rating may be endorsed onto an NPPL(A) or PPL(A) issued in accordance with the ANO, if the applicant holds a valid SEP or TMG class rating.

4.67 The applicant must have been assessed as colour safe in accordance with MED.A.030(d) of Annex IV (Part-MED) to the UK Aircrew Regulation.

4.68 Before completing flight training at night, NPPL holders shall complete Exercise 18c, radio navigation, in the Part-FCL PPL(A) syllabus.

4.69 Applicants for a night rating shall have completed a training course with an FI(A) entitled to instruct for the Night rating. The course shall consist of:

(a) Theoretical knowledge instruction in accordance with the syllabus in Chapter 12;

(b) Five hours of training in accordance with the syllabus in Chapter 12, including:

(i) three hours of dual instruction, with one hour of cross-country navigation training that includes a dual cross-country flight of at least 50 km (27 NM); and

(ii) five solo take-offs and full-stop landings.

4.70 If the applicant holds both an SEP and a TMG class rating, they may complete the requirements above in either class or both classes.

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Chapter 5

Maintenance of privileges

Recent experience

5.1 Pilots flying under the privileges of a licence issued in accordance with the ANO 2016 must not operate an aircraft when carrying passengers unless they meet the ‘recent experience condition’.

5.2 Alternative to the recent experience condition, when exercising the privileges of a private pilot’s licence (including the NPPL) in either aeroplanes or helicopters, the pilot may comply with the ‘recent experience exception’.

5.3 The requirements of the recent experience condition and the recent experience exception are reproduced below. For full details, please see Schedule 8 of the ANO 2016.

5.4 Recent experience condition:

“The condition is that the holder of a licence must not operate an aircraft carrying passengers—

(a) as pilot in command or co-pilot unless the holder has carried out, in the preceding 90 days, at least three take-offs, approaches and landings as the sole manipulator of the controls of an aircraft of the same type or class or a full flight simulator representing that type or class; and

(b) as pilot in command at night unless the holder—

(i) has carried out in the preceding 90 days at least one take-off, approach and landing at night as the sole manipulator of the controls of an aircraft of the same type or class or a full flight simulator representing that type or class; or

(ii) holds an instrument rating.”

5.5 Recent experience exception:

“The condition is that—

(a) the intended flight will carry a single passenger who is also qualified to act as pilot in command on that flight; and

(b) the holder of the licence has informed the intended passenger that the holder does not meet the recent experience condition.”

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Class ratings

5.6 Subject to paragraph 5.7, to exercise the privileges of a class rating endorsed on a pilot licence, there must be valid entry for the rating within the certificate of revalidation page of the licence document.

5.7 The holder of a valid SEP class rating may exercise the privileges of a Microlight class rating, without such a rating being endorsed on the licence, provided the holder has completed appropriate differences training for microlight aeroplanes.

5.8 The certificate of revalidation page must be signed by an authorised person. This may be either an authorised Flight Examiner, Class Rating Examiner, FI(A) with privileges in accordance with FCL.945 of the UK Aircrew Regulation, or the holder of a Revalidation Authorisation.

5.9 Revalidation is only applicable if the rating has not expired. If a rating has expired, it may only be reinstated via the renewal process.

Revalidation

5.10 Paragraph 4(2) of Chapter 2, Part 3 of Schedule 8 to the ANO 2016 sets out the revalidation requirements for NPPL(A) class ratings. For reference, these are reproduced below.

5.11 The revalidation requirements for the SEP, TMG and Microlight class ratings as a pilot in aeroplanes for which there is a class rating included in the licence and within the period of validity of the current certificate of revalidation for the rating—

(a) Pass an NPPL skill test with an authorised examiner in an aeroplane of the class for which the certificate of revalidation is sought, or

(b) Meet the following flight experience requirements:

(i) flown at least 12 hours which includes at least 6 hours as pilot in command;

(ii) completed at least 12 take-offs and at least 12 landings;

(iii) flown at least six hours in the 12 months preceding the expiry date of the rating;

(iv) undertaken at least one hour of flying training in an aeroplane with an instructor entitled to give instructions on aeroplanes of that class.

5.12 Where all the experience requirements of paragraph 5.11 are met except those in paragraph (b)(iv), a certificate of revalidation may be issued but must be endorsed ‘single seat only’.

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Renewal

5.13 Table A, Paragraph 4 of Chapter 2, Part 3 of Schedule 8 in the ANO 2016 sets out the NPPL(A) class rating renewal requirements. These are reproduced below for reference:

(a) If the last certificate of revalidation for the rating has expired less than five years before the date on which the new certificate is to be signed, the pilot is required to pass an NPPL skill test with an authorised examiner in an aeroplane of the class for which the certificate of revalidation is sought.

(b) If the last certificate of revalidation for the rating has expired five years or more before the date on which the new certificate is to be signed, the pilot is required to:

(i) Pass an NPPL skill test with an authorised examiner in an aeroplane of the class for which the certificate of revalidation is sought; and

(ii) Pass an oral theoretical knowledge examination conducted by an authorised examiner as part of the NPPL skill test.

5.14 Completing an NPPL skill test to renew an SEP rating, subject to the pilot having also completed the necessary differences training, also permits microlight aeroplanes to be flown as PIC.

Additional ratings

Aerobatic rating

5.15 The privileges of the Aerobatic rating do not expire. However, the pilot must hold a valid SEP or TMG class rating. If the pilot has not conducted aerobatic manoeuvres for more than two years, the CAA recommends appropriate refresher training is undertaken with an FI(A) or CRI entitled to instruct on aerobatics, before conducting further aerobatic manoeuvres.

5.16 Guidance on conducting aerobatic flights is published in *Safety Sense Leaflet 19: Aerobatics in light aircraft*, available on the CAA website.

IMC rating

5.17 Except for holders of a CPL or ATPL(A) issued in accordance with the ANO 2016, the privileges of an IMC rating must not be exercised unless the licence contains a valid entry in the certificate of revalidation page for the rating.

5.18 The IMC Rating is valid for 25 months. This is counted from the end of month in which the last flight test or proficiency check was passed. Provided that the rating is revalidated within the period of three months preceding the expiry date, the subsequent validity period will extend from that date for a further 25 months.

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5.19 The IMC Rating or IR (Restricted) must be revalidated by proficiency check, the details of which can be found in Standards Document 25.

5.20 When revalidating the rating, the licence holder may show logbook evidence that, in the period since the previous flight test or proficiency check, they have successfully completed a let-down and approach to DH/MDH, a go-around and a missed approach procedure, using a radio aid of a different type from that used during item (d) of the proficiency check. This shall have been accomplished to the satisfaction of an instructor qualified to give instrument flying instruction. Alternatively, the candidate may carry out two approach procedures using different aids during the proficiency check.

5.21 If an IMC rating or IR (Restricted) has expired by not more than five years, renewal may be achieved by solely by proficiency check.

5.22 Where the IMC rating or IR (Restricted) has expired by more than five years, the applicant shall carry out dual instruction, at the discretion of an FI(A) or IRI, covering the IMC rating course and pass a proficiency check that includes the same content as the initial IMC rating flight test. If the rating has expired by more than ten years, the theoretical knowledge examination must be passed again.

5.23 Credits towards revalidation or renewal:

(a) An IMC rating or IR (Restricted) rating may be revalidated or renewed for a further period on the basis of the most recent single pilot IR(A) revalidation or renewal on a UK issued pilot's licence. Pilots may demonstrate that they have a valid single pilot IR(A) to an appropriate Examiner or apply to the CAA for the revalidation or renewal of their IMC rating.

(b) An IMC rating or IR (restricted) rating may be revalidated or renewed for a further period by the CAA, on the basis of logbook or licence evidence of the most recent single-pilot IR(A) flight test endorsed on to a non-UK pilots licence issued by an ICAO Contracting State. Applicants will have to apply to the CAA for this revalidation or renewal and supply the necessary evidence.

Night rating

5.24 The privileges of the Night rating do not expire. However, the pilot must hold a valid class rating for the aeroplane flown. If passengers are to be carried at night, the pilot must have conducted one take-off, approach and landing at night as sole manipulator of the controls within the last 90 days.

5.25 If the pilot has not flown at night for more than two years, the CAA recommends appropriate refresher training is undertaken with an FI(A) entitled to instructor towards the night rating, before flying as PIC at night again.

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Chapter 6

Credits towards additional ratings

Aerobatic rating

6.1 An applicant for an aerobatic rating on the NPPL(A), who holds a TMG class rating on the licence, alongside advanced aerobatic privileges for sailplanes in accordance with SFCL.200(d) of Part-SFCL, may be fully credited towards the requirements of the rating to fly aerobatics in TMGs flown with engine power. To subsequently exercise the privileges of the aerobatic rating on the SEP class, the licence holder must have a valid SEP rating and complete the additional aerobatic training detailed in paragraph 4.38.

6.2 An applicant for an aerobatic rating on the NPPL(A), who holds SEP and TMG class ratings on the licence, alongside advanced aerobatic privileges for sailplanes in accordance with SFCL.200(d) of Part-SFCL, may complete the training for the aerobatic rating in SEP aircraft and exercise the associated privileges in both the SEP and TMG class, without being required to complete the additional aerobatic training on TMGs detailed in 4.38.

6.3 Graduates of Fast Jet Lead-In (FJLIN), Basic Flying Training (BFT), Basic Fast Jet Training (BFJT), Advanced Jet Training (AJT), FJ OCU or B1 QFI category on Tutor / Prefect or aerobatic equivalent who have received theoretical knowledge as specified in 4.37 (a) are to submit evidence for the award of the aerobatic rating to their licence.

6.4 More information for UK military flight crew seeking credits towards the aerobatic rating should refer to the Military Aircrew Accreditation Scheme (CAP 2254).

IMC rating

6.5 An applicant who has held an ICAO IR(A) or a UK professional pilot's licence in the aeroplane category within the 10 years before the date of application for the IMC rating is not required to undergo a course of flight or ground training but must pass the theoretical knowledge examination and initial IMC rating flight test.

6.6 An applicant who has held an ICAO IR(A) or a UK professional pilot's licence in the aeroplane category, or a valid Aircraft Owners and Pilots Association (AOPA) Ground Instructors Certificate, within the 5 years before the date of application for the IMC rating will be credited with a pass in the theoretical knowledge examination but must pass the initial IMC rating flight test.

6.7 The holder of a UK CPL or ATPL(A) issued in accordance with the ANO, includes privileges similar to the IMC rating. There is no requirement for a separate IMC rating entry in the certificate of revalidation for these privileges.

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6.8 An applicant who holds an ICAO IR(A) and has passed a single-pilot, single or multi-engine IR skill test or proficiency check in the 24 months preceding the date of application for the IMC Rating will be credited with a pass in the initial IMC Rating flight test and the theoretical knowledge examination. The applicant must apply for the issue of the IMC rating within 24 months of the last single-pilot, single or multi-engine IR Skill test or Proficiency check passed. The IMC Rating will be valid for 25 months after the last day of the month in which the last single-pilot, single or multi-engine IR Skill test or Proficiency check was successfully passed.

6.9 The holder of a night rating endorsed in a CAA issued helicopter pilot licence may be credited up to two hours of flight instruction by sole reference to instruments towards the issue of the IMC rating.

6.10 An applicant who has qualified for the AOPA Radio Navigation Certificate will be credited with up to five hours of the flight instruction by sole reference to instruments towards the issue of the IMC Rating.

6.11 The holder of a valid ICAO IR(H) who wishes to add an IMC Rating to a pilot licence in the aeroplane category is required to:

(a) comply with the experience requirements in 4.47;

(b) have received dual instruction in instrument flying in aeroplanes including not less than five hours flight time by sole reference to instruments gained in aeroplanes since the grant of an aeroplane licence;

(c) pass the initial IMC Rating Flight Test in an aeroplane.

6.12 The reductions in flight training towards the IMC rating specified in paragraphs 6.9, 6.10 and 6.11 may not be combined.

6.13 An applicant for an IMC rating with a valid pass in all of the following subjects of the Part-FCL ATPL(A), ATPL(H), CPL(A), CPL(H), IR(A) or IR(H) theoretical knowledge examinations will be accepted as a credit towards the IMC rating theoretical knowledge examination:

- Air law
- Aircraft general knowledge – instrumentation
- Flight planning and monitoring
- Human performance
- Meteorology
- Radio navigation

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6.14 A pass in the examinations listed in 6.13 will be accepted for the grant of the IMC rating for a period of 36 months from the end of the month in which a pass in last of the required subjects was gained.

6.15 The validity periods as specified in FCL.025 for the grant of the Part-FCL professional licence or instrument rating are not extended upon issue of the IMC rating.

6.16 Information for UK military flight crew seeking credits towards the IMC rating should refer to the Military Aircrew Accreditation Scheme (CAP 2254).

6.17 Part-FCL Basic Instrument Flight Module:

(a) The holder of a course completion certificate for the Part-FCL Basic Instrument Flight Module (BIFM) may have the total amount of flight training required for the rating reduced by 10 hours.

(b) Completion of the IMC rating course does not give any credit towards gaining a Basic Instrument Flight Module (BIFM) certificate.

