AUTORITATEA AERONAUTICĂ CIVILĂ

A REPUBLICII MOLDOVA

AMC&GM-Baloane

Mijloace acceptabile de punere în conformitate și materiale de îndrumare (AMC&GM-Baloane)

la

Regulamentul de stabilire a normelor detaliate pentru operarea baloanelor, precum și pentru acordarea certificatelor de echipaj de zbor pentru baloane

(Anexa nr.1 la Hotărârea Guvernului nr.85/2023)

Ediția 01/ aprilie 2023

REPUBLICA MOLDOVA
AUTORITATEA AERONAUTICĂ
CIVILĂ

РЕСПУБЛИКА МОЛДОВА
ОРГАН ГРАЖДАНСКОЙ
АВИАЦИИ

O R D I N

cu privire la aprobarea ediţiei nr.01 a Mijloacelor acceptabile de punere în conformitate şi materialelor de îndrumare la Regulamentul de stabilire a normelor detaliate pentru operarea baloanelor, precum şi pentru acordarea certificatelor de echipaj de zbor pentru baloane, aprobat prin HG nr.85/2023 (AMC&GM-Baloane)

nr. 18/GEN din 13.04.2023

Monitorul Oficial nr.138-140/646 din 21.04.2023

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În temeiul art.7 alin.(3) pct.1) lit.d) din Codul aerian al Republicii Moldova nr.301/2017 şi pct.10 subpct.1) lit.d) din Regulamentul cu privire la organizarea şi funcţionarea Autorităţii Aeronautice Civile, aprobat prin Hotărârea Guvernului Republicii Moldova nr.133/2019, întru executarea atribuţiilor ce îi revin Autorităţii Aeronautice Civile în calitate de autoritate de certificare, supraveghere şi control în domeniul aviaţiei civile, în scopul implementării Regulamentului de stabilire a normelor detaliate pentru operarea baloanelor, precum şi pentru acordarea certificatelor de echipaj pentru baloane, aprobat prin Hotărârea Guvernului nr.85/2023,

ORDON:

1. Se aprobă ediţia 01 a Mijloacelor acceptabile de punere în conformitate şi materialelor de îndrumare (AMC&GM-Baloane), conform anexei la prezentul ordin.

2. Autoritatea Aeronautică Civilă va pune la dispoziţia tuturor persoanelor interesate anexa la prezentul ordin prin publicarea pe pagina web oficială www.caa.md, la compartimentul „Cadrul normativ/AMC”.

3. Prezentul ordin intră în vigoare de la data de 19 mai 2023.

DIRECTOR ADJUNCT **Andrei CEBANU**

Nr.18/GEN. Chişinău, 13 aprilie 2023.

Content

AIR OPERATIONS AND LICENSING

REGULATION LAYING DOWN DETAILED RULES FOR THE OPERATION OF BALLOONS AS WELL AS FOR THE FLIGHT LICENSING FOR BALLOONS *(further on – Regulation)*

GM1 to point 7 subpoint 1) and 2) Chapter II Air operations
DIRECT COST

'Direct cost' means the cost directly incurred in relation to a flight, e.g. fuel costs of the balloon and the retrieve vehicle directly incurred in relation to a flight, take-off and landing fees, and rental fee for a balloon. There is no element of profit or salary for the pilot.

GM1 to point 7 subpoint 1) and 2) Chapter II Air operations
ANNUAL COST

'Annual cost' means the cost of the balloon over a period of one calendar year. There is no element of profit or salary for the pilot.

GM1 to point 7 subpoint 3 Chapter II Air operations
ORGANISATION CREATED FOR THE PURPOSES OF PROMOTING AERIAL SPORT OR LEISURE AVIATION

An 'organisation created for the purposes of promoting aerial sport or leisure aviation' means a non-profit organisation established under applicable national legal framework for the sole purpose of gathering persons sharing the same interest in general aviation to fly for pleasure or to conduct parachute jumping. The organisation should have balloons available.

GM1 to point 7 subpoint 3 Chapter II Air operations
MARGINAL ACTIVITY

The term 'marginal activity' should be understood as representing a very minor part of the overall activity of an organisation, mainly for the purpose of promoting itself or attracting new students or members. An organisation intending to offer such flights as a regular business activity is not considered to meet the condition of marginal activity. Also, flights organised with the sole intent to generate income for the organisation are not considered to be a marginal activity.

ANNEX NO.2 TO THE REGULATION — BALLOON AIR OPERATIONS (PART-BOP)

SUBPART BAS — BASIC OPERATIONAL REQUIREMENTS

Section 1 – General requirements

AMC1 BOP.BAS.001 Scope
AERIAL ADVERTISING FLIGHT

An aerial advertising flight, displaying a logotype or an advertisement on the balloon, should only be considered a commercial operation, when:
(a) especially conducted at a specific time and for an advertising purpose; and
(b) conducted in return for remuneration or other valuable consideration from the principal, with or without the existence of a contract.

GM1 BOP.BAS.001 Scope
MIXED BALLOONS

Mixed balloons are operated in accordance with the requirements for hot-air balloons, unless otherwise specified.

GM1 BOP.BAS.030 Responsibilities of the pilot-in-command
GENERAL

In accordance with the essential requirements for air operations, which are laid down in Annex no.3 to the Aviation Code of the Republic of Moldova no.301/2017 (further on – *Aviation Code*), the pilot-in-command is responsible for the operation and safety of the balloon and for the safety of all passengers on board. This includes the following:
(a) the safety of all passengers on board, as soon as he or she arrives on board until he or she leaves the balloon at the end of the flight; and
(b) the operation and safety of the balloon from the moment the balloon is unloaded from the retrieve vehicle or trailer to the moment the balloon is reloaded, unless the preparation of the flight is delegated to a crew member.

AMC1 BOP.BAS.030(a)(3) Responsibilities of the pilot-in-command
CHECKLISTS

(a) The pilot-in-command should use the latest checklists provided by the manufacturer or the operator.
(b) If checks conducted before take-off are suspended at any point, the pilot-in-command should restart them from a safe point prior to the interruption.

GM1 BOP.BAS.030(a)(7) Responsibilities of the pilot-in-command
PROTECTIVE CLOTHING

Protective clothing includes:
(a) long sleeves and trousers preferably made of natural fibres;
(b) stout footwear; and
(c) gloves.

GM1 BOP.BAS.030(a)(14) Responsibilities of the pilot-in-command
RECORDING UTILISATION DATA

Where a balloon conducts a series of flights of short duration and is operated by the same pilot-in-command, the utilisation data for the series of flights may be recorded in the balloon logbook as a single entry.

AMC1 BOP.BAS.030(a)(17) Responsibilities of the pilot-in-command
REPORTING OF HAZARDOUS FLIGHT CONDITIONS

(a) These reports should include any detail which may be pertinent to the safety of other aircraft.
(b) When unexpected meteorological conditions affecting other aircraft are encountered that, in the opinion of the pilot-in-command, may affect the safety of other aircraft operations, he or she should advise the appropriate air traffic services (ATS) unit as soon as practicable.

AMC1 BOP.BAS.030(b)(1) & AMC1 BOP.BAS.040(b) Responsibilities of the pilot-in-command & responsibilities of crew members
ALCOHOL CONSUMPTION

The operator should issue instructions concerning the consumption of alcohol by the pilot-in-command and the crew members. The instructions should not be less restrictive than the following:
(a) no alcohol should be consumed less than 8 hours prior to an operation;
(b) the blood alcohol level should not exceed the lower of the national requirements or 0.2 grams of alcohol in 1 litre of blood at the start of an operation; and
(c) no alcohol should be consumed during the operation.

GM1 BOP.BAS.030(b)(1); (2) & GM1 BOP.BAS.040(b) Responsibilities of the pilot-in-command & responsibilities of crew members
PART-MED

Information on the effects of medication, psychoactive substances and other treatments can be found in Annex no.4 (Part-MED) to the Regulation laying down technical requirements and administrative procedures related to civil aviation aircrew, approved by Government Decision no.204/2020 *(further on – Aircrew Regulation).*

GM1 BOP.BAS.040 Responsibilities of crew members
DESIGNATION OF PERSONS AS CREW MEMBERS

(a) The pilot-in-command or the operator may designate any person as a crew member provided that:
  (1) the role, according to the reasonable expectation of the pilot-in-command or the operator, will enhance the safety of the flight or achieve an operational objective of the flight;
  (2) the person, according to the reasonable expectation of the pilot-in-command or the operator, is capable of fulfilling the role;
  (3) the person has been briefed on the role as a crew member and informed that he or she is crew, not a passenger; and
  (4) the person agrees to the role as crew member.
(b) Crew members are not considered to be passengers.
(c) Crew members may be required, by specific provisions of this Regulation and other Implementing Rules, to hold licences, ratings or other personnel certificates to fulfil certain roles such as instructor or examiner, in certain circumstances.

GM1 BOP.BAS.050 Documents, manuals and information to be carried
GENERAL

(a) In case of loss or theft of documents specified in BOP.BAS.050, the operation may continue until the balloon has landed. The operator provides replacement documentation within the shortest possible time frame.
(b) The documents, manuals and information may be available in a form other than on printed paper. An electronic storage medium is acceptable if accessibility, usability and reliability is assured.

AMC1 BOP.BAS.050(a)(1) Documents, manuals and information to be carried
OPERATING LIMITATIONS, NORMAL, ABNORMAL AND EMERGENCY PROCEDURES

The operating limitations, as well as normal, abnormal and emergency procedures should be available to the pilot during the operation by providing the specific sections of the aircraft flight manual (AFM) or by other means that effectively accomplish the purpose.

AMC1 BOP.BAS.050(a)(3) Documents, manuals and information to be carried
CURRENT AND SUITABLE AERONAUTICAL CHARTS

(a) The aeronautical charts carried should contain data appropriate to the applicable air traffic regulations, rules of the air, flight altitudes, area, route, and nature of the operation. Due consideration should be given to the carriage of textual and graphic representations of:
  (1) aeronautical data, including, as appropriate for the nature of the operation:
    (i) airspace structure;
    (ii) communication frequencies;
    (iii) prohibited, restricted and danger areas;
    (iv) sites of other relevant activities that may hazard the flight; and
  (2) topographical data, including terrain and obstacle data.
(b) A combination of different charts and textual data may be used to provide adequate and current data.
(c) The aeronautical data should be relevant for the current aeronautical information regulation and control (AIRAC) cycle.
(d) The topographical data should be reasonably recent, as regards the nature of the planned operation.