(c) Flight experience gained from holding an IMC Rating may be used in certain circumstances to meet the requirements in Section Aa of Appendix 6 of the Part-FCL towards the issue of an Instrument Rating through the Competency Based Modular (CBM) route.

Night rating

6.18 Applicants seeking to endorse a night rating on to an NPPL(A) shall receive credit towards the requirements of paragraph 4.69 (a) and (b), if they hold a TMG night rating in accordance with SFCL.210 of Part-SFCL.

6.19 The holder of a valid aeroplane pilots licence issued in accordance with ICAO Annex 1, and which includes a night rating, and who wishes to have endorsed a night rating onto a NPPL(A) with SEP or TMG Class ratings, must complete the following:

(a) Complete a pre-course assessment flight with the holder of a valid FI(A) to establish how much flight training would be required.

(b) Complete the required dual training with an FI(A) as set out in the training needs assessment. This training should cover all elements of the flight training syllabus.

(c) Complete 5 solo take-offs and 5 solo full-stop landings under supervised solo circuit flying, as per paragraph 4.69 (b)(iii).

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Chapter 7
Instructors

Flight Instructor (Microlight)

7.1 The privileges of a Flight Instructor (Microlight) (FI(M)) are to conduct instruction for the NPPL(A) and associated ratings on microlight aeroplanes

7.2 The privileges and conditions of the FI(M) certificate are set out in Schedule 8 of the ANO 2016:

Flight instructor's certificate (restricted) (microlight)
(1) Subject to paragraphs (2) and (3), a flight instructor's certificate (restricted) (microlight) entitles the holder of the licence to give instruction in flying microlight aeroplanes with the same type of control system for which the holder's licence is endorsed with a flight instructor's certificate.

(2) Such instruction must only be given under the supervision of a person present during the take-off and landing at the aerodrome at which the instruction is to begin and end and holding a pilot's licence endorsed with a flight instructor's certificate entitling that person to instruct on a microlight aeroplane with the same type of control system on which instruction is being given.

(3) A flight instructor's certificate (restricted) (microlight) does not entitle the holder of the licence to authorise the person undergoing instruction to perform a first solo flight or first solo cross-country flight.

Flight instructor's certificate (microlight)
A flight instructor's certificate (microlight) entitles the holder of the licence to give instruction in flying microlight aeroplanes with the same type of control system for which the holder's licence is endorsed with a flight instructor's certificate.

Prerequisite requirements

7.3 Prerequisite requirements for the Flight Instructor (FI) course for Microlight Aeroplanes:

(a) Hold a UK issued licence that includes a valid microlight class rating with no operational limitations or a valid SEP Class rating and have completed the necessary differences training on Microlight Aeroplanes.

(b) Have completed at least 100 hours as PIC in aeroplanes of which at least 5 hours are on Microlight Aeroplanes and at least 5 hours as PIC on the control type to be used on the FI course.

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(c) Pass a pre-entry written examination and a Flight Test conducted by a Microlight FIE or a Microlight FIC Instructor in the 6 months immediately preceding the date of commencement of the course.

Course requirements

7.4 The course must be conducted by an instructor authorised by the CAA to conduct FI rating courses (FIC Instructor) through a training organisation having been approved or declared for that purpose.

7.5 The minimum course of approved training for the FI Rating (restricted) (Microlight) comprises not less than:

(a) 40 hours ground training; and

(b) 15 hours flight training, of which no more than 2 flight hours may be flown as ‘mutual’, with another FIC student.

7.6 Details of the syllabus for the theoretical knowledge and flight training course are available from the BMAA.

Flight test and theoretical knowledge examination

7.7 The applicant shall pass an FI(M) flight test and ground examination conducted by a FIE (Microlight) authorised by the CAA to conduct such tests.

7.8 The application and flight test report form is available as ‘Instructor Form 1’ on the BMAA website. Copies of the Instructor Form 1 are held by the BMAA and the originals sent to the CAA. The form is also available from the CAA website under SRG1132.

7.9 The test must be completed within a period of 31 days. The date of completion of the final part of the test is to be taken as the date of commencement of the period of validity of the rating or the date of continuance or revalidation of the privileges of the rating.

7.10 The applicant is responsible for providing a suitable microlight aeroplane for the test.

Credits towards FI(M) training course

7.11 Where the candidate holds or has held a Flight Instructor rating or certificate in any single pilot aeroplane, gyroplane or helicopter issued by the CAA:

(a) The duration of the ground and flight training course may be reduced at the discretion of the FIC(M) Instructor conducting the course.

(b) The prerequisite requirements must be met in full, and the FIC(M) instructor can assess the instructor’s suitability for a reduction on the basis of the pre-entry flight test and theoretical knowledge examination.

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7.12 Where the candidate holds or has held a Qualified Flying Instructor (QFI) in any single pilot aeroplane or Qualified Helicopter Instructor (QHI) in any single pilot helicopter issued by UK armed forces:

(a) The duration of the ground and flight training course may be reduced at the discretion of the FIC(M) instructor conducting the course.

(b) The prerequisite requirements must be met in full, and the FIC(M) instructor can assess the instructor's suitability for a reduction based on the pre-entry flight test and theoretical knowledge examination.

(c) The candidate will need to follow the procedures in the Military Aircrew Accreditation Scheme (CAP 2254), to show evidence of the necessary qualifications.

7.13 Where the candidate holds or has held an instructor qualification, rating or certificate for sailplanes issued by the BGA or the CAA, or a Qualified Glider Instructor (QGI) issued by the UK armed forces:

(a) The duration of the ground and flight training course may be reduced at the discretion of the FIC(M) Instructor conducting the course.

(b) The prerequisite requirements must be met in full, and the FIC(M) instructor can assess the instructor's suitability for a reduction based on the pre-entry flight test and theoretical knowledge examination.

(c) For the QGI the candidate will need to follow the procedures in the Military Aircrew Accreditation Scheme (CAP 2254), to show evidence of the necessary qualifications.

7.14 Where the candidate holds or has held an instructor rating or certificate in any powered single pilot aeroplane or helicopter issued by the Licensing Authority of an ICAO Contracting State:

(a) The duration of the ground and flight training course may be reduced at the discretion of the FIC(M) Instructor conducting the course.

(b) The prerequisite requirements must be met in full, and the FIC(M) instructor can assess the instructor's suitability for a reduction based on the pre-entry flight test and theoretical knowledge examination.

(c) The CAA will need to verify the third country licence with the issuing Licensing Authority. More information on the verification process can be found on the CAA website.

7.15 In all cases where the applicant may be able to gain a credit towards the issue of a FI(M), they must pass the applicable flight test and ground examination.

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7.16 Initially the applicant will be issued with a restricted FI(M). If the applicant meets the requirements for removal of the supervisory restriction and the FIC(M) instructor and FIE(M) agree that the applicant has the required competence, they should make a recommendation for the FI(M) to be issued without the supervisory restriction.

7.17 The FIC(M) Instructor must keep a record of the pre-entry flight test, the theoretical knowledge examination and their recommendation for a course reduction, in case the CAA wishes to review this on receipt of the application for the FI(M) certificate.

Unrestricted FI(M)

7.18 On initial issue, the FI(M) is issued as a restricted certificate, as per the privileges in privileges detailed in the ANO 2016 (see paragraph 7.2).

7.19 To remove the supervisory restriction and qualify for the grant of an unrestricted FI(M) certificate, the holder must have:

(a) held a valid restricted FI(M) for at least ten months;

(b) 250 hours experience as PIC of aeroplanes including microlight aeroplanes of which at least 200 hours must be on microlight aeroplanes;

(c) 100 hours experience instructing on microlight aeroplanes; and

(d) passed a flight test and ground examination conducted by an FIE(M).

7.20 Applicants must apply to the CAA to have the restriction removed. The completed flight test will also revalidate the privileges of the certificate for a further period of validity.

FI(M) revalidation and renewal

7.21 The revalidation and renewal procedures for the FI(M) certificate are set out in Schedule 8 of the ANO 2016.

7.22 The FI(M) is valid for 36 months and is revalidated by passing an appropriate test of the holder's ability to exercise the privileges of the certificate.

7.23 If the test to revalidate the certificate is taken more than three months before the expiry date of the existing validity period, the next validity period extends 36 months from the end of the month in which the test was taken.

7.24 If an FI(M) certificate has expired, on renewal it will be valid for 36 months from the end of the month in which the renewal test was passed.

7.25 If an FI(M) certificate has expired for a significant period, refresher training may be required prior to taking a renewal test.

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Additional qualifications for FI(M)

Different control types

7.26 An FI(M) certificate holder wishing to instruct on an additional microlight control type (i.e. weight shift, three axis or powered parachute) must have completed at least 5 hours as PIC on the type concerned.

7.27 The FI(M) certificate holder must also have passed a flight test and ground examination on the control type to be added conducted by a FIE (Microlight).

Flight Instructor Course Instructor (Microlight)

7.28 To obtain a Flight Instructor Course (FIC) authorisation for microlight aeroplanes, the holder of an FI(M) must have:

(a) held a valid FI(M) for at least three years;

(b) 500 hours flight hours, of which at least 250 instructional flight hours must be on microlight aeroplanes; and

(c) received a recommendation for FIC authorisation on the last occasion of taking the FI(M) test with FIE(M).

7.29 The applicant will be invited to attend an interview conducted by the Panel of Microlight Examiners and the CAA. If successful at the interview, they must pass a FIC Instructor flight test with FIE(M) and apply to the CAA for the FIC authorisation.

Instructing on microlight seaplanes

7.30 To be entitled to instruct on microlight seaplanes, the holder of an FI(M) must have the privilege to act as PIC in a Microlight Seaplane and demonstrate the ability to instruct on Microlight Seaplanes to an appropriately qualified FIC(M).

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Chapter 8

Examiners

Flight Examiner (Microlight)

8.1 The Flight Examiner (Microlight) (FE(M)) is a separate authorisation issued by the CAA, based on a recommendation from the Panel of Microlight Examiners and the BMAA.

8.2 The privileges of the FE(M) are established through Article 168 of the ANO 2016. The specific privileges of the authorisation are endorsed on the certificate:

(a) The FE(M) can conduct Flight Tests for the issue of an NPPL(A) with microlight aeroplanes.

(b) The FE(M) can conduct the flight test for the revalidation or renewal of a Microlight class rating.

(c) The FE(M) includes the privileges of the Ground Examiner (GR) with respects to conducting the NPPL(A) theoretical knowledge examinations for the issue of the NPPL(A).

(d) The FE(M) includes the privileges of the Revalidation Examiner (R) with respects to being an authorised person to sign the Certificate of Revalidation within a pilot's licence for the revalidation by experience of a Microlight, SEP or TMG class rating(s) endorsed in an NPPL(A).

(e) The FE(M) includes the privileges of the Revalidation Examiner (R) with respects to being an authorised person to sign the Certificate of Revalidation within a pilot's licence for the revalidation or renewal by flight test of a Microlight class rating endorsed in an NPPL(A).

8.3 Applicants for an examiner authorisation shall demonstrate relevant knowledge, background and appropriate experience related to the privileges of an examiner.

8.4 Applicants for an examiner authorisation must not have been subject to any sanctions, including the suspension, limitation or revocation of any of their licences, ratings or certificates issued in accordance with the ANO 2016 during the last 3 years prior to the application.

8.5 Applicants must have held a valid FI(M) for at least two years and have at least 500 flight hours, of which at least 250 flight instructional hours must be on microlight aeroplanes.

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8.6 The applicant is required to apply to the Panel of Microlight Examiners; this application will be reviewed by the Panel and the CAA.

8.7 The applicant is required to pass a theoretical knowledge assessment on their understanding of the NPPL(A) licensing requirements.

8.8 The applicant is required to attend an Examiner seminar conducted by the Panel of Microlight Examiners or an approved training organisation or a specific one-to-one coaching course with a FIE(M).

8.9 The applicant must have successfully completed an FI(M) flight test on each control type for which the FE privileges are being sought.

8.10 The applicant must pass a flight test including oral assessment with a FIE(M). Applicants for FE(M) on multiple control types will be required to complete the flight test on one control type but will be required to complete the oral assessment on any other control types.

8.11 On successful passing of the flight test and oral assessment, the Panel of Examiners will forward a recommendation to the CAA. The applicant will also need to apply to the CAA for the FE(M) authorisation.

8.12 Examiners should not conduct a flight test on an applicant to obtain, revalidate or renew a licence or rating if they feel that their objectivity may be affected.

Flight Instructor Examiner (Microlight)

8.13 The Flight Instructor Examiner (Microlight) (FIE(M)) is a separate authorisation issued by the CAA based on a recommendation from the Panel of Microlight Examiners and the BMAA.

8.14 The privileges of the FIE(M) are established through Article 168 of the ANO 2016. The specific privileges of the authorisation are endorsed on the certificate:

(a) The FIE(M) includes the privileges of the FE(M), R and GR authorisations.

(b) The FIE(M) can conduct the flight test for the issue, revalidation or renewal of a Flight Instructor (Restricted) (FI(M)) and Flight Instructor (FI(M)) for Microlight Aeroplanes.

(c) The FIE(M) can conduct the flight test to remove the supervisory restriction for the issue of a Flight Instructor (FI(M)) for Microlight Aeroplanes.