AMC1 BOP.BAS.050(b)(2) Documents, manuals and information to be carried
CERTIFICATE OF AIRWORTHINESS

The certificate of airworthiness should be a normal certificate of airworthiness, a restricted certificate of airworthiness, or a permit to fly issued in accordance with the applicable airworthiness requirements.

GM1 BOP.BAS.050(b)(3) Documents, manuals and information to be carried
AFM OR EQUIVALENT DOCUMENT

'AFM or equivalent document(s)' means the flight manual for the balloon or other documents containing information required for the operation of the balloon within the terms of its certificate of airworthiness.

GM1 BOP.BAS.050(b)(6) Documents, manuals and information to be carried
BALLOON LOGBOOK OR EQUIVALENT DOCUMENT

'Balloon logbook or equivalent document(s)' means that the required information may be recorded in documentation other than a logbook, such as the operational flight plan or the balloon technical log.

GM1 BOP.BAS.050(b)(7) Documents, manuals and information to be carried
DOCUMENTS THAT MAY BE PERTINENT TO THE FLIGHT AND REQUIRED BY THE CAA OF THE REPUBLIC OF MOLDOVA *(FURTHER ON - CAA)*

Any other documents that may be pertinent to the flight or are required by the CAA may include, for example, forms to comply with additional requirements.

GM1 BOP.BAS.055 Dangerous goods
GENERAL

The carriage of dangerous goods is only permitted when:
(a) they are not subject to the 'Technical instructions for the safe transport of dangerous goods by air', ICAO Doc 9284-AN/905, in accordance with Part 1 of those instructions. Following the technical instructions, articles and substances which would otherwise be classified as dangerous goods, but which are required on board the balloon in accordance with the pertinent airworthiness requirements or the requirements of Annex no.2 to the Regulation, are permitted;
(b) they are carried by crew members or passengers, or are in baggage, in accordance with Part 8 of the technical instructions; or
(c) they are required on board the balloon for specialised purposes in accordance with the technical instructions.

GM2 BOP.BAS.055 Dangerous goods
EXAMPLES

Dangerous goods include the following:
(a) explosives (fireworks, flares, detonators, fuses, dynamite, ammunition and materials for fireworks in general);
(b) compressed or refrigerated liquid, or dissolved gases (aerosols, self-defence sprays, camping gas, extinguishers, cryogenic liquids, bottles with cooling gases and compressed gas cylinders in general);
(c) flammable liquids and solids (fuel, equipment containing fuel, adhesives, solvents, paint, petrol, varnish, torches, cigarette lighters and lighter refills);
(d) substances that emit flammable gases in contact with water;
(e) oxidisers and organic peroxides (oxygen generators and bleaching powder); and
(f) substances liable to spontaneous combustion (strike-anywhere matches and phosphorous).

AMC1 BOP.BAS.065 Balloon logbook
GENERAL

The balloon logbook, or equivalent, should include the following items, where applicable:
(a) balloon nationality and registration;
(b) date;
(c) name(s) of flight crew member(s);
(d) place of departure;
(e) place of arrival;
(f) time of departure;
(g) time of arrival;
(h) hours of flight;
(i) type of operation;
(j) incidents and observations, if any; and
(k) signature of the pilot-in-command.

GM1 BOP.BAS.065 Balloon logbook
SERIES OF FLIGHTS

(a) 'Series of flights' means consecutive flights, which begin and end:
  (1) within a 6-hour period;
  (2) at the same operating site or remain within a local area; and

(3) with the same pilot-in-command of the balloon.

(b) The term 'series of flights' is used to facilitate a single set of documentation.

Section 2 – Operating procedures

AMC1 BOP.BAS.110 Fuel and ballast supply and planning

GENERAL

(a) The pilot-in-command should only commence a flight if the reserve fuel or ballast is sufficient for 30 minutes of flight.

(b) Notwithstanding (a), the pilot-in-command should only commence a flight if the reserve fuel (for the burner, and, in case of hot-air airships, also for the engine) or ballast is sufficient for 15 minutes of flight for:
   (1) hot-air balloons equipped with a single fuel tank; and
   (2) hot-air airships, when the flight is conducted in the vicinity of the operating site.

(c) Fuel or ballast supply calculations should be based upon at least the following operating conditions under which the flight is to be conducted:
   (1) data provided by the balloon manufacturer;
   (2) anticipated masses;
   (3) expected meteorological conditions; and
   (4) air navigation services provider procedures and restrictions.

AMC1 BOP.BAS.115 Passenger briefing

GENERAL

(a) Passengers should be given a verbal briefing and demonstration about safety matters in such a way that the information is easily retained and applied during the landing and in the case of an emergency situation.

(b) The briefing/demonstration should include the following items:
   (1) safety in relation to ground equipment;
   (2) use of internal handholds;
   (3) wearing of suitable clothing;
   (4) smoking regulations;
   (5) in-flight use and stowage of personal belongings and baggage;
   (6) importance to remain inside the basket at all times, particularly after landing;
   (7) landing positions to be assumed to minimise the effect of the impact during landing;
   (8) safe manoeuvring of the balloon on the ground after landing;
   (9) use of oxygen-dispensing equipment, if applicable; and
   (10) other emergency equipment provided for individual passenger use, if applicable.

(c) Part or all of the verbal briefing may be provided additionally by a safety briefing card on which pictorial instructions indicate the correct landing position.

(d) Before take-off, the correct landing position should be demonstrated.

(e) Before commencing the landing phase, passengers should be required to practise the correct landing position.

GM1 BOP.BAS.115 Passenger briefing

GENERAL

The pilot-in-command or a person designated by the operator is carrying out the passenger briefing.

AMC1 BOP.BAS.120 Carriage of special categories of passengers

CARRIAGE OF CHILDREN AND PERSONS WITH REDUCED MOBILITY

The pilot-in-command may exclude children or persons with reduced mobility from transportation in a balloon when:

(a) their presence may impede:
  (1) the crew in their duties;
  (2) access to emergency equipment; or
  (3) the emergency evacuation of the balloon; or
(b) those persons are:
  (1) unable to take a proper brace position;
  (2) smaller than the inner height of the basket wall; or
  (3) unable to understand the passenger briefing.

AMC1 BOP.BAS.125 Submission of the air traffic service flight plan
FLIGHTS WITHOUT ATS FLIGHT PLAN

(a) The operator should nominate a person to be responsible for alerting search and rescue services for flights without submitted ATS flight plans.
(b) The operator should establish procedures to ensure that the expected route of each flight is communicated to the ground crew, and should:
  (1) provide the nominated person with at least the information required to be included in a visual flight rules (VFR) flight plan;
  (2) notify the appropriate ATS or search and rescue facility when a balloon is overdue or missing; and
  (3) ensure that the information is retained at a designated place until the completion of the flight.

AMC1 BOP.BAS.150 Take-off conditions
FACILITIES AT THE TAKE-OFF SITE

At the balloon take-off site, means of assessing wind direction and wind speed should be available to the pilot-in-command.

GM1 BOP.BAS.170 Refuelling with persons on board
REPLACEMENT OF FUEL CYLINDERS

The definition of 'refuelling' in Annex no.1 to the Regulation excludes the replacement of fuel cylinders. Therefore, the replacement of fuel cylinders may be conducted, observing the appropriate precautions, when persons are on board.

AMC1 BOP.BAS.180 Use of supplemental oxygen
GENERAL

When the pilot-in-command cannot determine how the lack of oxygen might affect all occupants on board, he or she should ensure that:

(a) all flight crew members engaged in performing duties essential to the safe operation of a balloon use supplemental oxygen for any period in excess of 30 minutes when the pressure altitude is between 10 000 and 13 000 ft; and
(b) all occupants use supplemental oxygen for any period when the pressure altitude is above 13 000 ft.

GM1 BOP.BAS.185(a);(b) Operational limitations at night
AVOIDANCE OF NIGHT LANDING

(a) The intent of the rule is to ensure that when the balloon takes off during night, sufficient fuel is on board for landing under VFR by day.

(b) The risk of collision with overhead lines or other obstacles is considerable and cannot be overstated. The risk is considerably increased during night flights, in conditions of failing light and visibility, when there is increasing pressure to land. A number of incidents have occurred in the late evening in such conditions, and may have been avoided had an earlier landing been planned.

AMC1 BOP.BAS.190 Balloon specialised operations — Risk assessment and checklist
CRITERIA FOR BALLOON SPECIALISED OPERATIONS

The pilot-in-command or the operator should consider the following criteria to determine whether an activity falls within the scope of balloon specialised operations:
(a) special equipment is necessary to fulfil the task and which affects the behaviour of the balloon in flight;
(b) external loads are lifted; or
(c) persons enter or leave the balloon during flight.

AMC2 BOP.BAS.190 Balloon specialised operations — Risk assessment and checklist
DEVELOPMENT OF CHECKLIST

In order to develop a checklist, the pilot-in-command should take into account at least the following items:
(a) nature and complexity of the activity:
  (1) the nature of the flight and risk exposure;
  (2) the complexity of the activity taking into account the necessary pilot skills and level of experience, ground support, and individual protective equipment;
  (3) the operational environment and geographical area; and
  (4) the result of the risk assessment and evaluation;
(b) balloon and equipment:
  all equipment required for the activity should be listed;
(c) crew members:
  (1) crew composition;
  (2) duties of crew members;
  (3) minimum crew experience and training provisions; and
  (4) recency provisions;
(d) normal, abnormal and emergency procedures:
  (1) operating procedures for the flight crew; and
  (2) ground procedures for crew members; and
(e) records:
  it should be determined which records specific to the flight(s) are to be kept, such as task details, balloon registration, pilot-in-command, flight times, weather and any remarks, including a record of occurrences affecting flight safety or the safety of persons or property on the ground.

AMC3 BOP.BAS.190 Balloon specialised operations — Risk assessment and checklist
CHECKLIST FOR PARACHUTE OPERATIONS

The checklist for parachute operations should include:
(a) normal, abnormal and emergency procedures;
(b) relevant performance data;
(c) required equipment;
(d) any limitations such as maximum take-off mass and minimum landing mass; and
(e) responsibilities and duties of the pilot-in-command and, if applicable, of crew members.