(d) The FIE(M) can conduct the flight test and oral assessment for the issue of a FE(M).

(e) The FIE(M) also includes the privileges of the FIC(M) authorisation.

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8.15 Applicants for an examiner authorisation must not have been subject to any sanctions, including the suspension, limitation or revocation of any of their licences, ratings or certificates issued in accordance with the ANO 2016 during the last 3 years prior to the application.

8.16 The applicant must hold a valid unrestricted FI(M) with at least 1000 flight hours, of which at least 500 hours are as flight instruction on microlight aeroplanes.

8.17 The applicant must hold a valid FIC(M) authorisation and have completed at least one FI(M) course prior to application for the FIE(M).

8.18 The applicant is required to apply to the Panel of Microlight Examiners; the application will be reviewed by the Panel and the CAA.

8.19 The applicant is required to pass a theoretical knowledge assessment on their understanding of the FI(M) licensing requirements.

8.20 The applicant is required to attend an examiner seminar conducted by:

(a) the Panel of Microlight Examiners;

(b) an approved training organisation; or

(c) a specific one-to-one coaching course with a FIE(M).

8.21 The applicant must have successfully completed a FI Flight Test on each control type for which the FIE privileges are being sought.

8.22 The applicant must pass a flight test including oral assessment with a FIE(M). Applicants for FIE(M) on multiple control types will be required to complete the flight test on one control type but will be required to complete the oral assessment on any other control types.

8.23 On successful passing of the flight test and oral assessment the Panel of Examiners will forward a recommendation to the CAA. The applicant will also need to apply to the CAA for the FIE(M) authorisation.

8.24 Examiners should not conduct a flight test on an applicant to obtain, revalidate or renew a licence or rating if they feel that their objectivity may be affected.

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Chapter 9

Theoretical knowledge

Introduction

9.1 Applicants for an NPPL(A) shall pass either the NPPL(A) examinations or the Part-FCL examinations applicable to the PPL(A). An applicant for an NPPL(A) with a Microlight class rating restricted to Powered Parachute aircraft must pass the applicable NPPL(A) examinations.

9.2 More information on the procedures for the NPPL and Part-FCL examinations is found in Standards Document 11, available on the CAA website at Standards Document 11: Procedures & Conduct for all GA Theoretical Knowledge e-Examinations | UK Civil Aviation Authority.

9.3 It is recommended that classroom lectures are used to teach the theoretical knowledge subjects. However, there is no minimum ground instruction time applicable for the NPPL(A). Theoretical knowledge learning may consist of directed self-study.

9.4 An applicant for an NPPL(A) shall successfully pass all the examinations within 24 months prior to applying for the licence.

PPL(A) theoretical knowledge syllabus

9.5 The Part-FCL PPL(A) theoretical knowledge syllabus is published in the applicable Acceptable Means of Compliance (AMC) to the UK Aircrew Regulation – for full details see AMC 1 FCL.210; FCL.215 training course and theoretical knowledge examination, available in the Aviation Regulatory Library.

9.6 The Part-FCL examinations are conducted through the eExams system. The syllabus and learning objectives for the Part-FCL examinations are available on the CAA website at GA Theoretical Knowledge e-Exams | UK Civil Aviation Authority.

NPPL(A) theoretical knowledge syllabus

9.7 The NPPL(A) theoretical knowledge syllabus is listed in the tables below.

Aviation Law
Structure and governance Authorities • International Civil Aviation Organisation (ICAO) • Civil Aviation Authority (CAA)

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- Department for Transport
- Delegated responsibilities – British Gliding Association (BGA), British Microlight Aircraft Association (BMAA), Light Aircraft Association (LAA)

Other authorities

- European Aviation Safety Agency (EASA)
- Federal Aviation Administration (FAA)

Legislation

- Air Navigation Order 2016
- The Civil Aviation (Investigation of Air Accidents) Regulations 2018
- Civil Aviation Act 1982
- UK Basic Regulation (UK Reg No.2018/1139) and implementing rules, acceptable means of compliance (AMC) and guidance material (GM)

Aeronautical information

- Aeronautical Information Publication
- Aeronautical Information Circulars
- Notices to Airmen (NOTAM)
- Civil Aviation Publications (CAP)
- Standards Documents and other information documents

Aircraft

Classification

- Definitions of Microlight aeroplane, Single Engine Piston (SEP) aeroplane and Touring Motor Glider (TMG)
- Configurations of aircraft

Documentation

- Certificate of Registration
- Permit to Fly and the Certificate of Validity
- Conditions on a Permit to Fly
- Certificate of Airworthiness and the Airworthiness Review Certificate
- Airframe, engine and propeller logbooks
- Insurance
- Noise certificate
- Pilot's Operating Handbook or Flight Manual
- Weight (Mass) and Balance schedule
- Production of documents to authorised persons

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Permit to Fly

- Articles 41, 42 and 43 of the ANO 2016
- Conditions and restrictions applicable to aircraft operating on a Permit to Fly
- Maintain the validity of the Permit to Fly
- Hiring, flight training and charity flights

Certificate of Airworthiness

- Articles 38 and 39 ANO 2016 or Continuing Airworthiness Regulations (UK Reg No. 1321/2014)
- Airworthiness Review Certificate
- Annex I (Part M) of the Continuing Airworthiness Regulations (UK Reg No. 1321/2014)
- Annex Vd (Part CAO) of the Continuing Airworthiness Regulations (UK Reg No. 1321/2014)

Airworthiness

- Responsibilities of the operator, owner and pilot
- Schedule maintenance requirements
- Approval of modification and repairs
- Service bulletins
- Mandatory Permit Directives (MPD) and Airworthiness Directive (AD)
- Guidance material

Equipment to be carried

- Articles 77 and 78 of the ANO or Annex VII (Part-NCO) of the Air Operations Regulation (UK Reg No. 965/2012)
- Approved installation of avionics
- Aeronautical Radio Licence (Ofcom)

Flight crew licensing

- National Private Pilot Licence (NPPL)
- Licence privileges including Operational Limitation
- Aircraft ratings endorsed
- Different control type for Microlight aeroplanes

Maintaining licence privileges

- Certificate of Revalidation and period of validity
- Requirements for revalidation by experience or test
- Requirements for renewal by test
- Other ratings

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Medical and fitness to fly

- Pilot in Command (PIC) responsibilities
- Pilot Medical Declaration or medical certification
- Validity periods
- Fitness to fly

Flight Radio Telephony Operators Licence (FRTOL)

- Privileges and advantages
- Requirements for gaining and maintaining competence

Pilot in Command responsibilities

- Maintaining a record of flight time (personal)
- Pre-flight actions and preparations
- Care of passengers

Offences

- Negligent and/or reckless operation of an aircraft
- Misuse of psychoactive substances and alcohol
- Falsification, unauthorised use or destruction of documents

Airspace Infringements

- Effects on other airspace users
- Liabilities and consequences

Flight operations

- Carriage of dangerous goods or munitions
- Conducting flights for registered charities
- Exhibitions of flying
- Dropping persons or articles
- Formation flying
- Introductory flights
- Separation minima from wake turbulence

Accident and occurrence reporting

- The Civil Navigation (Investigation of Air Accidents Involving Civil and Military or Installations) Regulations
- Reporting accidents
- Reporting incidents and occurrences (Mandatory Occurrence Report (MOR) or voluntary reporting of an incident, occurrence or safety concern).
- BMAA Safety and Accident Investigation Handbook

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- AAIB Bulletins
- Airprox Reporting

Flight rules

Visual Flight Rules (VFR)

- Standardised Rules of the Air (UK Reg No. 923/2012) and Rules of the Air 2015
- Visual Meteorological Conditions (VMC) for VFR
- Visual Meteorological Conditions (VMC) for SVFR

Altimeter settings

- Height, altitude and flight levels
- Transition altitude, layer and level
- Semi-circular rule
- Requirements for different settings near to, underneath and within certain airspace

Rules of the Air

- Standardised Rules of the Air (UK Reg No. 923/2012) and Rules of the Air 2015
- Low flying rules and minimum heights
- Collision avoidance and rights of way in flight
- Reporting hazardous conditions
- Light or other signals to be shown or made by an aircraft
- Displaying of lights by an aircraft

Air traffic rules and services

- Classification of airspace
- Flight Information Region
- Upper Information Region
- Class A, B, C, D, E, F and G

Airspace structures

- Control Area (CTA)
- Control zone (CTR)
- Terminal Control Area (TMA)
- Radio Mandatory Zone (RMZ)
- Transponder Mandatory Zone (TMZ)
- Aerodrome Traffic Zone (ATZ)
- Military Aerodrome Traffic Zone (MATZ)
- Restricted Airspace (Temporary)

Restriction and hazards

- Bird sanctuaries
- Flying displays, air races and competitions
- Free fall parachuting drop zone

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- Gliding, hang gliding and paragliding sites
- High intensity radio transmission areas (HIRTA)
- Military flight training areas
- Kite and tethered balloons
- Other sporting and recreational activities
- Prohibited, Restricted and Danger Areas
- Training aerodromes
- Unusual activity aerodrome

Air Traffic Services

- Basic service
- Deconfliction service
- Procedural service
- Traffic service
- Aerodrome Terminal Information service (ATIS)
- Aerodrome Flight Information Service (AFIS)
- Air Ground Communication Service (ACGS)
- Distress and Diversion Service (D&D)

Aerodrome procedures

- Flight within an ATZ
- Prior permission required (PPR)
- Access to and movement on the manoeuvring area
- Collision avoidance and rights of way on the ground
- Dropping of tow ropes
- Signals on the ground
- Light signals to aircraft
- Marshalling signals

International flights

- Permission requirements for aircraft and for flight crew
- Arrival and departure procedures
- Customs and immigration requirements
- Documents to be carried
- Public health requirements

Flight plans

- Completion and submission of flight plans
- Opening and closing of flight plans
- Abbreviated flight plans
- Action When the destination aerodrome has no ATSU or AFTN Link

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- Delays, Departures, Modifications and Cancellations to a Filed Flight Plan
- Flight planning and alerting action

Search and rescue

- Distress and urgency signals, ground and in flight

Human Performance

Situational Awareness

- Sensory inputs
- Sight – horizon and instrumentation
- Feel – control positions and pressures
- Auditory – engine sound, airflow and radio telephony
- Using all information available to assess situation.

The memory

- Sensory memory
- Short-term (primary, active or working) memory
- Long-term (episodic or implicit) memory
- Muscle (procedural or motor learning) memory

Perception and decision making

- Confirmation bias
- Continuation bias
- Overconfidence bias

Hazardous attitudes

- Anti-authority
- Impulsiveness
- Invulnerability
- Macho
- Resignation
- Peer pressure

Risk (threat) assessment and management

- Assessing potential threats
- Environmental
- Operational

Error management

- Maintaining situational awareness
- Recognising and staying within limits of ability
- Use and value of checklists
- Avoidance of distraction

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Pilot Competence

Maintaining skills

- Skill are perishable and the value of currency
- Assessment of weather or challenge against currency and skill levels
- Value of proficiency checks and refresher training
- Specific items for currency and practice plan

Developing skills

- Structured plan
- Benefit of flying new types, completing differences training and personal preparation

Physiology

Oxygen and composition of the atmosphere

- Oxygen and hypoxia
- Time of useful consciousness
- Hyperventilation

Effects of pressure

- Barotrauma
- Decompression

Effects of temperature

- Hypothermia
- Overheating

Vision and limitations of the eye

- Visual acuity
- Empty field myopia
- Peripheral vision
- Relative movement and closing speeds
- Visual scanning techniques
- Correction of sight defects
- Blind spots

Visual illusions

- Runway width and length
- Sloping runways
- Haze or pollution
- Object fixation

Hearing

- Noise effects

Spatial disorientation

- Loss of natural horizon
- Effects of acceleration

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- Motion sickness

Fatigue

- Types, causes and symptoms of fatigue
- Comfort and ergonomics
- Effects and management of fatigue

Nutrition and hydration

- Importance of blood sugar levels and symptoms of low levels
- Symptoms of dehydration

Common aliments

- Colds and congestion
- Gastric illness

Other considerations

- Prescribed and over the counter medication
- Anaesthetics both local and general
- Blood donations

Toxic hazards

- Alcohol
- Smoking
- Psychoactive substances (recreational drugs)
- Carbon monoxide

Stress

- Definition
- Levels of arousal
- Anxiety and stress
- Effects and management of stress

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- Illness
- Medication
- Stress
- Alcohol
- Fatigue
- Eating

First aid

- Contacting the emergency services
- Risk assessment of scene before approaching
- Fractured or broken limbs
- Bleeding minor or severe
- Head and neck injuries

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- Shock
- Burns, both chemical and fire related

Meteorology

The Atmosphere

- Troposphere and tropopause
- Composition

Temperature, pressure and density

- Temperature variation in the atmosphere
- Pressure variation in the atmosphere
- Density
- The International Standard Atmosphere (ISA)

Pressure distribution

- Horizontal motion of the atmosphere
- Effect of the Earth's rotation
- Isobars
- Low pressure systems (depression)
- High pressure systems (anticyclones)
- Troughs, ridges and cols