GM1 BOP.BAS.190 Balloon specialised operations — Risk assessment and checklist
LIST OF OPERATIONS

(a) Balloon specialised operations include the following activities:
  (1) parachute operations;
  (2) hang-gliding dropping; and
  (3) special events flights, including flying displays and competition flights.
(b) The following operations are not considered balloon specialised operations, but normal operations:
  (1) aerial advertising flights; and
  (2) news media flights, television and movie flights.

GM2 BOP.BAS.190 Balloon specialised operations — Risk assessment and checklist
CATEGORISATION OF OPERATIONS

The pilot-in-command or the operator determines whether the main purpose of an operation is passenger ballooning, commercial or not, or whether the activity falls within the scope of a balloon specialised operation. As regards a balloon specialised operation, the pilot-in-command or the operator applies the criteria in AMC1 BOP.BAS.190 and the activities listed in GM1 BOP.BAS.190.

Section 3 – Performance and operating limitations

GM1 BOP.BAS.200 Operating limitations
GENERAL

In most cases the operating limitations are documented in the AFM, and in certain cases in the operations manual.

GM1 BOP.BAS.205 Weighing
GENERAL

(a) New balloons that have been weighed at the factory may be placed into operation without reweighing if the mass records have been adjusted for alterations or modifications to the balloon. Balloons transferred from an EU operator to an operator from the Republic of Moldova do not have to be weighed prior to use by the receiving operator, unless the mass cannot be accurately established by calculation.
(b) The initial empty mass for a balloon is the balloon empty mass determined by a weighing performed by the manufacturer of the balloon before the initial entry into service.
(c) The mass of a balloon is revised whenever the cumulative changes to the balloon empty mass due to modifications or repairs exceed ± 10 % of the initial empty mass. This may be done by weighing the balloon or by calculation.

Section 4 – Instruments and equipment

GM1 BOP.BAS.300(a) Instruments and equipment — General
APPLICABLE AIRWORTHINESS REQUIREMENTS

The applicable airworthiness requirements for the approval of instruments and equipment required by Annex no.2 to the Regulation are the following:
(a) Annex no.1 (Part 21) to the Regulation laying down administrative requirements and procedures for the airworthiness and environmental certification of aircraft and related products, parts and appliances, as well as for the certification of design and production organisations approved by Government decision no.468/2019 *(further on – IAW Regulation),* for balloons registered in the EU; and

(b) airworthiness requirements of the state of registry for balloons registered outside the EU.

GM1 BOP.BAS.300(a)(2) Instruments and equipment - General
PERMANENTLY INSTALLED

'Permanently installed' means an instrument or equipment that requires a specific kind of installation to:
(a) perform its intended function;
(b) be operated according to its specified limitations; and
(c) minimise the hazards to the balloon in the event of a probable malfunction or failure.

GM1 BOP.BAS.300(b) Instruments and equipment — General
REQUIRED INSTRUMENTS AND EQUIPMENT THAT DO NOT NEED TO BE APPROVED

The functionality of non-installed instruments and equipment, required by this Subpart and that do not need an equipment approval, are checked against recognised industry standards appropriate to the intended purpose. The operator is responsible for ensuring the maintenance of these instruments and equipment.

GM1 BOP.BAS.300(c) Instruments and equipment — General
NOT REQUIRED INSTRUMENTS AND EQUIPMENT THAT DO NOT NEED TO BE APPROVED

(a) The provision of this paragraph does not exempt any installed instrument or item of equipment from complying with the applicable airworthiness requirements. In this case, the installation should be approved as required by the applicable airworthiness requirements and should comply with the applicable certification specifications.
(b) The failure of additional, non-installed instruments or equipment not required by this Annex or by the applicable airworthiness requirements or any applicable airspace requirements should not adversely affect the airworthiness or the safe operation of the balloon.

AMC1 BOP.BAS.305 Minimum instruments and equipment for flight
GENERAL

Instruments and equipment that must be operative for all flights should be identified in a list. These instruments and equipment are:
(a) included in the type certification data sheet (TCDS) or the AFM; and
(b) required by the applicable implementing rules, such as operational and airspace requirements, and any other applicable requirements for the intended operation.

AMC1 BOP.BAS.310 Operating lights
ANTI-COLLISION LIGHTS AND ILLUMINATION FOR INSTRUMENTS AND EQUIPMENT

(a) An acceptable means of compliance for free manned balloons should be the anti-collision light required for VFR at night approved in accordance with CS-31HB/CS-31GB or with the applicable provisions for hot-air airships.
(b) A means of providing adequate illumination to instruments and equipment essential to the safe operation of the balloon may be an independent portable light.

AMC1 BOP.BAS.315(a) Flight and navigational instruments and associated equipment
MEANS OF DISPLAYING DRIFT DIRECTION

The drift direction may be determined by using a map and reference to visual landmarks.

AMC1 BOP.BAS.315(b)(1) Flight and navigational instruments and associated equipment
MEANS OF MEASURING AND DISPLAYING THE TIME

A means of measuring and displaying the time in hours, minutes and seconds may be a wristwatch capable of the same functions.

GM1 BOP.BAS.315(b)(3) Flight and navigational instruments and associated equipment
MEANS OF MEASURING AND DISPLAYING PRESSURE ALTITUDE

A means of measuring and displaying pressure altitude is needed when required by air traffic control or when altitude needs to be checked for flights where oxygen is used, or the limitations in the AFM require to limit altitude or rate of climb or descent.

GM1 BOP.BAS.320 Restraint system
EQUIPMENT REQUIREMENTS

A pilot restraint harness mounted to the basket is considered to meet the requirements of CS-31HB/CS-31GB for a restraint system.

AMC1 BOP.BAS.330 First-aid kit
CONTENT OF THE FIRST-AID KIT

(a) The first-aid kit should be equipped with appropriate and sufficient medications and instrumentation. However, the kit should be amended by the operator according to the characteristics of the operation (scope of operation, flight duration, number and demographics of passengers, etc.).
(b) The following should be included in the first-aid kit:
    (1) bandages (assorted sizes);
    (2) burns dressings (large and small);
    (3) wound dressings (large and small);
    (4) adhesive dressings (assorted sizes);
    (5) antiseptic wound cleaner;
    (6) safety scissors; and
    (7) disposable gloves.

AMC2 BOP.BAS.330 First-aid kit
MAINTENANCE OF FIRST-AID KIT

To be kept up to date, the first-aid kit should be:
(a) inspected periodically to confirm, to the extent possible, that contents are maintained in the condition necessary for their intended use;
(b) replenished at regular intervals, in accordance with the instructions contained on their labels, or as circumstances warrant; and
(c) replenished after use in flight at the first opportunity where replacement items are available.

GM1 BOP.BAS.330(a) First-aid kit
ADDITIONAL FIRST-AID KIT

An additional first-aid kit may be carried in the retrieve vehicle or trailer.

AMC1 BOP.BAS.335 Hand fire extinguishers
CERTIFICATION SPECIFICATIONS

The applicable certification specification for hot-air balloons should be CS-31HB or equivalent.

GM1 BOP.BAS.335 Hand fire extinguishers
ADDITIONAL HAND FIRE EXTINGUISHER

An additional hand fire extinguisher may be carried in the retrieve vehicle or trailer.

AMC1 BOP.BAS.340 Life-saving and signalling equipment – Flights over water
RISK ASSESSMENT

In order to determine the risk, the pilot-in-command should take the following operating environment and conditions into account:
(a) water state;
(b) water and air temperatures;
(c) the distance from land suitable for making an emergency landing; and
(d) the availability of search and rescue facilities.

AMC2 BOP.BAS.340 Life-saving and signalling equipment – Flights over water
EQUIPMENT

Based on the risk assessment, the pilot-in-command should determine the carriage of:
(a) a life jacket or equivalent individual flotation device for each person on board that should:
  (1) be worn or stowed in a position that is readily accessible from the station of the person for whose use it is provided; and
  (2) be equipped with a means of electric illumination for the purpose of facilitating the location of persons;
(b) when carrying up to six persons, an emergency locator transmitter (ELT) or a personal locator beacon (PLB), carried by a crew member or a passenger, capable of transmitting simultaneously on 121.5 and 406 MHz;
(c) when carrying more than six persons, an ELT capable of transmitting simultaneously on 121.5 and 406 MHz; and
(d) signalling equipment for making distress signals.

AMC3 BOP.BAS.340 Life-saving and signalling equipment – Flights over water
BRIEFING ON PLB USE

When a PLB is carried by a passenger, he or she should be briefed on its characteristics and use by the pilot-in-command before the flight.

AMC4 BOP.BAS.340 Life-saving and signalling equipment – Flights over water

ELT AND PLB REGISTRATION AND OPERATION PROVISIONS
(a) Any ELT and PLB carried should be registered in accordance with the COSPAS-SARSAT C/S S.007 - HANDBOOK OF BEACON REGULATIONS via link: https://cospas-sarsat.int/images/stories/SystemDocs/Current/S.007-Moldova.pdf .
(b) Any ELT carried should be operated in accordance with the relevant provisions of Volume III of ICAO Annex 10 to the Chicago Convention, 'Aeronautical telecommunications'.

GM1 BOP.BAS.340 Life-saving and signalling equipment – Flights over water
TERMINOLOGY

(a) An ELT is a generic term describing equipment that broadcasts distinctive signals on designated frequencies and, depending on application, may be activated by impact or may be manually activated.
(b) A PLB is an emergency beacon, other than an ELT, that broadcasts distinctive signals at designated frequencies, is stand-alone, portable, and is manually activated by the survivors.

AMC1 BOP.BAS.345 Life-saving and signalling equipment – Search and rescue difficulties
GENERAL

Balloons operated across land areas in which search and rescue would be especially difficult should be equipped with the following:
(a) at least one ELT or a PLB;
(b) signalling equipment for making distress signals; and
(c) additional survival equipment adequate for the route to be flown taking account of the number of persons on board.

AMC2 BOP.BAS.345 Life-saving and signalling equipment – Search and rescue difficulties
ADDITIONAL SURVIVAL EQUIPMENT

(a) The following additional survival equipment should be carried:
    (1) 500 ml of water for each four, or fraction of four, persons on board;
    (2) one knife; and
    (3) first-aid equipment.

(b) If any item of equipment in (a) is already carried on board in accordance with other requirements, the carriage does not need to be duplicated.

GM1 BOP.BAS.345 Life-saving and signalling equipment – Search and rescue difficulties
SIGNALS

The distress signals are described in Technical requirements – Rules of air (CT-RA) approved by the CAA.

GM2 BOP.BAS.345 Life-saving and signalling equipment – Search and rescue difficulties
AREAS IN WHICH SEARCH AND RESCUE WOULD BE ESPECIALLY DIFFICULT

The expression ‘areas in which search and rescue would be especially difficult’ means:
(a) areas so designated by the Joint Group for Coordination of Search and Rescue Operations (GMCOCS, equal to Rescue Coordination Centre) responsible for managing search and rescue; or
(b) areas that are largely uninhabited and where the GMCOCS:
    (1) has not published any information to confirm whether search and rescue would be or would not be especially difficult; and
    (2) does not, as a matter of policy, designate areas as being especially difficult for search and rescue.

AMC1 BOP.BAS.350(b)(3) Miscellaneous equipment
FIRE BLANKET

A fire blanket should comply with the European Norm EN 1869 or equivalent. The size should be at least 1.5 m × 1.8 m. Smaller sizes are not recommended as they cannot sufficiently cover the source of developing propane fire.

AMC1 BOP.BAS.350(c)(1) Miscellaneous equipment
KNIFE

The knife, hook knife or equivalent, should be capable of cutting any control line or handling rope that is accessible to the pilot-in-command or a crew member from the basket.

GM1 BOP.BAS.355 Radio communication equipment
APPLICABLE AIRSPACE REQUIREMENTS

For balloons being operated within the airspace of the Republic of Moldova, the applicable airspace requirements are those established by the Republic of Moldova, if within the airspace of an ICAO member state, in accordance with the regulations of that state.

AMC1 BOP.BAS.360 Transponder
GENERAL

Within the airspace of the Republic of Moldova, the SSR transponders should operate in accordance with the relevant provisions of Volume IV of ICAO Annex 10 to the Chicago Convention, 'Aeronautical telecommunications', if within the airspace of an ICAO member state, in accordance with the regulations of that state.

SUBPART ADD — Additional requirements for commercial operations

Section 1 – General organisation requirements

AMC1 BOP.ADD.010 Notification of alternative means of compliance
DEMONSTRATION OF COMPLIANCE

Whenever alternative means of compliance are used, a risk assessment should be completed and documented. The result of this risk assessment should demonstrate that an equivalent level of safety to that established by the AMC adopted by CAA is reached.

AMC1 BOP.ADD.020(b) Findings
CORRECTIVE ACTION PLAN

The corrective action plan defined by the operator should address the effects of non-compliance, as well as its root cause.

GM1 BOP.ADD.020(b);(c) Findings
CORRECTIVE ACTION

'Corrective action' means the action to eliminate or mitigate the root cause(s) and prevent recurrence of an existing detected non-compliance or other undesirable condition or situation. Proper determination of the root cause(s) is crucial for defining effective corrective actions to prevent reoccurrence.

AMC1 BOP.ADD.025(a) Occurrence reporting
GENERAL

All occurrences required by Regulation on the reporting, analysis and subsequent actions regarding civil aviation events (further on - RAASEAC) should be reported by the operator.

AMC1 BOP.ADD.030(a)(2) Management system
SAFETY POLICY

The safety policy should include a commitment to improve towards the highest safety standards, comply with all applicable legal requirements, meet all applicable standards, consider best practices, and provide appropriate resources.

AMC1 BOP.ADD.030(a)(3) Management system
SAFETY RISK MANAGEMENT

Hazard identification and safety risk management should:
(a) be performed using internal safety or occurrence reports, hazard checklists, risk registers or similar risk management tools or processes, integrated into the activities of the operator;
(b) in particular address safety risks related to a change, by making use of the existing hazard identification, risk assessment and mitigation tools or processes; and
(c) include provisions for emergency response or a formal emergency response plan (ERP) to define the actions to be taken by the operator or specified individuals in an emergency.

GM1 BOP.ADD.030(a)(4) Management system
TRAINING ON SAFETY

The safety training programme may consist of self-instruction via the media (newsletters, flight safety magazines, etc), classroom training, e-learning or similar training provided by training service providers.

AMC1 BOP.ADD.030(a)(5) Management system
MANAGEMENT SYSTEM DOCUMENTATION

(a) The operator's management system documentation should at least include the following information:
  (1) a statement signed by the accountable manager to confirm that the operator will continuously work in accordance with the applicable requirements and the operator's documentation, as required by this Annex;
  (2) the operator's scope of activities;
  (3) the titles and names of persons referred to in BOP.ADD.040(a) and (c);
  (4) an organisation chart showing the lines of responsibility among the persons referred to in BOP.ADD.040;
  (5) a general description and location of the facilities referred to in BOP.ADD.045;
  (6) procedures specifying how the operator ensures compliance with the applicable requirements;
  (7) the amendment procedure for the operator's management system documentation.
(b) The operator's management system documentation may be included in a separate manual, or in (one of) the manual(s) required in this Annex. A cross reference should be included.

AMC1 BOP.ADD.030(a)(6) Management system
COMPLIANCE MONITORING - AUDIT AND ORGANISATIONAL REVIEW

(a) Methodology
  (1) The operator should accomplish the compliance monitoring by means of internal auditing.
  (2) Notwithstanding (1), an operator with five or less full-time equivalents (FTEs), involved in the activity subject to this Subpart, may choose to accomplish compliance monitoring through an organisational review.
(b) General provisions for compliance monitoring
  (1) The operator should specify the basic structure of the compliance monitoring function applicable to the activities conducted.
  (2) The operator should ensure that personnel performing an audit or an organisational review, either internal to the operator or external, have relevant knowledge, background and experience as appropriate to the activities being audited or reviewed, including knowledge and experience in compliance monitoring.
  (3) The operator should monitor compliance with the procedures it has designed to ensure safe activities. In doing so, the operator should as a minimum, and where appropriate, monitor compliance with:
    (i) all activities for which the declaration is required;
    (ii) manuals, logs and records;
    (iii) training standards;
    (iv) management system procedures; and
    (v) standard operating procedures (SOPs).
  (4) The operator should ensure that the status of all corrective and preventive actions is monitored and that these actions are implemented within a specified time frame. Action closure should be recorded along with a summary of the action taken.
  (5) Based on the results of the audit or the organisational review, the accountable manager should determine the need for and initiate, as appropriate, further actions to address deficiencies or to further improve the operator's management system.
(c) Provisions, in addition to (b), for auditing

(1) The independence of the audit function should be ensured, in particular in cases where those performing the audit are also responsible for other functions for the operator.
(2) The operator should establish a compliance monitoring programme, defining a calendar for the audits to be performed. The frequency and depth of such audits should be determined with due regard to:
  (i) the volume and complexity of operations;
  (ii) results of the safety risk management processes;
  (iii) results of past compliance monitoring;
  (iv) findings raised by the CAA; and
  (v) the scope of changes not requiring prior CAA approval.

(d) Provisions, in addition to (b), for the organisational review
(1) The organisational review should be performed at intervals not exceeding 12 months.
(2) As part of the management system documentation, the operator should describe the organisational review programme and related responsibilities.
(3) The organisational review programme may consist of:
  (i) checklist(s) covering all items necessary to be addressed in order to demonstrate that the operator ensures effective compliance with the applicable requirements; and
  (ii) a schedule for the accomplishment of the different checklist items, where each item should be checked at least at intervals not exceeding 12 months.

GM1 BOP.ADD.030(a)(6) Management system
COMPLIANCE MONITORING — AUDIT AND ORGANISATIONAL REVIEW

(a) 'audit' means a systematic, independent and documented process for obtaining evidence and evaluating it objectively to determine the extent to which requirements are complied with.
(b) 'organisational review' means a systematic and documented process for obtaining evidence and evaluating it to determine the extent to which requirements are complied with.

GM2 BOP.ADD.030(a)(6) Management system
COMPLIANCE MONITORING CHECKLIST

(a) Compliance monitoring audits or organisational reviews may be documented using a compliance monitoring checklist. The following provides a basic checklist, to be adapted as necessary to address the particular type of operations and to cover all relevant procedures described in the management system documentation and operations manual.
(b) Each checklist item may be addressed using an appropriate combination of:
(1) review of records and documentation;
(2) interview of the personnel involved; and
(3) feedback provided by contractors.

COMPLIANCE MONITORING CHECKLIST Year:			
Subject	Date checked	Checked by	Comments/non-compliance Report No
Declaration change management			
Operations have been performed in accordance with the declaration			
Changes have been properly managed in accordance with the defined process			
Flight operations			
Balloon checklists checked for accuracy and validity			
Flight plans checked for proper and correct information			
Ground handling			
Instructions regarding fuelling, if applicable			
Instructions regarding dangerous goods issued and known by all relevant personnel, if applicable			
Mass			
Load sheets checked for proper and correct information, if applicable			
Pilot training			
Updated and accurate training records			
Pilot licences current, correct ratings and valid medical certificates			
Pilots received recurrent training			
Training facilities and instructors approved			
Pilots received pre-flight inspection training, as applicable			
Documentation related to operations			

Operations manual checked for correct amendment status			
Flight documents record checked and updated			
Personnel			
Correctly identified current accountable manager and other nominated persons			
The organisation chart accurately indicates lines of responsibility and accountability throughout the organisation			
Qualifications of all new personnel (or personnel with new functions) have been appropriately assessed			
Proper training has been provided to staff involved in any safety-management-related processes and tasks			
Proper training has been provided to staff involved in any compliance-monitoring-related processes and tasks			
Training provided to staff, as necessary, to cover changes in CAA regulations, in the management system documentation and in associated procedures, etc.			
Contracted activities (if applicable)			
Assessment of any new providers prior to the establishment of any contract			
For existing providers: check that the service provided conforms to the applicable requirements of this Annex			
Training and communication on safety			
All personnel are aware of safety management policies, processes and tasks			
Availability of safety-related documentation and publications			
Safety-critical information derived from internal safety or occurrence reporting, hazard identification or compliance monitoring have been timely communicated to all staff concerned			

Management system documentation			
Adequate and updated documentation			
Staff can easily access such documentation when needed			
Record-keeping			
The records cover all the activities and management system processes			
Compliance with minimum record-keeping periods (random checks)			
Emergency response provisions or emergency response plan (ERP)			
Emergency response information or ERP, as applicable, is up to date and readily available			
All staff is aware of the emergency response information or ERP (random checks)			
If an ERP has been activated, how effective was it?			
Internal safety reporting procedures			
Check the number of reports received since the last audit or organisational review			
Internal reporting and external occurrence reporting are properly performed			
The safety or occurrence reports are analysed			
Feedback is provided to reporters			

AMC1 BOP.ADD.035 Contracted activities
RESPONSIBILITY WHEN CONTRACTING ACTIVITIES

(a) The operator may decide to contract certain activities to external organisations.
(b) A written agreement should exist between the operator and the contracted organisation clearly defining the contracted activities and the applicable requirements.
(c) The contracted, safety-related activities relevant to the agreement should be included in the operator's safety management and compliance monitoring programmes.
(d) The operator should ensure that the contracted organisation has the necessary resources and competence to undertake the task.