Wind

- Relation of wind to isobars
- Surface and geostrophic wind
- Veering and backing
- Wind gradient
- Diurnal effect
- Coastal effects
- Katabatic, anabatic and valley winds
- Effects of terrain
- Mountain wave

Humidity

- Water vapour
- Relative humidity
- Dew point temperature
- Effect on density

Stability

- Environmental lapse rate
- Adiabatic cooling and heating
- Adiabatic lapse rates (Dry (DALR)) and (Saturated (SALR))

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Clouds and precipitation

- Formation of clouds
- Principal cloud types
- Height bands
- Precipitation

Air Masses

- Sources and types affecting the UK
- Stability and weather characteristics

Fronts

- Warm
- Cold
- Occlusion
- Associated sector weather

Visibility

- Measurements
- Haze
- Mist
- Fog
- Smoke

Hazardous weather conditions

- Hoar frost
- Rime ice
- Clear ice
- Rain ice
- Effects of icing on aircraft performance, stability and control

Thunderstorms

- Formation of thunderstorms
- Hazards for aircraft

Other

- Mountainous areas
- Low level turbulence
- Flight near to fronts
- Strong winds
- Thermic turbulence
- Potential hazards of a clear evening sky in Autumn
- Hazards of flight in reduced visibility

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- Effect on visibility related to the sun's position ahead or behind

Meteorological information

- Synoptic charts
- Satellite imagery
- Weather radar
- Area and significant weather forecasts
- TAFs and METARs
- Briefing charts
- Sources of meteorological information

Navigation

Planning – Calculations

- The triangle of velocities
- IAS, Wind, Heading, Groundspeed
- Flight computers
- Differences between IAS, CAS and TAS
- Measurement of angles
- Calculation of heading
- Relationship to True, Magnetic and Compass North
- Measurement of distance
- Conversion of units
- Calculation of time
- Calculation of fuel required
- Methods of heading correction
- Altimeter setting procedures
- QFE, QNH and regional pressure setting
- Standards setting
- Semi-circular rule

Charts

- Importance of using a current chart
- Practical use of half and quarter mill chart (1:500,000 and 1:250,000)
- Chart projections
- Chart scale
- Measurement of horizontal and vertical distances
- Conversion of units

Chart topography and Aeronautical Information

- Relief
- Maximum elevation figures

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- Cultural features
- Line features
- Hydrographical (water) features
- Spot, unique or special features
- Populated areas
- Aerodrome symbols
- Aeronautical information
- Controlled and advisory airspace

Flight planning

- Route weather forecasts and reports
- Limitations of local TV and internet general weather forecasts
- Area forecast (Met Form 214 and 215)
- Aerodrome forecasts and reports (TAFs and METARs)
- Selection of charts
- Planning the route
- Planning to avoid airspace infringements
- NOTAMs and the importance of using an approved source
- Aeronautical Information Circulars (AIC)
- Calculation of headings, times and fuel required
- Local time and Coordinated Universal Time (UTC)
- Destination airfield information
- Diversion airfields
- Selection of altitude and minimum safe altitude
- Plotting route on charts
- Pilot log
- Integration of moving map devices and flight planning software

Using the chart

- Folding the chart for use
- Chart orientation
- Checkpoint features and selection
- Anticipation of checkpoints with respects to terrain and visibility considerations
- Identification of when uncertain of position from ground to chart

Use of moving map device and Global Navigation Satellite System (GNSS)

- How does GNSS work
- Difference between barometric and GNSS altitude
- Displays position of aircraft on a chart
- Calculates and updates track and heading
- Calculates time

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- Airspace warning capability
- Information database

Potential operational limitations

- Portable devices
- Loss of satellite signal
- Software failure
- Out of date information
- Positioning of device
- Inter Ference with other instrumentation
- Effect of ambient temperature
- Insecure installation
- Importance of cross-checking information with the chart and the pre-planned route

Aeroplane Technical

Principles of flight

Aerofoils, Lift and Drag:

- Static and dynamic pressure
- Lift - Angle of Attack and Airspeed
- Distribution of lift and centre of pressure
- Drag - Induced, Parasite - Form, Skin, Interference
- Tip vortices and wake turbulence
- Lift/Drag ratio and aspect ratio

The four forces and equilibrium

- The Four Forces - Lift, Weight, Thrust, Drag
- Moments and Couples
- The Balance of the Four Forces – Straight, Turning, Level, Climbing, Descending

The stall

- Airflow separation
- Effects on centre of pressure
- Factors affecting stall airspeed
- High speed stall

The spin

- Definition
- Causes and means to avoid
- Effects of power, use of flaps and centre of gravity

The tumble

- Definition
- Causes and means to avoid

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Flight limitations and envelope

- Airspeed limitations
- Positive and negative load factors or ‘G’ limits
- Angle of pitch and bank limits

Weight and balance

- Maximum take-off weight
- Minimum and maximum seat and cockpit weight limitations
- Fuel, ballast and baggage considerations
- Centre of gravity limitations
- Pre-flight calculations

Flying controls

- The three axes
- Primary controls
- Billow shift
- Trimming devices
- Flaps and other devices
- Aerodynamic balance and anti-balance tabs

Stability

- Positive, neutral and negative
- Longitudinal (pitch) stability (fixed wing)
- Lateral (roll) stability (fixed wing)
- Directional (yaw) stability (fixed wing)
- Relationship between centre of gravity and stability (fixed wing)
- Control of mass balance (prevention of flutter)

Aircraft performance

General

- The International Standard Atmosphere (ISA)
- Cruising flight
- Climbing
- Descending
- Take-off, initial climb, approach and landing

Effect on performance

- Power available
- Wind direction and strength
- Calculation of crosswind component
- Wind gradient
- Wind shear
- Ground effect

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- Weight/mass
- Density
- Ground surface and gradient
- Use of flaps and other high lift devices
- Use of flaps and other lift spoiling devices

Take-off and landing performance calculations

- Aircraft specific data
- Application of safety factors
- Declared distances and obstacles

Aircraft General

Aircraft Structure

- Airframe
- Ground and flight loads
- Aircraft components conditions, security and types of fastenings
- Fabric coverings

Propulsion

The internal combustion engine

- Two-stroke cycle
- Four-stroke cycle
- Diesel

Electrical systems

- Batteries, switching, fuses and circuit breakers
- Charging systems

Ignition systems

- Principles and components
- Ignition switching circuit

Fuel systems

- Fuel system
- Fuels pump(s)
- Fuel grade
- Water and ethanol in fuel
- Fuel tanks
- Fuel gauges and indicators

Carburettors

- Principles
- Indications of correct or incorrect fuel/air mixture
- Mixture control
- Carb icing

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- Carb heating systems
- Air filters

Fuel injection systems

- Principles and operation

Exhaust systems

- Difference between two-stroke and four-stroke systems
- Checks for security, cracks and internal integrity
- Cabin heating systems

Oil systems

- Two-stroke lubrication system
- Four-stoke lubrication system

Engine cooling

- Air, fluid and oil cooling systems

Reduction drive

- Gearbox
- Belt drive

The propeller

- Construction and shape
- Pitch settings (POH/HADS/TADS)
- Condition and serviceability

Other propulsion systems

- Turbine
- Hybrid
- Electric including battery powered

Instruments

Pressure Instruments

- Airspeed indicator
- Altimeter
- Vertical speed indicator
- Potential malfunctions

Magnetic compass

- Deviation
- Turning, acceleration and deceleration errors

Engine instruments

- Temperature gauges
- Pressure gauges
- RPM gauge

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Safety equipment

- Airframe mounted ballistic recovery parachute system
- Canopy hammer
- Carbon monoxide detector
- Fire extinguisher
- Survival equipment, Personnel Locator Beacon (PLB), Emergency Locator Transmitter (ELT), lifejackets, life rafts

Maintenance, modification and repairs to aeroplane types

- Airframe
- Engine
- Instruments and avionics
- Safety equipment
- Requirements and responsibility for maintenance
- Use of manufacturer's maintenance schedules
- Variations according to conditions of storage and levels of use
- Recording maintenance
- Processes for repairs and modifications

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Chapter 10

NPPL(A) skill test

Introduction

10.1 During the skill test for the issue of an NPPL(A) the applicant shall demonstrate the ability to:

- exercise good judgement and airmanship;
- operate the aeroplane within its limitations;
- complete all manoeuvres with smoothness and accuracy;
- apply aeronautical knowledge;
- execute emergency procedures as required;
- demonstrate control of the aeroplane such that the successful outcome of a procedure or manoeuvre is never significantly in doubt.

Skill test for NPPL(A) on SEP or TMG

Flight test tolerances

10.2 The following limits are for general guidance. The examiner should make allowance for turbulent conditions and the handling qualities or performance of the aeroplane used:

- Height: ± 150 ft in normal flight
- Heading: ± 10° in normal flight
- Speed:
  - +15/–5 knots during take-off and approach
  - ± 15 knots in all other flight regimes

10.3 Further guidance on the conduct of skill test is contained in the Flight Examiners Handbook (A): Flight Examiners' Handbook (Aeroplanes) 2020 | UK Civil Aviation Authority.

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Contents of the NPPL(A) skill test

The skill test contents for the issue of an NPPL (SEP(Land))/NPPL (TMG) are shown below.

Use of checklists, control of the aeroplane by external visual reference, anti/de-icing procedures, etc. apply in all sections.

SECTION 1 – PRE-FLIGHT OPERATIONS AND DEPARTURE

a) Pre-flight documentation and weather brief

b) Mass and balance and performance calculation

c) Aeroplane inspection and servicing

d) Passenger care and considerations

e) Engine starting and after starting procedures

f) Taxiing and aerodrome procedures, pre-take-off procedures

g) Take-off and after take-off checks

h) Aerodrome departure procedures

i) ATSU liaison - compliance, flight radio procedures, Airmanship

SECTION 2 – GENERAL AIRWORK

a) ATSU liaison and compliance, flight radio procedure, Airmanship

b) Straight and level flight, with speed changes

c) Climbing:

- best rate of climb
- climbing turns
- levelling off

d) Medium (30° bank) turns

e) Steep turns (360° left and right - 45° bank) including recognition and recovery from a spiral dive

f) Flight at critically low airspeed with and without flaps. Best angle of climb

g) Stalling:

- Clean stall and recovery with power
- Approach to stall descending turn with bank angle 20°, approach configuration
- Approach to stall in landing configuration

h) Descending

- With and without power
- Descending turns (steep gliding turns)
- Levelling off

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SECTION 3 – ENROUTE PROCEDURES

a) Flight plan, dead reckoning, map reading and use of moving map display (optional)

b) Maintenance of altitude, heading and speed

c) Orientation, timing and revision of ETAs and log keeping using a manual flight log

d) Diversion to alternate aerodrome (planning and implementation) including the use of moving map displays (optional)

e) Basic instrument flying check (180° turn in simulated IMC)

f) Flight management (checks, fuel systems and carburettor icing, etc.)

g) ATSU compliance and flight radio procedures

SECTION 4 – APPROACH AND LANDING PROCEDURES

a) Aerodrome arrival procedures

b) *Precision landing (short field landing), cross wind, (if suitable conditions available)

c) *Flapless landing

d) Approach to landing with idle power

e) Touch and go

f) Go-around from low height

g) ATSU liaison -compliance, flight radio procedures, Airmanship

h) Actions after flight including documentation

*Some of these items may be combined at the discretion of the Flight Examiner.

SECTION 5 – ABNORMAL AND EMERGENCY PROCEDURES

This section may be combined with Sections 1 through 4

a) Simulated engine failure after take-off

b) *Simulated forced landing

c) Simulated precautionary landing

d) *Simulated emergencies

- Engine fire
- Cabin or Electrical fire
- Partial loss of power
- Simulated emergencies from the POH, FM or similar or abnormal conditions introduced by the examiner.

e) Oral questions

*Some of these items may be combined at the discretion of the Flight Examiner.

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Examiner report for NPPL(A) (SEP/TMG) skill test

Complete this form in BLOCK CAPITALS using black or dark blue ink.

1. APPLICANT DETAILS

Surname: …… Forenames: ……

CAA Personal reference number: …… Attempt: ……

Date: …….. Place of Test……

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, license, 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.

I declare that the information provided is correct. Applicant's Signature:……

2. FLIGHT TEST

Route					
Aircraft Type and Reg		Block Times: Depart	Arrival	Total	
Test Sections:	1	2	3	4	5
Sections to be taken:					
Result:					
(a)					
(b)					
(c)					
(d)					
(e)					
(f)					N/A
(g)					N/A
(h)			N/A		N/A
(i)		N/A	N/A	N/A	N/A
Re-test Sections:					
Test Sections incomplete due:					
Items not completed:					
Re-training required/recommended:					

I confirm the applicant's instruction and experience complies with CAP 3181, that all theoretical examinations are valid and that all the required manoeuvres and exercises have been completed.

Examiner's Name:	Examiner's CAA Reference Number:
Examiner's Signature:	Date:
Applicant's Signature:	Date:

3. TRAINING ORGANISATION

ATO/DTO/Other:	Date training completed:
Recommended for test by (name):	

Copies of the report shall be submitted to the: (1) applicant (2) CAA (3) examiner

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Civil Aviation Authority Regulation 6
Regulation 6(5) of the Civil Aviation Authority Regulations 1991 provides as follows: Any person who has failed any test or examination which he is required to pass before he is granted or may exercise the privileges of a personnel licence may within 14 days of being notified of his failure request that the Authority determine whether the test or examination was properly conducted. In order to succeed you will have to satisfy the Authority that the examination or test was not properly conducted. Mere dissatisfaction with the result is not sufficient reason for appeal.

Use of checklists, airmanship, aircraft control by visual references, anti-icing procedures, etc apply in all sections			
SECTION 1. PRE-FLIGHT AND DEPARTURE		**SECTION 3. ENROUTE PROCEDURES**	
a	Pre-flight documentation, NOTAM and weather briefing	a	Flight plan, dead reckoning, map reading, and use of moving map display (optional).
b	Mass, balance and performance calculation	b	Maintenance of altitude, heading and speed.
c	Passenger care and considerations	c	Orientation, airspace structure, timing and revision of ETAs, and log keeping using a manual flight log.
d	Aeroplane inspection and servicing	d	Diversion to alternate aerodrome (planning and implementation) including the use of moving map displays (optional)
e	Engine starting and after starting procedures		
f	Taxiing and aerodrome procedures, pre-take-off procedures	e	Basic instrument flying (180° turn in simulated IMC)
g	Take-off and after take-off checks	f	Flight management (checks, fuel systems and carburettor icing etc.)
h	Aerodrome departure procedures		
i	ATSU liaison – compliance, flight radio procedures	g	ATSU liaison – compliance, flight radio procedures
SECTION 2. GENERAL AIRWORK		**SECTION 4. APPROACH AND LANDING PROCEDURES**	
a	ATSU liaison – compliance, flight radio procedures	a	Aerodrome arrival procedures
b	Straight and level flight, with speed changes	b	*Precision Landing (short field landing), crosswind, if suitable conditions available
c	Climbing: (i) Best rate of climb (ii) Climbing turns (iii) Levelling off	c	*Flapless Landing
		d	*Approach to landing with idle power
		e	Touch and go
		f	Go around from a low height
d	Medium (30° bank) turns, lookout procedure and collision avoidance	g	ATSU liaison – compliance, flight radio procedures
e	Steep (45° bank) turns (including recognition and recovery from a spiral dive)	h	Actions after flight
f	Flight at critically low airspeed with and without flaps	**SECTION 5. ABNORMAL & EMERGENCY PROCEDURES** *This section may be combined with sections 1 through 4*	
g	Stalling: (i) Clean stall and recover with power (ii) Approach to stall descending turn with 20° bank approach configuration (iii) Approach to stall in landing configuration	a	Simulated engine failure after take-off
		b	*Simulated forced landing
		c	Simulated precautionary landings
		d	Simulated emergencies: (i) Engine fire (ii) Cabin or electrical fire (iii) Partial loss of power (iv) Simulated emergencies from the POH, AFM or similar or abnormal conditions introduced by the examiner.
h	Descending: (i) With and without power (ii) Descending turns (steep gliding turns) (iii) Levelling off	e	Oral questions
		*these items may be combined at the discretion of the FE.	

Note: if the test is completed in two parts, then Section 1 and items a, b and h of Section 4 (aerodrome arrival, landing, actions after flight) shall be assessed on both flights.

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Skill test for NPPL(A) on microlight aeroplanes

Flight test tolerances

10.4 The following limits are for general guidance. The examiner should make allowance for turbulent conditions and the handling qualities or performance of the aeroplane used:

(a) height:

- normal flight ± 100 ft of required altitude
- not more than 200 ft at any time
- not more than 100 ft for more than 30 seconds

(b) heading:

- normal flight ± 15° of required heading
- not more than ± 30° at any time
- not more than ± 15° for more than 30 seconds

(c) airspeed:

- normal ± 5 mph or knots of required airspeed
- not more than ± 10 mph or knots at any time
- not more than ± 5 mph or knots for more than 30 seconds

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Skill test schedule for NPPL with microlight aeroplane

Civil Aviation Authority Regulation 6
Regulation 6(5) of the Civil Aviation Authority Regulations 1991 provides as follows: Any person who has failed any test or examination which he is required to pass before he is granted or may exercise the privileges of a personnel licence may within 14 days of being notified of his failure request that the Authority determine whether the test or examination was properly conducted. In order to succeed you will have to satisfy the Authority that the examination or test was not properly conducted. Mere dissatisfaction with the result is not sufficient reason for appeal.

Skill test for the issue of a NPPL(A) on microlight aeroplanes	
PREPARATION FOR FLIGHT	STALLING continued
Weather suitability / NOTAM check	Recovery from developed stall - In turning flight
Aircraft documents check	Recovery from developed stall - In approach configuration
Weight and performance calculation	FORCED LANDING WITHOUT POWER
Fuel state	Checks & Procedure
Pre-flight inspection	PRECAUTIONARY LANDING
Booking out & airfield procedures	Checks & Procedure
STARTING, TAXIING AND PRE-DEPARTURE CHECKS	OPERATION AT MINIMUM LEVEL
Pre-start checks	Procedure
Post-start checks	AERODROME JOINING
Taxiing techniques and checks	Procedure and awareness
Pre-departure / power checks	CIRCUIT JOINING PROCEDURES
TAKE-OFF AND DEPARTURE	Standard overhead join / other standard join
Pre-take-off checks (vital actions)	APPROACH AND LANDING
During and post-take-off checks	Pre-landing checks
Normal take-off	Glide approach and use of sideslip
Assessment of crosswind & crosswind take-off	Powered approach / Performance landing
Performance take-offs	Assessment of crosswind & crosswind landing
Aerodrome departure procedures	Checks after landing
NAVIGATION, ORIENTATION	MISSED APPROACH & GO-AROUND
Recognition of features	Checks & Procedure

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Assessment of heading	SIMULATED EMERGENCIES
GENERAL HANDLING	Partial engine failures at all stages of flight
Climbing	Engine fire in the air/on the ground
Straight and Level flight	Cabin fire in the air/on the ground
Descending – use of power, flap, spoiler	Engine failure after take-off
Turning - Level	Other simulated emergencies
Turning - Climbing	ENGINES AND SYSTEMS HANDLING
Turning - Descending	Use and management throughout
Turning at high angles of bank	AIRMANSHIP AND AWARENESS
UNUSUAL ATTITUDES	Lookout
Recovery from spiral dives	Positioning – restricted airspace, hazards, weather
Recovery from steep climbing turns	Aerodrome discipline & procedures
STALLING	ACTION AFTER FLIGHT
Checks before stalling	Engine shut down
Recovery at the incipient stage	Parking and security aircraft
Recovery from developed stall – In straight flight	Recording flight details

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Chapter 11

Flight training syllabus

SEP and TMG syllabus

Introduction

11.1 This syllabus is for the NPPL(A) with SEP(Land) or TMG and conforms to the requirements as set out in this CAP for the training of pilots towards the grant of an NPPL with an SEP or TMG class rating.

11.2 Each course is to be designed so that the students or the pilots under training are given the experience, the competence in flying, and the knowledge of aviation technical matters demanded by the ground and flight tests as laid down in this syllabus for the initial issue of a National Private Pilot Licence.

11.3 To enable them to use the aeroplanes and facilities of the private flying environment within the privileges of the licence, in a safe and responsible manner within their own limitations.

11.4 The co-ordination of ground and flight training is a necessary and important part of any pilot course. Care should be exercised when conducting the course to ensure that flying training exercises are compatible with the student's ground training progress.

11.5 The following definitions provide a general guide to the briefings given but may vary in length and content dependent on the individual students' needs.

11.6 **Long briefing** – a detailed explanation and discussion conducted by the flight instructor of the major considerations of an air exercise. The normal length should be approximately 30 minutes and may be given to an individual student, or as an informal lecture to two or more students.

11.7 **Pre-flight briefing** – a practical exposition by the flight instructor and lasting 10-15 minutes, on the contents of a specific flight lesson. This normally includes a statement of the aims, a brief revision of the practical aspects of any Principles of Flight involved, a statement of exactly what air exercises are to be taught by the instructor and practised by the student, and how, when and by whom the aeroplane is to be operated within the limits imposed by airmanship, weather and flight safety. These limits may vary with a particular flight and will be appropriate to the student's stage of training. The order in which the content is given may vary according to the instructor's judgement and the student's experience.

11.8 **Post-flight discussion** – a few minutes devoted by the instructor immediately after a specific lesson to consolidate the major points made during the flight,

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clarify any queries the student may have and review progress made by the student, using fault analysis or praise as necessary, and finally to indicate the nature of the next lesson.

11.9 The numbering of the air exercises is to be used primarily as a reference list and instructional sequencing guide only. Demonstrations and practices need not necessarily be given in the order listed. The actual order and content will depend upon the following interrelated factors:

- The student's progress and ability
- Instructional technique considerations
- The weather conditions affecting the flight
- The local operating environment
- The flight time available

11.10 Flight instruction shall be given by flight instructors qualified in accordance with the Air Navigation Order or Part-FCL and shall be sufficient to cover the following flight procedures and manoeuvres:

(a) pre-flight operations, including mass and balance determination, aeroplane inspection and servicing;

(b) aerodrome and traffic pattern operations, collision avoidance precautions and procedures;

(c) control of the aeroplane by external visual reference;

(d) flight at critically slow airspeeds; recognition of, and recovery from, incipient and full stalls;

(e) flight at critically high airspeeds; recognition of, and recovery from spiral dives;

(f) normal and cross wind take-offs and landings, landing at unlicensed strips, short field/grass field operation;

(g) maximum performance (short field and obstacle clearance) take-offs; short field landings;

(h) instrument appreciation;

(i) cross-country flying using visual reference, dead reckoning and integrating the use of MMD;

(j) emergency operations, including simulated aeroplane equipment malfunctions; and

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(k) operations to, from and transiting controlled aerodromes, compliance with air traffic services, procedures, radiotelephony procedures and phraseology.

11.11 The exercise numbering for the NPPL(A) with SEP (Land) class rating syllabus corresponds to the exercises conducted for the Part-FCL PPL(A).

11.12 The exercise numbering for the NPPL(A) with TMG class rating syllabus corresponds to the exercises conducted for the Part-SFCL SPL.

11.13 The exercises, particularly those following first solo and consolidation on the circuit, will not necessarily be given in the order as shown.

Flight training exercises for NPPL(A) with SEP

Exercise number	Flight instruction elements
Exercise 1 Familiarisation with the aeroplane	- characteristics of the aeroplane - cockpit layout - systems - check lists, drills, controls - passenger care
Exercise 1b Emergency drills	- action in event of fire on the ground and in the air - engine, cabin and electrical system fire - systems failure - escape drills, location and use of emergency equipment and exits
Exercise 2 Preparation for and action after flight	- flight authorisation and aeroplane acceptance - serviceability documents - equipment required, maps, etc - external checks - internal checks - harness, seat or rudder pedal adjustments - starting and warm up checks - power checks - running down system checks and switching off the engine - parking, security and picketing (e.g. tie down) - completion of authorisation sheet and serviceability documents

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Exercise 3 Air Experience	- flight exercise
Exercise 4 Effects of controls	- primary effects when laterally level and when banked - further effects of aileron and rudder - effects of: - airspeed - slipstream - power - trimming controls - flaps - other controls as applicable - operation of: - mixture control - carburettor heat - cabin heating/ventilation - airmanship
Exercise 5a Taxiing	- pre-taxi checks - starting, control of speed and stopping - engine handling - control of direction and turning - turning in confined spaces - parking area procedures and precautions - effects of wind and use of flying controls - effects of ground surface - freedom of rudder movement - marshalling signals - instrument checks - air traffic control procedures - airmanship
Exercise 5b Emergencies	- brakes and steering failure

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Exercise 6 Straight and level	- at normal cruising power, attaining and maintaining straight & level flight - flight at critically high airspeeds - demonstration of inherent stability - control in pitch, including use of trim - lateral level, direction and balance, trim: - at selected airspeeds (use of power) - during speed and configuration changes - use of instruments for precision flight - airmanship
Exercise 7 Climbing	- entry, maintaining the normal and maximum rate climb, levelling off - levelling off at selected altitudes - enroute climb (cruise climb) - climbing with flap down - recovery to normal climb - maximum angle of climb - airmanship
Exercise 8 Descending	- entry, maintaining and levelling off - levelling off at selected altitudes - glide, powered and cruise descent (including effect of power and airspeed) - descending with flaps down - side slipping (on suitable types) - airmanship

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Exercise 9 Turning	- entry and maintaining medium level turns - resuming straight flight - faults in the turn (incorrect pitch, bank, balance) - climbing turns - descending turns - slipping turns (on suitable types) - turns on to selected headings, use of gyro heading indicator and compass - use of instruments for precision flight - airmanship
Exercise 10a Slow flight	- safety checks - introduction to slow flight - controlled flight down to critically slow airspeed - application of full power with correct attitude and balance to achieve normal climb speed - airmanship **NOTE:** The objective is to improve the student's ability to recognise inadvertent flight at critically low speeds and provide practice in maintaining the aeroplane in balance while returning to normal airspeed.
Exercise 10b Stalling	- airmanship - safety checks - symptoms - recognition - clean stall and recovery without power and with power - recovery when a wing drops - approach to stall in the approach and in the landing configuration with and without power, recovery at the incipient stage of the stall.