GM1 BOP.ADD.035 Contracted activities
CONTRACTING — GENERAL

(a) Operators may decide to contract certain activities to external organisations for the provision of services related to areas such as:

(1) ground handling;
(2) flight support;
(3) training; and
(4) manual preparation.

(b) Contracted activities include all activities that are performed by another organisation either itself declared or certified to carry out such activities or, if not declared or certified, working under the operator's declaration.
(c) The ultimate responsibility for the product or service provided by external organisations always remains with the operator.

GM2 BOP.ADD.035 Contracted activities
RESPONSIBILITY WHEN CONTRACTING ACTIVITIES

(a) Regardless of the status of the contracted organisation, the contracting operator is responsible for ensuring that all contracted activities are subject to hazard identification and risk management as required by BOP.ADD.030(a)(3), and to compliance monitoring as required by BOP.ADD.030(a)(6).
(b) When the contracted organisation is itself declared or certified to carry out the contracted activities, the operator's compliance monitoring at least checks that the declaration effectively covers the contracted activities.

GM1 BOP.ADD.040 Personnel requirements
SMALLEST OPERATOR

The smallest operator that can be considered is the one-person operator where all of the nominated posts are filled by the accountable manager.

AMC1 BOP.ADD.040(c) Personnel requirements
NOMINATED PERSONS

(a) A description of the functions and the responsibilities of the nominated persons, including their names, should be contained in the operations manual.
(b) The operator should make arrangements to ensure continuity of supervision in the absence of nominated persons.
(c) A person nominated by the operator, who has already been nominated by another operator, may be acceptable subject to the agreement of the CAA.
(d) Nominated persons should work sufficient hours to fulfil the management functions associated with the scale and scope of the operation.
(e) One person may hold more than one of the nominated posts if such an arrangement is considered suitable and properly matched to the scale and scope of the operation.
(f) The acceptability of a single person holding several posts, possibly in combination with being the accountable manager, should depend upon the nature and scale of the operation. The two main areas of concern should be competence and the individual's capacity to meet his or her responsibilities.
(g) As regards competence in different areas of responsibility, there should not be any difference from the requirements applicable to persons holding only one post.
(h) The capacity of an individual to meet his or her responsibilities should primarily be dependent upon the scale of the operation. However, the complexity of the organisation or of the operation may prevent, or limit, combinations of posts which may be acceptable in other circumstances.

GM1 BOP.ADD.040(c) Personnel requirements
COMPETENCE OF NOMINATED PERSONS

(a) Nominated persons in accordance with BOP.ADD.040 possess the experience and meet the licensing provisions that are listed below in (b) to (e). Exceptionally, in particular cases, the CAA may accept a nomination that does not meet these provisions in full. In that case, the nominee has comparable experience and also the ability to perform effectively the functions associated with the post and with the scale of the operation.
(b) Nominated persons have:
  (1) practical experience and expertise in the application of aviation safety standards and safe operating practices;
  (2) comprehensive knowledge of:
    (i) the applicable EU and international safety regulations and any associated requirements and procedures; and
    (ii) the need for, and content of, the relevant parts of the operations manual; and
  (3) 3 years of relevant work experience.
(c) Flight operations
  The nominated person:
  (1) holds or has held a valid flight crew licence and the associated ratings appropriate to the relevant type of operation; or
  (2) has demonstrated in another manner thorough knowledge of the relevant flight operations.
(d) Ground operations
  The nominated person has a thorough knowledge of the operator's ground operations concept.
(e) Continuing airworthiness
  The nominated person has the relevant knowledge and meets the appropriate experience requirements related to balloon continuing airworthiness as detailed in the Regulation on the continuing airworthiness of aircraft and aeronautical products, parts and appliances, and on the approval of organisations and personnel involved in these tasks, approved by Government decision no.641/2019 (*further on – CAW Regulation*).

Section 2 – Declaration, airworthiness and wet and dry lease

GM1 BOP.ADD.100 Declaration
GENERAL

The intent of the declaration is to:
(a) have the operator acknowledge its responsibilities under the applicable safety regulations and that it holds all necessary approvals;
(b) inform the CAA of the existence of an operator; and
(c) enable the CAA to fulfil its oversight responsibilities.

AMC1 BOP.ADD.105(a) Changes to the declaration and cessation of commercial operations
NOTIFICATION OF CHANGES

The new declaration should be submitted before the change becomes effective, indicating the date as of which the change would apply.

AMC1 BOP.ADD.115 Wet lease and dry lease of a balloon registered in an ICAO member state
GENERAL

(a) The operator intending to lease-in a balloon operated in an ICAO member state should provide the CAA with the following information:
  (1) the name and address of the registered owner;
  (2) a copy of the valid certificate of airworthiness;
  (3) a copy of the lease agreement or description of the lease provisions, except financial arrangements;
  (4) duration of the lease;

(5) copies of liability insurance contracts/certificates in respect of passengers, baggage, goods as well as third parties' liability, with the indication of both parties (lessor and lease), delimitating the liability between them, as specified in the wet-lease agreement.

(b) The information mentioned above should be accompanied by a statement signed by the lessee that the parties to the lease agreement fully understand their respective responsibilities under the applicable regulations.

Section 3 – Manuals and records

AMC1 BOP.ADD.200 Operations manual

GENERAL

(a) The operations manual may vary in detail according to the complexity of the operation and of the type of balloons operated.

(b) The operations manual, or parts thereof, may be presented in any form, including electronic form. In all cases, the accessibility, usability and reliability should be assured.

(c) The operations manual should be such that:
  (1) all its parts are consistent and compatible in form and content;
  (2) it can be easily amended; and
  (3) its content and amendment status is controlled and clearly indicated.

(d) The operations manual should include a description of its amendment and revision process specifying:
  (1) the person(s) who may approve amendments or revisions;
  (2) the conditions for amendments and revisions; and
  (3) the methods by which operator personnel are advised of the changes.

(e) The operations manual content may be based on, or may refer to, industry codes of practice.

(f) When compiling an operations manual, the operator may take advantage of the contents of other relevant documents. Material produced by the operator for the type-related part of the operations manual may be supplemented with, or substituted by, applicable parts of the AFM or, where such a document exists, by an operating manual produced by the manufacturer of the balloon.

(g) If the operator chooses to use material from another source in the operations manual, either the applicable material should be copied and included directly in the relevant part of the operations manual, or the operations manual should contain a reference to the appropriate section of that applicable material. In the latter case the operator should make available the applicable material to the personnel.

(h) If the operator chooses to make use of material from another source (e.g. a route manual producer, a balloon manufacturer or a training organisation), this does not absolve the operator from the responsibility of verifying the applicability and suitability of this material. Any material received from an external source should be given its status by a statement in the operations manual.

AMC2 BOP.ADD.200 Operations manual

CONTENT

The operations manual should include the following information, as relevant for the area and the type of operation:

(a) table of contents;

(b) amendment control status and list of effective pages or paragraphs, unless the entire manual is reissued and the manual has an effective date on it;

(c) duties, responsibilities, and succession of management and operating personnel;

(d) description of the management system;

(e) flight time limitations;

(f) standard operating procedures;

(g) weather limitations;
(h) emergency procedures;
(i) accident and incident considerations;
(j) personnel qualifications and training;
(k) record-keeping;
(l) normal flight operations;
(m) performance operating limitations; and
(n) handling of dangerous goods, if applicable.

GM1 BOP.ADD.200 Operations manual
MORE CONSERVATIVE DATA AND PROCEDURES

The operator may decide to publish data and procedures in the operations manual which are more conservative.

AMC1 BOP.ADD.205 Record-keeping
GENERAL

(a) The record-keeping system should ensure that all records are accessible whenever needed within a reasonable time. These records should be organised in a way that ensures traceability and retrievability throughout the required retention period.
(b) Records should be kept in paper form or in electronic format or a combination of both. Records stored on microfilm or optical disc format are also acceptable. The records should remain legible throughout the required retention period. The retention period starts when the record has been created or last amended.
(c) Paper systems should use robust material which can withstand normal handling and filing. Computer systems should have at least one backup system which should be updated within 24 hours of any new entry. Computer systems should include safeguards against the ability of unauthorised personnel to alter the data.
(d) All computer hardware used to ensure data backup should be stored in a different location from that containing the working data and in an environment that ensures they remain in good condition. When hardware or software changes take place, special care should be taken that all necessary data remains accessible at least through the full retention period.

AMC2 BOP.ADD.205 Record-keeping
STORAGE PERIODS AND AVAILABILITY

(a) The following records should be stored for at least 5 years:
    (1) records of the activities referred to in BOP.ADD.030;
    (2) a copy of the operator's declaration;
    (3) details of approvals held; and
    (4) operations manual.
(b) The following information used for the preparation and execution of a flight, and associated reports, should be stored for 3 months:
    (1) the operational flight plan, if applicable;
    (2) mass documentation;
    (3) notification of special loads, including written information to the pilot-in-command about dangerous goods, if applicable; and
    (4) flight report(s) for recording details of any occurrence, or any event that the pilot-in-command deems necessary to report or record.
(c) Flight crew records should be stored for the periods indicated below:

Flight crew licence	As long as the crew member is exercising the privileges of the licence for the balloon operator
Flight crew member training, checking and qualifications	3 years
Records on flight crew member recent experience	15 months

(d) The operator should make such records available, on request, to the crew member concerned.
(e) The operator should preserve the information used for the preparation and execution of a flight and personnel training records, even if the operator ceases to be the operator of that balloon or the employer of that crew member, provided this is within the timescales prescribed in (c).
(f) If a crew member becomes a crew member for another operator, the former operator should make the crew member's records available to the new operator, provided this is within the timescales prescribed in (c).
(g) A summary of training should be maintained by the operator to show every crew member's completion of each stage of training and checking.