Exercise 11 Spin avoidance	- airmanship - safety checks - stalling and recovery at the incipient spin stage (stall with excessive wing drop, about 45°) - instructor induced distractions during the stall **NOTE 1:** At least two hours of stall awareness and spin avoidance flight training should be completed during the course. **NOTE 2:** Consideration of manoeuvre limitations and the need to refer to the aeroplane manual and mass and balance calculations.

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Exercise 12 Take-off and climb to downwind position	- pre-take-off checks - into wind take-off - safeguarding the nosewheel - crosswind take-off - drills during and after take-off - short take-off and soft field procedure/techniques including performance calculations - noise abatement procedures - airmanship
Exercise 13 Circuit, approach and landing	- circuit procedures, downwind, base leg - powered approach and landing - safeguarding the nosewheel - effect of wind on approach and touchdown speeds, use of flaps - crosswind approach and landing - glide approach and landing - short landing and soft field procedures/techniques - flapless approach and landing - 3 point landing (tailwheel aeroplane, if applicable) - missed approach/go-around - noise abatement procedures - airmanship
Exercise 12/13 Emergencies	- abandoned take-off and reasons for doing so - engine failure after take-off including partial loss of power - mislanding/go-around - missed approach **NOTE:** If partial loss of power is not taught prior to first solo, it should be addressed during circuit consolidation flying. **NOTE**: In the interests of safety, it will be necessary for pilots trained on nose-wheel aeroplanes to undergo differences training before flying tailwheel aeroplanes and vice versa.

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Exercise 14a First solo	- instructor's briefing, observation of flight and de-briefing - procedures for leaving and rejoining the circuit - the local area, restrictions, map reading - turns using the magnetic compass - compass errors - airmanship
Exercise 14b Solo consolidation	**NOTE:** During flights immediately following the solo circuit consolidation the following should be revised: - instructor's briefing, observation of flight and de-briefing - procedures for leaving and rejoining the circuit - the local area, restrictions, map reading - turns using the magnetic compass - compass errors - airmanship
Exercise 15 Advanced turning	- steep turns (45°), level, descending - stalling in the turn and recovery - recoveries from unusual attitudes, including spiral dives - airmanship
Exercise 16 Forced landing without power	- forced landing procedure - choice of landing area, provision for change of plan - gliding distance, descent plan - key positions - engine warming procedure, engine failure checks - use of radio - base leg - final approach - landing, actions after landing - airmanship - after completing the forced landing without power items, the FI should discuss and practice enroute partial power loss scenarios with the applicant **NOTE:** The teaching of partial power engine failures during or immediately after take-off should emphasise maintaining a safe flying speed and control of the aircraft. It may be appropriate to treat a partial loss of power as a full EFATO, with selection of a landing site beyond the runway.

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	Recommended items for teaching partial power during Exercise 16: 1. Identify partial power failure condition; 2. Perform the partial engine failure checks, as per the checklist, Pilots Operating Handbook or Flight Manual; 3. Adjust flight controls to re-establish flight path that maximises performance for partial power condition and maintain a safe airspeed margin above stall speed; 4. Formulate a plan to recover aeroplane to a safe landing area or aerodrome, taking into account that partial failure might lead to a full power failure at any time; 5. Manoeuvre the aeroplane to a selected landing area or aerodrome using the remaining power to establish an optimal aircraft position for a safe landing; 6. Advise Air Traffic Service Unit, or other agencies capable of providing assistance of situation and intentions; 7. Brief passengers about flight situation, brace position and harness security; 8. Maintain a contingency plan for coping with a full power failure throughout the manoeuvre, for example instead of making a straight in approach, consider flying into the overhead of the aerodrome to maintain height for as long as possible, followed by a descending circuit close to the runway.
Exercise 17 Precautionary landing	- full procedure away from the aerodrome to break-off height - occasions necessitating - in-flight conditions - landing area selection - normal aerodrome - disused aerodrome - ordinary field - circuit and approach - actions after landing - airmanship
Exercise 18a Navigation	Flight planning - weather forecast and actuals - map selection and preparation - choice of route - controlled airspace - danger, prohibited and restricted areas - safety altitude(s) - calculations - magnetic heading(s) and time(s) en-route

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	- fuel consumption - mass and balance - mass and performance - flight information - NOTAMS etc. - radio frequencies - selection of alternate aerodromes - aeroplane documentation - notification of the flight - pre-flight administrative procedures - flight plan form Departure - organisation of cockpit workload - departure procedures - altimeter settings - ATC liaison in controlled/regulated airspace - setting heading procedure - noting of ETAs - maintenance of altitude and heading - revision of ETAs & heading - log keeping - use of radio - minimum weather conditions for continuation of flight - in-flight decisions - transiting controlled/regulated airspace - diversion procedures - uncertainty of position procedure - lost procedure - Arrival, aerodrome joining procedure - ATC liaison in controlled/regulated airspace - altimeter setting - entering the traffic pattern - circuit procedure - parking - security of aeroplane - refuelling

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	- booking in/closing of flight plan, if appropriate - post-flight administrative procedure **NOTE:** The applicant should initially conduct the navigation exercises using a chart, manually completed flight log and maintain the flight log during the exercises. Once the applicant has reached a sufficient level of competence determined by the FI, flight planning applications and moving map devices should be integrated into the navigation exercises and supervised solo cross-country flights.
Exercise 18b Navigation problems at lower levels and in reduced visibility	- actions prior to descending - hazards (e.g. obstacles & terrain) - difficulties of map reading or when using moving map devices - effects of wind and turbulence - avoidance of noise sensitive areas - joining the circuit - bad weather circuit and landing
Exercise 19 Instrument appreciation	- physiological sensations - instrument appreciation - demonstration to show need for proper training before flying by sole reference to instruments and being able to make a 180° turn on instruments on inadvertent encounter with cloud

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Flight training exercises for NPPL with TMG

11.14 Some flight exercises for the NPPL(A) with TMG class rating are specific to Touring Motor Gliders and may not be included in the available Flight Instructors Manuals.

11.15 The following TMG syllabus has been aligned with AMC 1 SFCL.150(b) SPL of Part-SFCL. Additional guidance has been provided based on UK experience with TMGs.

Exercise Number	Flight instruction elements
Exercise 1 Familiarisation with TMG	• characteristics of the TMG; • cockpit layout; • systems; and • checklists, drills and controls.
Exercise 1e Emergency drills	• action if fire on the ground and in the air; • engine cabin and electrical system fire; • systems failure; and • escape drills, location and use of emergency equipment and exits.
Exercise 2 preparation for and action after flight	• serviceability documents; • equipment required, maps, etc.; • external checks; • internal checks; • harness and seat or rudder panel adjustments; • starting and warm-up checks; • power checks; • running down system checks and switching off the engine; • parking, security and picketing (for example, tie down); and • completion of authorisation sheet and serviceability documents.

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Exercise 3 Taxiing	• pre-taxi checks; • starting, control of speed and stopping; • engine handling; • control of direction and turning; • turning in confined spaces; • parking area procedure and precautions; • effects of wind and use of flying controls; • effects of ground surface; • freedom of rudder movement; • marshalling signals; • instrument checks; and • air traffic control procedures (if applicable).
Exercise 3e Emergency brake and steering failure	
Exercise 4 Straight and level	• at normal cruising power, attaining and maintaining straight and level flight; • flight at critically high air speeds; • demonstration of inherent stability; • control of pitch, including use of trim; • lateral level, direction and balance and trim; • at selected air speeds (use of power); • during speed and configuration changes; and • use of instruments for precision. **Effect of airbrakes and spoilers** Demonstration Part 1. In trimmed level or gliding flight, remove your hands and feet from the flying controls. Point out or remind the student of the location of the airbrake lever. Progressively select ½ to 2/3 airbrake (or spoiler) and note the change of attitude and speed. Close the airbrake (or spoiler) and note the attitude and speed change. Then take control and demonstrate maintaining the attitude and speed while opening and closing the airbrake (or spoiler). **Student Practice**. Ask the student to take control and maintain the required attitude and speed while he or she opens, pauses, and then closes the airbrake (or spoiler).

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	Demonstration Part 2. In level or gliding flight, while maintaining the required attitude, progressively open the airbrake (or spoiler) to 1/2 and note the increased rate of descent. Fully open the airbrake (or spoiler) and note a further increase in the rate of descent. Close the airbrake (or spoiler) and note the reduction in descent rate. **Instructors Note**: This exercise is to show the effect that airbrake (or spoiler) has on the pitch attitude and to the performance of the aircraft. The reasons for using airbrake (or spoiler) will be covered during subsequent lessons. **Summary**: The airbrake (or spoiler) can affect the pitch attitude and therefore the speed of the aircraft. More significantly, the airbrake (or spoiler) affects the rate of descent of the aircraft. The operational use of airbrake will be covered later.
Exercise 5 Climbing	• entry, maintaining the normal and max rate climb and levelling off; • levelling off at selected altitudes; • en-route climb (cruise climb); • climbing with flap down (if available); • recovery to normal climb; • maximum angle of climb; and • use of instruments for precision.
Exercise 6 Descending	• entry, maintaining and levelling off; • levelling off at selected altitudes; • glide, powered and cruise descent (including effect of power and air speed); • side slipping (on suitable types); • use of instruments for precision flight; and • descending with engine inoperative.
Exercise 7 Turning	• entry and maintaining medium level turns; • resuming straight flight; • faults in the turn (incorrect pitch, bank and balance); • climbing turns; • descending turns; • slipping turns (on suitable types); • turns onto selected headings, use of gyro heading indicator or compass; and • use of instruments for precision.

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Exercise 8a Slow flight	Note: The objective is to improve the pilot's ability to recognise inadvertent flight at critically low speeds and provide practice in maintaining the TMG in balance while returning to normal air speed. • safety checks; • recognition of the characteristics of slow flight; • controlled flight down to critically slow air speed; and • application of full power with correct attitude and balance to achieve normal climb speed.
Exercise 8b stalling	• airmanship; • safety checks; • symptoms; • recognition; • clean stall and recovery without power and with power; • recovery when a wing drops; and • approach to stall in the approach and in the landing configurations, with and without power, recovery at the incipient stage.
Exercise 8 appreciation of gliding performance additional guidance for Instructors.	**Demonstration 1**. At an appropriate height, note the position above the ground and close the throttle. Fly the aircraft in the straight glide at the best glide speed and note the rate of descent. Having descended approximately 1000', again note the aircraft position. **Demonstration 2**. Climb away and then close the throttle at the same position and height above the ground as in as the previous demonstration. Fly the aircraft in the straight glide on approximately the same heading as the previous demonstration, but at, say, 20 kt faster than best glide speed and note the rate of descent. Having descended approximately 1000', again note the aircraft position. Note the shorter distance travelled for a similar height loss. **Instructor's Note**: During exercise 16 the student will be expected to have an appreciation of the glide performance of the aircraft to enable him or her to make appropriate judgement when gliding to a landing area. Additionally, pilots of TMGs will inevitably utilise the aircraft for soaring flight with the engine stopped. This exercise demonstrates the best glide performance against a glide flown at an inappropriate speed. The exercise is best flown in a non-soaring environment. **Summary**: The speed of the aircraft significantly affects the glide performance. The operational use of appreciating glide performance will be covered during exercise 16, 'Forced landings without power'.

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Exercise 9 Take-off and climb to downwind position	• pre-take-off checks; • into wind take-off; • safeguarding the nose wheel (if applicable); • crosswind take-off; • drills during and after take-off; • short take-off and soft field procedure or techniques including performance calculations; and • noise abatement procedures.
Exercise 10 Circuit, approach and landing	• circuit procedures, downwind and base leg; • approach and landing with and without (idle) engine power; • safeguarding the nose wheel (if applicable); • effect of wind and wind shear on approach and touchdown speeds; • use of airbrakes, flaps, slats or spoilers (if available); • crosswind approach and landing; • glide approach and landing (engine stopped); • short landing and soft field procedures or techniques; • flapless approach and landing (if applicable); • wheel landing; • missed approach and go-around; and • noise abatement procedures. Note: In the interests of safety, it will be necessary for pilots who are trained on nose wheel TMGs to undergo dual conversion training before flying tail wheel TMGs, and vice versa.
Exercise 9/10e Emergencies	• abandoned take-off; • engine failure after take-off; • mislanding and go-around; • missed approach; and • partial power loss.
Exercise 11 Advanced turning	• steep turns (45 °), level and descending; • stalling in the turn and recovery; and • recoveries from unusual attitudes, including spiral dives.

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Exercise 12 stopping and restarting the engine inflight	**Demonstration – Stopping**. Having carefully addressed the airmanship considerations, at an appropriate height and position (ideally close to an airfield) reduce the power to allow the engine to cool to the recommended temperature. Having achieved the recommended temperature, stop the engine as recommended in the flight manual or pilots notes. Note any post engine stop requirements, for example electrical power conservation, propeller adjustment, engine cooling flap closure, etc. If the type has no recommended engine stopping procedure, the following guidelines may be appropriate. After the engine cooling down period: • Carb Heat 'Check Fully Hot' • Ancillary electrics 'Off' • Radio 'Off' • Ignition 'Off' • Fuel 'Off' • Check airspeed • Apply the propeller brake, or feather the propeller, or reduce the airspeed until the propeller stops • Adopt the normal gliding attitude • Radio 'On' **Demonstration – Starting**. Having addressed the appropriate airmanship considerations and any pre starting requirements, for example un-feathering the propeller or opening cooling flaps, etc, start the engine as recommended in the flight manual or pilots notes. If the type has no recommended engine starting procedure, the following guideline may be appropriate. If above the minimum height to attempt a start: • Fuel 'On' • Choke 'As required' • Throttle 'Set' • Ignition 'On' • Radio 'Off' • Starter 'Operate', and when engine starts, • Choke 'Off' • Starter Warning 'Check' • Oil Pressure and Temperature 'Check' • Carb Heat 'Cold' • Radio 'On' **Instructors Note**: This exercise has significant airmanship implications! It is, of course, important that the instructor ensures that the student is fully aware of the requirement to remain within gliding range of an airfield with the engine stopped, and to ensure that he or she understands the concept of a height envelope, including a 'height floor'.

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	For example: 3000' – Stop the engine 1500' – Restart the engine 1000' – Exercise 'height floor'. Abandon engine start attempt. Get established in the glide circuit This exercise demonstrates the procedure for stopping and starting the engine in flight using normal engine starting for the aircraft type. **Summary**: Stopping and starting the engine in flight is a relatively complex procedure, and in some types, may require the use of flight reference cards. **The priority must always be to FLY the aircraft, and to remain in gliding range of a safe landing area.** Switching off the ignition and fuel will prevent the engine running under its own power, but the gliding speed will continue to make the propeller rotate due to the windmilling action of the slipstream.
Exercise 13 Forced landing without power	• forced landing procedure; • choice of landing area, provision for change of plan; • gliding distance; • descent plan; • key positions; • engine failure checks; • use of radio; • base leg; • final approach; • landing; and • actions after landing.

Exercise 14
Precautionary landing
	• full procedure away from aerodrome to break-off height;
	• occasions necessitating;
	• in-flight conditions;
	• landing area selection:
	  ○ normal aerodrome;
	  ○ disused aerodrome; and
	  ○ ordinary field;
	• circuit and approach; and
	• actions after landing.

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Exercise 15a Navigation	• Flight planning
	  o weather forecast and actuals;
	  o map selection and preparation:
	  ▪ choice of route;
	  ▪ airspace structure; and
	  ▪ safety altitudes;
	• calculations:
	  o magnetic heading(s) and time(s) en-route;
	  o fuel consumption;
	  o mass and balance; and
	  o mass and performance;
	• flight information:
	  o NOTAMs, etc.;
	  o radio frequencies; and
	  o selection of alternate aerodromes;
	• TMG documentation;
	• notification of the flight:
	  o pre-flight administrative procedures; and
	  o ICAO flight plan form;
	• Departure:
	• organisation of cockpit workload;
	• departure procedures:
	  o altimeter settings;
	  o ATC liaison in regulated airspace (may be simulated in case of unavailability of regulated airspace);
	  o setting heading procedure; and
	  o noting of ETAs;
	• En-route:
	  o maintenance of altitude and heading;
	  o revisions of ETAs and heading;
	  o log keeping;
	  o use of radio or compliance with ATC procedures;
	  o minimum weather conditions for continuation of flight;
	  o in-flight decisions;

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	○ transiting controlled or regulated airspace; ○ diversion procedures; ○ uncertainty of position procedure; and ○ lost procedure; and • Arrival, aerodrome joining procedure: ○ ATC liaison in regulated airspace (may be simulated in case of unavailability of regulated airspace); ○ altimeter setting; ○ entering the traffic pattern; ○ circuit procedures; ○ parking; ○ security of TMG; ○ refuelling; ○ closing of flight plan, if appropriate; and ○ post-flight administrative procedures.
Exercise 15b Navigation problems at lower levels and in reduced visibility	• actions before descending; • hazards (for example, obstacles and terrain); • difficulties of map reading; • effects of wind and turbulence; • vertical situational awareness (avoidance of controlled flight into terrain); • avoidance of noise sensitive areas; • joining the circuit; and • bad weather circuit and landing.

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Exercise 16 windmill starting the engine inflight	**Demonstration.** Having addressed the airmanship considerations, including an agreed start attempt 'height floor', fly the aircraft at best glide speed and close to the airfield. Having noted any pre-starting requirements, carry out a windmill start as recommended in the flight manual or pilots notes. If the type has no recommended procedure for a windmill start but the type is approved for a windmill start, the following procedure may be appropriate: • Fuel 'On' • Throttle 'Set as for a ground start' • Choke 'As Required' • Ignition 'On' • Radio 'Off' • Propeller 'Unfeather' • Accelerate to windmill the propeller (speed is type specific) • When engine starts, reduce the airspeed • Adjust the power setting as required • Choke 'Off' • Radio 'On' **Instructors Note**: This exercise uses a considerable amount of height, and therefore the airmanship considerations previously described in exercise 16 should again be addressed. This exercise should be carried out close to an airfield. Consideration should also be given to some older aircraft types with a low V_{ne} – the speed required to windmill the propeller may be too close to V_{ne} for safe windmill starting. It is important that the student is made aware that electrical failure could occur while attempting to start the engine in flight – for example a discharged battery or failed starter motor. This exercise demonstrates the procedure for windmill starting the engine in flight. **Summary**: The windmilling action of the slipstream can be utilised to start the engine in the event of a failure of the aircraft normal engine starting system. Care must be taken to avoid over speeding the engine and propeller during the post start recovery. A windmill start attempt will inevitably use a significant amount of height.
Exercise 19 Instrument appreciation	• physiological sensations • instrument appreciation • demonstration to show need for proper training before flying by sole reference to instruments and being able to make a 180° turn on instruments on inadvertent encounter with cloud.

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Advice to TMG instructors

11.17 Operational experience of training in TMG within the British Gliding Association has developed the following advice to instructors:

11.18 **Gliding airfields** – NPPL(A) TMG flight training may take place alongside winch launched gliding operations. Instructors should ensure that they and their students are fully conversant with the site procedures for ensuring adequate launching separation.

11.19 **Performance** – some TMG aircraft types have limited climb performance when compared to other powered aircraft. Instructors should ensure that their students are fully aware of the precautions required in the event of precipitation before take-off, and that they are fully aware of the many factors that can affect take-off and climb performance.

11.20 **Airbrakes or spoilers** – in many TMG aircraft types, in the event of a 'go around' or baulked landing it is necessary to move the left hand from the airbrake (or spoiler) lever to the stick and the right hand from the stick to the throttle. All instructors and their students should be fully briefed on the required procedure to change from the approach or landing with airbrake (or spoiler) to the take-off or climb. For example:

- Close and lock the airbrake (or spoiler) and adopt the appropriate attitude;
- move the left hand to the control column and then the right hand to the throttle;
- apply power.

11.21 **Carburettor icing** – all pilots should be made aware of carburettor icing during their theoretical knowledge and flight training. However, some TMG aircraft types are less prone to carburettor icing because of design features such as carburettor position and/or air inlet position. It is likely that this has influenced some instructors and students to become complacent about use of carburettor hot air in flight. Instructors should ensure that their students use carburettor hot air on all occasions appropriate to the engine and aircraft type and are reminded of the primacy aspects of the student noting the use of carburettor heat during the first and every subsequent flight.

11.22 **Self-Launching Sailplanes** – for information on operating this type of powered sailplane, refer to the SPL requirements in Part-SFCL of the UK Sailplane Regulation.

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Microlight aeroplane syllabus

11.23 All microlight flight instruction must be conducted in accordance with the appropriate syllabus, as summarised in this section. The full training syllabus for the NPPL(A) on microlight aeroplanes is available from the BMAA or other authorised suppliers.

11.24 The syllabus comprises two parts:

- Flying syllabus
- Ground subject syllabus

11.25 The flying syllabus is broken down into phases and exercises. Individual exercises are further sub-divided into different elements, each of which must be fully understood by the student.

11.26 Within each phase, each exercise has a specific stated aim. To ensure that these aims are achieved each phase has a specific stated standard of skill which must be achieved.

11.27 Elements pertinent to both weight shift and 3-axis types of aircraft are included in the syllabus. Where an aspect is not relevant to a type it should be ignored. For example, in exercise 6 – “Use of yaw control to maintain balanced flight” is not pertinent to a weight shift aircraft, as no primary control for yaw is provided in current designs.

11.28 Every student should be in possession of a copy of the syllabus. As an aid to ensuring that no element is omitted each element can be ticked off as it is completed.

11.29 An exercise or group of exercises of the flying syllabus is taken as a session, and the pattern of each flying session should be run as follows:

- Pre-flight briefing,
- Flight training lesson,
- Post flight debriefing.

11.30 The flight exercises as listed reflect a progression through the basic handling skills to more complex manoeuvring and procedural flying. It is not however mandatory for a student to complete the exercises in strict number order if an instructor feels that the student would benefit from an earlier introduction to a later exercise, for example Exercise 17, First Solo, immediately after satisfactory completion of Phase 4, Exercises 12 and 13.

11.31 All flight exercises should be completed to a satisfactory standard prior to course completion.

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11.32 Every training organisation, school or independent flight instructor is required to keep an up-to-date progress report for each student pilot on a student record sheet. Student records must be kept for at least two years after the last entry and should be available to the student to view.

11.33 Summary of the flying syllabus for the NPPL on microlight aeroplanes:

Phase	Ex No.	Exercise Description
1		Familiarisation exercises and foundation
	1	Air experience - The first lesson
	2	Aircraft familiarisation
	3	Preparation for flight and actions after
	4	Effects of Controls
	5	Taxiing
2		The basic flight manoeuvres
	6	Straight & Level flight
	7	Basic climbing and descending
	8	Performance climbing and descending
	9a	Turning flight
	9b	Climbing and descending turns
3		Slow speed handling
	10a	Critically low airspeed
	10b	Stalling and spin avoidance
4		Take-off, landing and circuit flying
	12	Circuit training
	13	Advanced take-off and landing techniques
5		Advanced handling
	14	Advanced turning
	15	Unusual attitudes
6		Operational hazards, Emergency procedures and unexpected/unplanned occurrences
	16a	Forced landings
	16b	Precautionary landings
	16c	Operation at minimum level
	16d	Action in the event of a fire
	16e	Systems failure
	16f	Partial engine failures en-route, in the circuit and after take-off

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7		Solo flight training
	17a	First solo flight.
	17b	Solo circuit, local area orientation and general handling consolidation
8	18	VFR navigation
	18a	Pre-flight planning
	18b	Enroute navigation, departure and arrival procedures
	18c	Navigation at minimum level and/or in deteriorating conditions.
	18d	Unsure of position and lost procedures.
9		Preparation for General Skill test and Ground Oral Exam
	19a	Dual revision for GST
	19b	Revision for the Aeroplane Technical Part 2 (ground oral) exam
	19c	Documentation review

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Chapter 12

Syllabus for additional ratings

Aerobatic rating

12.1 The aim of the aerobatic training is to qualify licence holders to perform aerobatic manoeuvres.

12.2 The training organisation or independent FI(A) or CRI should issue a certificate of satisfactory completion of the instruction to licence endorsement.

Theoretical knowledge

12.3 The theoretical knowledge syllabus should cover the revision or explanation of:

(a) human factors and body limitation:

(i) spatial disorientation;

(ii) airsickness;

(iii) body stress and G-forces, positive and negative;

(iv) effects of grey- and blackouts;

(v) effects of startle and surprise.

(b) technical subjects:

(i) legislation affecting aerobatic flying to include environmental and noise subjects;

(ii) principles of aerodynamics to include slow flight, stalls and spins, flat and inverted;

(iii) general airframe and engine limitations (if applicable).

(c) limitations applicable to the specific aircraft category (and type):

(i) air speed limitations (aeroplane, TMG and sailplane, as applicable);

(ii) symmetric load factors (type-related, as applicable);

(iii) rolling Gs (type-related, as applicable).

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(d) aerobatic manoeuvres and recovery:

(i) entry parameters;

(ii) planning systems and sequencing of manoeuvres;

(iii) rolling manoeuvres;

(iv) looping manoeuvres;

(v) combination manoeuvres;

(vi) entry and recovery from developed spins, flat, accelerated and inverted.

(e) emergency procedures:

(i) recovery from unusual attitudes;

(ii) drills to include the use of parachutes (if worn) and aircraft abandonment.

Flying training

12.4 The exercises of the aerobatic flying training syllabus should be repeated as necessary until the applicant achieves a safe and competent standard. Having completed the flight training, the student pilot should be able to perform a solo flight containing a sequence of aerobatic manoeuvres.

12.5 The dual training and the supervised solo training flights should be tailored to the category of aircraft and limited to the permitted manoeuvres of that type of aircraft. The exercises should comprise at least the following practical training items:

(a) confidence manoeuvres and recoveries:

(i) slow flights and stalls;

(ii) steep turns;

(iii) side slips;

(iv) engine restart in-flight (if applicable);

(v) spins and recovery;

(vi) recovery from spiral dives;

(vii) recovery from unusual attitudes.