Section 4 – Flight crew

AMC1 BOP.ADD.310(a) Provision of training and checking
ADDITIONAL TRAINING FOR THE PILOT-IN-COMMAND

The pilot-in-command should complete training in first-aid and in the use of the fire extinguisher, at intervals of maximum 36 months.

AMC1 BOP.ADD.315(b);(c) Recurrent training and checking
PROFICIENCY CHECK

The operator proficiency check should be conducted by an examiner.

Section 5 – General operating requirements

AMC1 BOP.ADD.410 Additional balloon crew member
TRAINING AND RECENCY

(a) For training, the additional crew member should have participated in:
  (1) three practical training inflations with subsequent flights on a balloon with a basket of a capacity of more than 19 passengers;
  (2) at least one landing under (1) with a ground speed of at least 8 kt; and
  (3) training in first-aid and in the use of the fire extinguisher, at intervals of maximum 36 months.
(b) For recency, the additional crew member should perform at least 2 flights in this function in any 12-month period. Otherwise, he or she should, before resuming as additional crew member, fulfil again the training requirements of points (a)(1) and (a)(2).

GM1 BOP.ADD.415 Fitness relating to deep water diving and blood donation
ELAPSED TIME BEFORE RETURNING TO FLYING DUTY

24 hours is a suitable minimum length of time to allow after normal recreational (sport) diving or normal blood donation before a flight. This is considered by operators when determining a reasonable time period for the guidance of crew members.

GM1 BOP.ADD.435(a)(2) Documents, manuals and information to be carried
SEARCH AND RESCUE INFORMATION

This information is usually found in the aeronautical information publication of the Republic of Moldova.

GM1 BOP.ADD.435(a)(3) Documents, manuals and information to be carried
OPERATIONAL FLIGHT PLAN

(a) The operational flight plan used and the entries made may contain the following items:
  (1) balloon registration;
  (2) date of flight;
  (3) name of the pilot-in-command;
  (4) place of departure;
  (5) time of departure;
  (6) type of operation
  (7) balloon type;
  (8) balloon size;
  (9) balloon empty mass;
  (10) mass of the traffic load;
  (11) mass of the fuel or ballast load;
  (12) take-off mass;
  (13) fuel or ballast calculation;
  (14) relevant meteorological information; and
  (15) special risk factors (e.g. power lines, wind turbines, airspace classification, etc.).
(b) Items that are readily available in other documentation or from another acceptable source or are irrelevant to the type of operation may be omitted from the operational flight plan.

GM1 BOP.ADD.440 Dangerous goods
PROCEDURES AND INFORMATION TO CREW MEMBERS AND PASSENGERS

(a) The operator provides information in the operations manual to enable the pilot-in-command and other crew members to identify which dangerous goods may be permitted on board.
(b) Information should be given to the passengers as regards goods that are prohibited to take on board before the flight takes place. The crew may provide this information in a briefing before the flight.
(c) Procedures are established and described in the operations manual to respond to accidents or incidents involving dangerous goods. The relevant crew members are familiar with these procedures.

Section 6 – Operating procedures

AMC1 BOP.ADD.510 Commercial balloon specialised operations — Standard operating procedures
DEVELOPMENT OF STANDARD OPERATING PROCEDURES

(a) Standard operating procedures (SOPs) should be developed to a standard format in accordance with AMC2 BOP.ADD.510 and should take into account the results of the risk assessment process.
(b) SOPs should be based on a systematic risk assessment to ensure that the risks associated with the task are acceptable. The risk assessment should describe the activity in detail, identify the relevant hazards, analyse the causes and consequences of accidental events, and establish methods to treat the associated risk.

AMC2 BOP.ADD.510 Commercial balloon specialised operations — Standard operating procedures
TEMPLATE

(a) Nature and complexity of the activity
  (1) The nature of the activity and exposure. The nature of the flight and the risk exposure should be described.
  (2) The complexity of the activity. Details should be provided on how demanding the activity is with regard to the required piloting skills, the necessary level of experience, the ground support, safety and individual protective equipment that should be provided to persons involved.
  (3) The operational environment and geographical area. The operational environment and geographical area over which the operation takes place should be described:
    (i) congested hostile environment: balloon performance standard, compliance with rules of the air, mitigation of third-party risk;
    (ii) mountain areas: altitude, performance, the use or non-use of oxygen with mitigating procedures;
    (iii) water areas: water state and temperature, risk of ditching, availability of search and rescue, survivability, carriage of safety equipment;
    (iv) desert areas: carriage of safety equipment, reporting procedures, search and rescue information; and
    (v) other areas.

(b) Equipment
All equipment required for the activity should be listed. This includes installed equipment certified in accordance with Annex no.1 (Part-21) to IAW Regulation as well as equipment approved in accordance with other, officially recognised standards.

(c) Crew members
  (1) The crew composition and their duties should be specified.
  (2) In addition, for flight crew members, the following should be specified:
    (i) selection criteria (initial qualification, flight experience, experience in the activity);
    (ii) initial training (volume and content of the training); and
    (iii) recent experience requirement and recurrent training (volume and content of the training).
  (3) The criteria listed in (2) should take into account the operational environment and the complexity of the activity, and should be detailed in the training programmes.

(d) Performance
Details on applicable, specific performance requirements should be provided.

(e) Normal, abnormal and emergency procedures
The normal, abnormal and emergency procedures to be applied in flight and on the ground should be described.

(f) Ground equipment
Details on the nature, number and location of ground equipment required for the activity should be provided.

(g) Records
It should be determined which records specific to the flight(s) are to be kept, such as task details, balloon registration, pilot-in-command, flight times, weather and any remarks, including a record of occurrences affecting flight safety or the safety of persons or property on the ground.

Section 7 – Performance and operating limitations

AMC1 BOP.ADD.600(a)(2) System for determining the mass
TRAFFIC LOAD, AND MASS VALUES FOR PASSENGERS AND BAGGAGE

(a) Traffic load should be determined by actual weighing, or by calculating masses for passengers, persons other than flight crew members and baggage as follows:
  (1) Passenger mass may be calculated on the basis of a statement by, or on behalf of, each passenger, adding to it a predetermined mass to account for hand baggage and clothing.

(2) The predetermined mass for hand baggage and clothing should be established by the operator on the basis of experience relevant to its particular operation. In any case, it should not be less than:
   (i) 4 kg for clothing; and
   (ii) 3 kg for hand baggage.

(b) The passengers' stated mass, the mass of passengers' clothing and hand baggage should be checked prior to boarding and adjusted, if necessary.

(c) When determining the actual mass by weighing, passengers' personal belongings and hand baggage should be included.

AMC1 BOP.ADD.600(a)(6) System for determining the mass

DOCUMENTATION

(a) Mass documentation should include the following:
   (1) balloon registration and type;
   (2) date and flight identification;
   (3) name of the pilot-in-command;
   (4) name of the person who prepared the document;
   (5) empty mass;
   (6) mass of the fuel or ballast at take-off;
   (7) load components including passengers, baggage and, if applicable, freight;
   (8) maximum take-off mass allowed by the AFM according to temperature and altitude; and
   (9) limiting mass values.

(b) The mass documentation should enable the pilot-in-command to determine that the load is within the mass limits of the balloon.

(c) The information above may be available in flight planning documents, or other documents readily available for use, or mass systems.

(d) Any last-minute change should be brought to the attention of the pilot-in-command and entered in the documents containing the mass information. The operator should specify the maximum last-minute change allowed in passenger numbers. New mass documentation should be prepared if this maximum number is exceeded.

(e) Where mass documentation is generated by a computerised mass system, the operator should verify the integrity of the output data at intervals not exceeding 6 months.

(f) A copy of the final mass documentation should be made available to the pilot-in-command for his or her acceptance.

GM1 BOP.ADD.600(a)(6) System for determining the mass

LIMITING MASS VALUES

The limiting mass values contained in the mass documentation are those stipulated in the AFM.

ANNEX NO.3 — REQUIREMENTS FOR BALLOONS FLIGHT CREW LICENSING (PART-BFCL)

SUBPART GEN — General requirements

AMC1 BFCL.015 Application for and issue, revalidation and renewal of a BPL as well as associated privileges, ratings and certificates

APPLICATION AND REPORT FORMS

Application and report forms can be found as follows:

(a) for skill tests and proficiency checks for the balloon pilot licence (BPL) as well as for the commercial operation rating, in AMC1 BFCL.410(b)(3); and

(b) for the assessment of competence for the flight instructor (balloon) FI(B), in AMC3 BFCL.345.

GM1 BFCL.015(c) Application for and issue, revalidation and renewal of a BPL as well as associated privileges, ratings and certificates

HOT-AIR BALLOON GROUP ENDORSEMENTS AND RECENCY

When complying with recency requirements for the hot-air balloon class in a smaller balloon group, a licence endorsement related to privileges for a bigger balloon group does not need to be removed from the licence. Those privileges for the bigger group remain 'inactive' and can be exercised once the recency requirements are complied with in that bigger group.

For example, if a BPL holder holds privileges for hot-air balloon groups A, B and C and completes the proficiency check in accordance with point BFCL.160 in a hot-air balloon that represents group B, it is not necessary for the BPL holder to have the licence reissued without an endorsement for group C. The privileges for group C can be exercised after complying with recency requirements in group C balloons.

AMC1 BFCL.045(a)(4) Obligation to carry and present documents

SUFFICIENT LOGBOOK DATA

In order to be able to demonstrate compliance with the requirements of Part-BFCL, a BPL holder should carry either the full logbook or at least excerpts or copies of those parts of the logbook (in paper or electronic format) in which compliance with the requirements that are related to the exercised privileges is documented.

AMC1 BFCL.050 Recording of flight time

GENERAL

(a) The record of the flights flown should contain at least the following information:
  (1) personal details: name(s) and address of the pilot; and
  (2) for each flight:
    (i) name(s) of pilot-in-command (PIC);
    (ii) date of flight;
    (iii) place and time of departure and arrival;
    (iv) type, including make, model, and registration of the balloon;
    (v) total time of flight;
    (vi) accumulated total time of flight;
    (vii) details on pilot function, namely PIC, including solo, dual, FI(B) or flight examiner (balloon) FE(B); and
    (viii) operational conditions, namely if the operation takes place at day or night and whether it is a free flight or tethered flight.