(b) aerobatic manoeuvres:

(i) Chandelle;

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(ii) Lazy Eight;

(iii) rolls;

(iv) loops;

(v) inverted flight;

(vi) Hammerhead turn;

(vii) Immelmann.

IMC rating

12.6 The theoretical knowledge syllabus for the IMC Rating is an abridged version of that applicable to that the published for the Part-FCL Instrument Rating via the Competency Based Modular route, as set out in Appendix 6 Aa of Part-FCL.

12.7 Expanded learning objectives will be added to this section at a later amendment.

Theoretical knowledge

Syllabus	Subject title	Applicability
Subject code	**Instrument Meteorological Conditions (IMC) Rating**	**IMC Rating**
010 00 00 00	Air Law	X
022 00 00 00	Aircraft General Knowledge - Instrumentation	X
033 00 00 00	Flight Planning and Monitoring	X
040 00 00 00	Human Performance	X
050 00 00 00	Meteorology	X
062 00 00 00	Radio Navigation	X
092 00 00 00	IFR Communications	X

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Flight training

12.8 Details of the IMC Rating flight test are contained in Standards Document 25 (A): Notes for the guidance of applicants taking the Initial Skill Test or revalidating the Instrument Meteorological Conditions Rating (Aeroplanes) | UK Civil Aviation Authority, available on the CAA website.

12.9 A student's ability and previous experience may be taken into account in determining how much training time should be allocated to each of the following items, but the course must cover all of them.

Basic instrument appreciation		
Full panel	Instrument attitude flight	Pitch indications, bank and direction indications, effect of power variations and aircraft configuration, instrument limitations, selective radial scan.
	Basic flight manoeuvres	Straight and level in various configurations, climbing, descending, standard rate turns (level, climbing and descending, compass/ timed).
	Intermediate Flight Manoeuvres	Turns at various rates, transfer to instruments after take-off (full panel only), recovery from unusual attitudes (incipient stall, steep bank, spiral dive).
Limited panel	Basic Flight Manoeuvres	Simulated loss of gyroscopic pitch and bank indicator and gyroscopic direction indicator. Straight and level, climbing, descending, standard rate level turns.
	Recovery from unusual attitudes	Simulated loss of gyroscopic pitch and bank indicator and gyroscopic direction indicator. Incipient stall, steep bank, spiral dive.
Partial panel	Simulated loss of pitot/static pressure: recognition of loss of pitot/static pressure, maintenance of attitude and safe airspeed, straight and level and turning flight.	

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Applied stage		
Pre-flight planning	Route planning, published procedures, operating minima applicable to IMC Rating holders.	
Departure	Aircraft instrumentation and equipment checks	Aircraft instrumentation checks after start up. Radio aid selection and identification appropriate to the planned departure. ATSU liaison and compliance with procedures. Transition from VMC to IMC, during or at top of climb. Establish track to initial waypoint.
Enroute	Aircraft equipment checks, radio aid selection and identification.	Top of climb or on track, ATC liaison and compliance with RT procedures, use of lower airspace radar services. Operation of radio aids for the establishment of planned track. Flight monitoring by interception and maintenance of pre-selected bearings/radials to and from a facility, use of bearing information from off-track radio aids for position finding. ATSU liaison and compliance with procedures. The applicant to be trained in the use of at least 2 from RNP, VOR, VDF, DME or ADF to carry out these procedures.

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Approach and let-down	Applicants are to be trained in at least 2 instrument approach procedures using NDB, DME, ILS, radar, RNP, VDF or VOR of which at least one must be pilot interpreted. Completion of a notified recognised civil or military instrument approach procedure during training, is to be certified in the applicant's flying book.	Use of approach charts, calculation of Decision Height/Minimum Descent Height calculations using the recommended minima for the IMC Rated pilot given in the UK AIP. ATSU liaison and compliance with procedures. Aircraft equipment checks, radio aid selection and identification. Initial homing, achieving the overhead/approach fix, holding procedures (if necessary), achieving the horizontal and vertical patterns, calculation of rate of descent, go-around, missed approach procedure.
Bad weather circuits and landings	Visual circling minima.	Identification of appropriate visual circling minima. ATSU liaison and compliance with procedures. Appreciation of low cloud with good visibility and low cloud with poor visibility. Aircraft configuration for landing or missed approach. Transition from IMC to VMC.

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Instructing for the IMC Rating

12.10 The following instructors are considered competent to deliver instruction for the IMC rating:

(a) The holder of a valid Part-FCL Instrument Rating Instructor (IRI) Certificate issued by the UK CAA; or

(b) The holder of a valid Part-FCL or ANO (2016) Flight Instructor (Aeroplane) Certificate issued by the UK CAA who can teach for the Instrument Rating (as set out in FCL.905.FI(h) of Annex I (Part-FCL)) and Schedule 8 of the ANO (2016).

Authorisation to instruct for the IMC rating

12.11 The CAA may authorise a FI(A) to instruct for the IMC rating only, without having the prerequisite IFR experience for the issue of the privileges as set out in FCL.905.FI(h) of Annex I (Part-FCL), if the instructor:

(a) holds a PPL, CPL or ATPL(A) licence issued by the UK CAA;

(h) holds a valid IMC, IR(R) or single pilot, single or multi-engine IR(A) rating (not an EIR) on their licence;

(i) is an FI(A) without supervisory restriction and is qualified to instruct for single pilot, single engine or multi-engine class rating(s) for the class on which IMC rating instruction is to be provided in;

(j) has completed at least ten hours flight time by sole reference to instruments in an aeroplane or a qualified FFS, FTD 2/3 or FNPT I/II;

(k) has completed a training course delivered by an FI(A) qualified to instruct for the FI(A) course and that included:

(i) ten hours of technical training, including revision of instrument theoretical knowledge, the preparation of lesson plans and the development of classroom instructional skills; and

(ii) five hours of flight instruction on an aeroplane, FFS, FTD 2/3 or FPNT II;

(l) has passed an Assessment of Competence to instruct for the IMC rating with a Flight Instructor Examiner (FIE) as required in FCL.935.

12.12 To be entitled to instruct in instrument flying, other than towards the IMC rating, the instructor must comply with the prerequisite IFR experience for the issue of the privileges as set out in FCL.905.FI(h)(1). An application must be made to the CAA for the removal of the applicable limitation.

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12.13 For the revalidation of an FI(A) as set out in Schedule 8 of the ANO (2016) or FCL.940.FI, which includes the privilege to instruct for the IMC rating only, the instructor need not meet the requirement to have at least 10 hours flight instruction in the 12 months preceding the expiry date of the FI(A), in accordance with FCL.940.FI(1)(i)(A).

12.14 For the revalidation of an FI(A) as set out in Schedule 8 of the ANO (2016) or FCL.940.FI which includes the privileges for the IMC rating, the Assessment of Competence must include emphasis on applied instrument flight, in order to retain the privilege to instruct for the IMC rating.

12.15 More information on the Assessment of Competence is available on the CAA website at Standards Document 10(A): Guidance for: Instructors, Instructor Trainers and Authorised Flight Instructor Examiners (FIE). (Aeroplanes) Assessment of Competence for Instructor Certification | UK Civil Aviation Authority.

IMC rating instructor course

12.16 The aim of the instrument instructor training course is to train aeroplane licence holders to the level of competence defined in FCL.920 of Part-FCL. Further guidance is available in AMC1 to FCL.920 – Instructor competencies and assessment.

12.17 The training course should give particular emphasis on the role of the individual in relation to the importance of human factors in the man-machine environment.

12.18 Special attention should be paid to the applicant's levels of maturity and judgement including an understanding of adults, their behavioural attitudes and variable levels of education.

12.19 Except for the section on 'teaching and learning', all the subject detail contained in the theoretical and flight training syllabus is complementary to the instrument rating pilot course syllabus, which should already be known by the applicant. Therefore, the objective of the course is to:

- refresh and bring up to date the technical knowledge of the student instructor;
- train pilots in accordance with the requirements of the modular instrument flying training course;
- enable the applicant to develop the necessary instructional techniques required for teaching of instrument flying, radio navigation and instrument procedures to the level required for the issue of an instrument rating;
- ensure that the student instrument rating instructor's flying is of a sufficiently high standard.

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12.20 Part 3 of AMC1 to FCL.930.IRI covers the air exercises of the flight instruction syllabus of this guidance. Multiple exercises may be addressed in the same flight.

12.21 During the training course applicants should be made aware of their own attitudes to the important aspects of flight safety. Improving safety awareness should be a fundamental objective throughout the training course. It will be of major importance for the training course to aim at giving applicants the knowledge, skills and attitudes relevant to an instructor's task.

12.22 It is to be noted that airmanship is a vital ingredient of all flight operations. Therefore, in the following air exercises the relevant aspects of airmanship are to be stressed at the appropriate times during each flight.

12.23 The student instructor should learn how to identify common errors and how to correct them properly, which should be emphasised at all times.

12.24 The training course should consist of three parts:

Part 1 – teaching and learning

12.25 The content of the teaching and learning part of the FI training course, as established in AMC1 FCL.930.FI, should be used as guidance to develop the course syllabus.

Part 2 – theoretical knowledge (technical training)

12.26 Training should follow the content in AMC 1 FCL.930.IRI.

12.27 The instrument theoretical knowledge instruction should comprise not less than 10 hours training to include the revision of instrument theoretical knowledge, the preparation of lesson plans and the development of classroom instructional skills to enable the FI to instruct the instrument theoretical knowledge syllabus.

12.28 All the subject detail contained in the instrument theoretical knowledge instruction syllabus and flight instruction syllabus is complementary to the instrument rating pilot course syllabus which should already be known by the applicant. Therefore, the objective of the course is to:

(a) refresh and bring up to date the technical knowledge of the student instructor;

(b) train pilots in accordance with the requirements of the modular instrument flying training course;

(c) enable the applicant to develop the necessary instructional techniques required for teaching of instrument flying, radio navigation and instrument procedures to the level required for the issue of an instrument rating; and

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(d) ensure that the student instrument rating instructor's flying is of a sufficiently high standard.

12.29 The theoretical subjects covered should be used to develop the instructor's teaching skills. The items selected should relate to the student's background and should be applied to training for an IMC rating.

Part 3 – flight instruction

12.30 The flight instruction element should follow the content in AMC 1 FCL.930.IRI, aiming to ensure that the applicant is able to teach the air exercises safely and efficiently.

Night rating

12.31 The aim of the course is to qualify holders of a NPPL(A) with privileges to fly aeroplanes or TMGs to exercise their privileges at night.

12.32 The training organisation or Flight Instructor should issue a certificate of satisfactory completion of the instruction that can be used for licence endorsement.

Theoretical knowledge

12.33 The theoretical knowledge syllabus should cover the revision or explanation of:

(1) night VMC minima;

(2) rules about airspace control at night and facilities available;

(3) rules about aerodrome ground, runway, and obstruction lighting;

(4) aircraft navigation lights and collision avoidance rules;

(5) physiological aspects of night vision and orientation;

(6) dangers of disorientation at night;

(7) dangers of weather deterioration at night;

(8) instrument systems or functions and errors;

(9) instrument lighting and emergency cockpit lighting systems;

(10) map marking for use under cockpit lighting and integration of MMD;

(11) practical navigation principles;

(12) radio navigation principles;

(13) planning and use of safety altitude; and

(14) danger from icing conditions, as well as from avoidance and escape manoeuvres

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Flying training

12.34 The exercises of the night rating flight syllabus should be repeated as necessary until the student achieves a safe and competent standard.

12.35 In all cases, exercises 4 to 7 of the night rating flight syllabus should be completed in an aeroplane or TMG.

12.36 For exercises 1 to 3, up to 50% of the required flight training may be completed in an FSTD(A). However, each item of exercises 1 to 3 should be completed in an aeroplane or TMG in flight.

12.37 Starred items (*) should be completed in simulated IMC and may be completed in daylight.

12.38 The flying exercises should comprise:

Exercise Number	Flight training elements
Exercise 1	(A) revise basic manoeuvres when flying by sole reference to instruments*; (B) explain and demonstrate transition from visual flight to instrument flight*; and (C) explain and revise recovery from unusual attitudes by sole reference to instruments*.
Exercise 2	Explain and demonstrate the use of radio navigation aids when flying by sole reference to instruments, to include position finding and tracking*.
Exercise 3	Explain and demonstrate the use of radar assistance*.
Exercise 4	(A) explain and demonstrate night take-off techniques; (B) explain and demonstrate night circuit techniques; (C) explain and demonstrate night approaches with or without visual approach aids; and (D) practise take-offs, circuits, as well as approaches and landings.
Exercise 5	Explain and demonstrate night emergency procedures including: (A) simulated engine failure (to be terminated with recovery at a safe altitude); (B) simulated engine failure at various phases of flight; (C) simulated inadvertent entry to IMC (not on base leg or final approach); (D) internal and external lighting failure; and (E) other malfunctions and emergency procedures, as required by the AFM.
Exercise 6	Solo night circuits
Exercise 7	(A) explain and demonstrate night cross-country techniques; and (B) practise night cross-country dual flight and optionally supervised solo to a satisfactory standard.

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