(b) Logging of time
  (1) PIC flight time

(i) Holders of a licence may log as PIC time all of the flight time during which they are the PIC.
(ii) Applicants for or holders of a BPL may log as PIC time all supervised solo flight time as well as flight time of successfully completed skill tests and proficiency checks, provided that, in the case of supervised solo flight time, the logbook entry is signed by the supervising instructor.
(iii) Holders of an FI(B) certificate may log as PIC all flight time during which they act as an instructor in a balloon.
(iv) Holders of an FE(B) certificate may log as PIC all flight time during which they act as an examiner in a balloon.

(2) Instruction time

A summary of all time logged by an applicant for a licence or rating as flight instruction may be logged if certified by the appropriately rated or authorised instructor from whom it was received.

(c) Format of the record

A suitable format should be used that contains the relevant items mentioned in (a) and additional information specific to the type of operation.

GM1 BFCL.065 Curtailment of privileges of BPL holders aged 70 years or older in commercial passenger ballooning

APPLICABILITY OF AGE LIMITATION

'Commercial passenger ballooning' as per point BFCL.065 includes any flight during which fare-paying passengers are carried. This means that, for example, if during a competition or a promotion flight fare-paying passengers are carried, the age limitation of point BFCL.065 for the BPL holder applies.

SUBPART BPL — Balloon pilot licence ("BPL")

AMC1 BFCL.130 BPL – Training course and experience requirements

THEORETICAL KNOWLEDGE INSTRUCTION FOR THE BPL

(a) General

The training should cover aspects related to non-technical skills in an integrated manner, taking into account the particular risks associated with the licence and the activity. The theoretical knowledge instruction provided by the declared training organisation (DTO) or approved training organisation (ATO) should include a certain element of formal classroom work but may also include other methods of delivery — for example, interactive video, slide or tape presentation, computer-based training and other media distance-learning courses. The training organisation responsible for the training has to check whether all the appropriate elements of the training course of theoretical knowledge instruction have been completed to a satisfactory standard before recommending the applicant for the examination.

(b) Syllabus

The following table contains the syllabus for theoretical knowledge instruction for the BPL:

Note: The content of Subjects 5 (Principles of flight), 6 (Operational procedures), 7 (Flight performance and planning), and 8 (Aircraft general knowledge, envelope and systems and emergency equipment) should contain aspects as relevant for the class of balloon used for the training, unless a certain element is specifically marked as relevant for one particular class only.

1.	**AIR LAW AND ATC PROCEDURES**
1.1.	International law: conventions, agreements and organisations

1.2.	Airworthiness of aircraft
1.3.	Aircraft nationality and registration marks
1.4.	Personnel licensing
1.5.	Rules of the air
1.6.	Procedures for air navigation: aircraft operations
1.7.	Air traffic regulations: airspace structure
1.8.	Air traffic services (ATS) and air traffic management (ATM)
1.9.	Aeronautical information services (AIS)
1.10.	Aerodromes, external take-off sites
1.11.	Search and rescue
1.12.	Security
1.13.	Accident reporting
1.14.	National law
2.	**HUMAN PERFORMANCE**
2.1.	Human factors: basic concepts
2.2.	Basic aviation physiology and health maintenance
2.3.	Basic aviation psychology
2.4.	Use of oxygen
3.	**METEOROLOGY**
3.1.	The atmosphere
3.2.	Wind
3.3.	Thermodynamics
3.4.	Clouds and fog
3.5.	Precipitation
3.6.	Air masses and fronts
3.7	Pressure systems
3.8.	Climatology
3.9.	Flight hazards

3.10.	Meteorological information
4.	**COMMUNICATIONS**
4.1.	Definitions
4.2.	VFR communications
4.2.1	VFR communication at uncontrolled airfields
4.2.2.	VFR communication at controlled airfields
4.2.3.	VFR communication with ATC (en-route)
4.3.	General operating procedures
4.4.	Relevant weather information terms (VFR)
4.5.	Action required to be taken in case of communication failure
4.6.	Distress and urgency procedures
4.7.	General principles of VHF propagation and allocation of frequencies
5.	**PRINCIPLES OF FLIGHT**
5.1.	Principles of flight
5.2.	Aerostatics
5.3.	Loading limitations
5.4.	Operational limitations
6.	**OPERATIONAL PROCEDURES**
6.1.	General requirements
6.2.	Special operational procedures and hazards (general aspects)
6.3.	Emergency procedures
7.	**FLIGHT PERFORMANCE AND PLANNING**
7.1.	Mass
7.1.1.	Purpose of mass considerations
7.1.2.	Loading
7.2.	Performance
7.2.1.	Performance: general
7.3.	Flight planning and flight monitoring

7.3.1.	Flight planning: general
7.3.2.1.	Fuel planning (hot-air balloons only)
7.3.2.2.	Ballast planning (gas balloons only)
7.3.3.	Pre-flight preparation
7.3.4.	ICAO flight plan (ATS flight plan)
7.3.5.	Flight monitoring and in-flight re-planning
8.	**AIRCRAFT GENERAL KNOWLEDGE, ENVELOPE AND SYSTEMS AND EMERGENCY EQUIPMENT**
8.1.	System design, loads, stresses and maintenance
8.2.	Envelope
8.3.1.	Burner (hot-air balloon only)
8.3.2.	Basket
8.4.1	Fuel cylinders (hot-air balloons only)
8.4.2.	Lifting gas (gas balloons only)
8.5.	Ballast (gas balloons only)
8.6.	Fuel (hot-air balloons only)
8.7.	Instruments
8.8.	Emergency equipment
9.	**NAVIGATION**
9.1.	General navigation
9.2.	Basics of navigation
9.3.	Magnetism and compasses
9.4.	Charts
9.5.	Dead reckoning navigation
9.6.	In-flight navigation
9.7.	Use of GNSS
9.8.	Use of ATS

AMC2 BFCL.130 BPL – Training course and experience requirements
FLIGHT INSTRUCTION FOR THE BPL

(a) Entry to training
Before being accepted for training, an applicant should be informed that the appropriate medical certificate must be obtained before solo flying is permitted.

(b) Flight instruction — general
(1) The BPL flight instruction syllabus should take into account the principles of threat and error management (TEM) and also cover:
(i) pre-flight operations, including load calculations, balloon inspection and servicing;
(ii) crew and passenger briefings;
(iii) inflation and crowd control;
(iv) control of the balloon by external visual reference;
(v) take-off in different wind conditions;
(vi) approach from low and high level;
(vii) landings in different surface wind conditions;
(viii) cross-country flying using visual reference and dead reckoning;
(ix) emergency operations, including simulated balloon equipment malfunctions;
(x) compliance with air traffic services procedures and communication procedures;
(xi) avoidance of nature protection areas; and
(xii) landowner relations.
(2) Before allowing applicants to undertake their first solo flight, the FI should ensure that they can operate the required systems and equipment.

(c) Syllabus of flight instruction (hot-air balloon)
(1) The numbering of exercises should be used primarily as an exercise reference list and as a broad instructional sequencing guide; therefore, the demonstrations and practices need not necessarily be given in the order listed. The actual order and content will depend upon the following interrelated factors:
(i) the applicant's progress and ability;
(ii) the weather conditions affecting the flight;
(iii) the flight time available;
(iv) the instructional technique considerations;
(v) the local operating environment; and
(vi) the applicability of the exercises to the balloon type.
(2) Each of the exercises requires the applicant to be aware of the need for as well as the principles of good airmanship and look-out, which should be emphasised at all times.
(3) List of exercises
Exercise 1: Familiarisation with the balloon
(i) characteristics of the balloon;
(ii) the components or systems;
(iii) refuelling of the cylinders;
(iv) instruments and equipment; and
(v) use of checklist(s) and procedures.
Exercise 2: Preparation for flight
(i) documentation and equipment;
(ii) weather forecast and actuals;
(iii) flight planning:
(A) notices to airmen (NOTAMs);
(B) airspace structure;
(C) sensitive areas (for example, nature protection areas);
(D) expected track and distance;
(E) pre-flight picture; and
(F) possible landing fields.
(iv) launch field:
(A) permission;
(B) field selection;

(C) behaviour; and
(D) adjacent fields; and
(v) load calculations.

Exercise 3: Crew and passenger briefing

(i) clothing;
(ii) crew briefing; and
(iii) passenger briefing.

Exercise 4: Assembly and layout

(i) crowd control;
(ii) rigging envelope, basket and burner;
(iii) burner test;
(iv) use of restraint line; and
(v) pre-inflation checks.

Exercise 5: Inflation

(i) crowd control;
(ii) cold inflation;
(iii) use of the inflation fan; and
(iv) hot inflation.

Exercise 6: Take-off in different wind conditions

(i) pre-take-off checks and briefings;
(ii) heating for controlled climb;
(iii) 'hands off and hands on' procedure for ground crew;
(iv) assessment of lift;
(v) use of quick release;
(vi) assessment of wind and obstacles;
(vii) take-off in wind of different speeds, with and without shelter; and
(viii) preparation for false lift.

Exercise 7: Climb to level flight

(i) climbing with a predetermined rate of climb;
(ii) look-out procedures;
(iii) effect on envelope temperature;
(iv) maximum rate of climb according to the manufacturer's flight manual; and
(v) levelling off at selected altitude.

Exercise 8: Level flight

(i) maintaining level flight by:
(A) use of instruments only;
(B) use of visual references only; and
(C) all available means; and
(ii) use of parachute and turning vents (if applicable).

Exercise 9: Descent to level flight

(i) descent with a predetermined rate of descent;
(ii) fast descent;
(iii) look-out procedures;
(iv) maximum rate of descent according to the manufacturer's flight manual;
(v) use of parachute;
(vi) parachute stall;
(vii) cold descent; and
(viii) levelling off at selected altitude.

Exercise 10A: Emergencies — systems

(i) pilot light failure;
(ii) burner failure, valve leaks, flame out and re-light;
(iii) gas leaks;
(iv) envelope over temperature;

(v) envelope damage in-flight; and
(vi) parachute or rapid deflation system failure.

Exercise 10B: Other emergencies

(i) fire extinguisher;
(ii) fire on ground;
(iii) fire in the air;
(iv) contact with electrical power lines;
(v) obstacle avoidance; and
(vi) escape drills, location and use of emergency equipment.

Exercise 11: Navigation

(i) maps selection;
(ii) plotting expected track;
(iii) marking positions and time;
(iv) calculation of distance, speed and fuel consumption;
(v) ceiling limitations (ATC, weather and envelope temperature);
(vi) planning ahead;
(vii) monitoring of weather development and related decision-making/acting;
(viii) monitoring of fuel consumption and envelope temperature;
(ix) ATC liaison (if applicable);
(x) communication with retrieve crew; and
(xi) use of GNSS (if applicable).

Exercise 12: Fuel management

(i) cylinder arrangement and burner systems;
(ii) pilot light supply (vapour or liquid);
(iii) use of master cylinders (if applicable);
(iv) fuel requirement and expected fuel consumption;
(v) fuel state and pressure;
(vi) fuel reserves;
(vii) cylinder contents gauge and change procedure; and
(viii) use of cylinder manifolds.

Exercise 13: Approach from low level

(i) pre-landing checks;
(ii) passenger pre-landing briefing;
(iii) selection of field;
(iv) use of burner and parachute;
(v) look-out procedures; and
(vi) missed approach and fly on.

Exercise 14: Approach from high level

(i) pre-landing checks;
(ii) passenger pre-landing briefing;
(iii) selection of field;
(iv) rate of descent;
(v) use of burner and parachute;
(vi) look-out procedures; and
(vii) missed approach and fly on.

Exercise 15: Operating at low level

(i) use of burner, whisper burner and parachute;
(ii) look-out procedures;
(iii) avoidance of low-level obstacles;
(iv) avoidance of sensitive areas and nature protection areas; and
(v) landowner relations.

Exercise 16: Landing in different wind conditions

(i) pre-landing checks;

(ii) passenger pre-landing briefing;
(iii) selection of field;
(iv) turbulence (in the case of landings with high wind speed only);
(v) use of burner and pilot lights;
(vi) use of parachute (or other deflation system) and turning vents (if applicable);
(vii) look-out procedures;
(viii) dragging and deflation;
(ix) landowner relations; and
(x) airmanship.

Exercise 17: First solo flight

(i) supervised flight preparation; and
(ii) instructor's briefing, observation of flight and de-briefing.

Note: Exercises 1 to 16 must have been completed and the student must have achieved a sufficient level of competence to safely perform a flight before undertaking the first solo flight.

(d) Syllabus of flight instruction (gas balloon)

(1) The numbering of exercises should be used primarily as an exercise reference list and as a broad instructional sequencing guide; therefore, the demonstrations and practices need not necessarily be given in the order listed. The actual order and content will depend upon the following interrelated factors:
(i) the applicant's progress and ability;
(ii) the weather conditions affecting the flight;
(iii) the flight time available;
(iv) the instructional technique considerations;
(v) the local operating environment; and
(vi) the applicability of the exercises to the balloon type.

(2) Each of the exercises involves the need for the pilot under training to be aware of the needs of good airmanship and look-out, which should be emphasised at all times.

(3) List of exercises

Exercise 1: Familiarisation with the balloon

(i) characteristics of the balloon;
(ii) the components or systems;
(iii) instruments and equipment; and
(iv) use of checklist(s) and procedures.

Exercise 2: Preparation for flight

(i) documentation and equipment;
(ii) weather forecast and actuals;
(iii) flight planning:
(A) NOTAMs;
(B) airspace structure;
(C) sensitive areas (for example, nature protection areas);
(D) expected track and distance;
(E) pre-flight picture; and
(F) possible landing fields;
(iv) launch field:
(A) permission;
(B) behaviour; and
(C) adjacent fields; and
(v) load calculations.

Exercise 3: Crew and passenger briefing

(i) clothing;
(ii) crew briefing; and
(iii) passenger briefing.

Exercise 4: Assembly and layout

(i) crowd control;
(ii) rigging envelope and basket (balloon with net);
(iii) rigging envelope and basket (netless balloon); and
(iv) ballast check.

Exercise 5: Inflation

(i) crowd control;
(ii) inflation procedure according to the manufacturer's flight manual; and
(iii) avoidance of electrostatic discharge.

Exercise 6: Take-off in different wind conditions

(i) pre-take-off checks and briefings;
(ii) preparation for controlled climb;
(iii) 'hands off and hands on' procedure for ground crew;
(iv) assessment of wind and obstacles;
(v) take-off in wind of different speeds, with and without shelter; and
(vi) preparation for false lift.

Exercise 7: Climb to level flight

(i) climb with a predetermined rate of climb;
(ii) look-out procedures;
(iii) maximum rate of climb according to the manufacturer's flight manual; and
(iv) levelling off at selected altitude.

Exercise 8: Level flight

(i) maintaining level flight by:
  (A) use of instruments only;
  (B) use of visual references only; and
  (C) all available means; and
(ii) use of parachute or valve.

Exercise 9: Descent to level flight

(i) descent with a predetermined rate of descent;
(ii) fast descent;
(iii) look-out procedures;
(iv) maximum rate of descent according to the manufacturer's flight manual;
(v) use of parachute or valve; and
(vi) levelling off at selected altitude.

Exercise 10: Emergencies

(i) closed appendix during take-off and climb;
(ii) envelope damage in-flight;
(iii) parachute or valve failure;
(iv) contact with electrical power lines;
(v) obstacle avoidance; and
(vi) escape drills, location and use of emergency equipment.

Exercise 11: Navigation

(i) map selection;
(ii) plotting expected track;
(iii) marking positions and time;
(iv) calculation of distance, speed and ballast consumption;
(v) ceiling limitations (ATC, weather and ballast);
(vi) planning ahead;
(vii) monitoring of weather development and acting so;
(viii) monitoring of ballast consumption;
(ix) ATC liaison (if applicable);
(x) communication with retrieve crew; and
(xi) use of GNSS (if applicable).

Exercise 12: Ballast management

(i) minimum ballast;
(ii) arrangement and securing of ballast;
(iii) ballast requirement and expected ballast consumption; and
(iv) ballast reserves.

Exercise 13: Approach from low level

(i) pre-landing checks;
(ii) passenger pre-landing checks;
(iii) selection of field;
(iv) use of ballast and parachute or valve;
(v) use of trail rope (if applicable);
(vi) look-out procedures; and
(vii) missed approach and fly on.

Exercise 14: Approach from high level

(i) pre-landing checks;
(ii) passenger pre-landing checks;
(iii) selection of field;
(iv) rate of descent;
(v) use of ballast and parachute or valve;
(vi) use of trail rope (if applicable);
(vii) look-out procedures; and
(viii) missed approach and fly on.

Exercise 15: Operating at low level

(i) use of ballast and parachute or valve;
(ii) look-out procedures;
(iii) avoidance of low-level obstacles;
(iv) avoidance of sensitive areas and nature protection areas; and
(v) landowner relations.

Exercise 16: Landing in different wind conditions

(i) pre-landing checks;
(ii) passenger pre-landing briefing;
(iii) selection of field;
(iv) turbulence (in the case of landings with high wind speed only);
(v) use of ballast and parachute or valve;
(vi) look-out procedures;
(vii) use of rip panel;
(viii) dragging;
(ix) deflation;
(x) avoidance of electrostatic discharge; and
(xi) landowner relations.

Exercise 17: First solo flight

(i) supervised flight preparation; and
(ii) instructor's briefing, observation of flight and de-briefing.

Note: Exercises 1 to 16 have to be completed and the student must have achieved a sufficient level of competence to safely perform a flight before undertaking the first solo flight.

AMC1 BFCL.135 BPL – Theoretical knowledge examinations

(a) The theoretical knowledge examinations for the BPL follow the syllabus for theoretical knowledge instruction for the BPL set out in AMC1 BFCL.130.
(b) The examinations should be in written form. However, for the subject Communications, practical classroom testing may be conducted.

(c) The examinations should comprise a total of 120 multiple-choice questions, covering all the subjects, with the following arrangements for questions and allocated time per subject:

Subject	Number of questions	Duration (in minutes)
Air law	20	40
Human performance	10	20
Meteorology	20	40
Communications	10	20
Navigation	20	75
Principles of flight*	10	20
Operational procedures*	10	20
Flight performance and planning*	10	20
Aircraft general knowledge*	10	20

* Content as relevant for either hot-air balloons or gas balloons, depending on the class privileges sought. These four subjects may be combined in one single examination paper that comprises 10 questions per subject (40 in total) and has a duration of 80 minutes. In any case, the pass rate as per point BFCL.135(c)(1) needs to be achieved for each subject.

(d) The period of 18 months mentioned in point BFCL.135(c)(2) should be counted from the end of the calendar month when the applicant first attempted an examination.
(e) The CAA should inform applicants of the language(s) in which the examination will be conducted.

GM1 BFCL.135 BPL – Theoretical knowledge examinations
TERMINOLOGY

The meaning of the following terms used in BFCL.135 is as follows:
(a) 'Entire set of examinations': an examination in all subjects required by the licence level.
(b) 'Examination': the demonstration of knowledge in one or more examination papers.
(c) 'Examination paper': a set of questions that covers one subject required by the licence level, to be answered by a candidate for examination.
(d) 'Attempt': a try to pass a specific examination paper.

AMC1 BFCL.145 BPL – Practical skill test
(a) GENERAL
(1) The take-off site should be chosen by the applicant depending on the actual meteorological conditions, the area which has to be overflown, and the possible options for suitable landing sites. The applicant should be responsible for the flight planning and should ensure that all equipment and documentation for the execution of the flight are on board.
(2) An applicant should indicate to the FE the checks and duties carried out. Checks should be completed in accordance with the flight manual or the authorised checklist for the balloon on which the test is being taken. During pre-flight preparation for the test, the applicant should be required to perform crew and passenger briefings and demonstrate crowd control. The load calculation should be performed by the applicant in compliance with the operations manual or flight manual for the balloon used.

(3) The flight time of the skill test should be at least 30 minutes.

(b) FLIGHT TEST TOLERANCE

The applicant should demonstrate the ability to:

(1) operate the balloon within its limitations;
(2) complete all manoeuvres with smoothness and accuracy;
(3) exercise good judgment and airmanship;
(4) apply aeronautical knowledge; and
(5) maintain control of the balloon at all times in such a manner that the successful outcome of a procedure or manoeuvre is never seriously in doubt.

(c) CONTENT OF THE SKILL TEST

(1) The skill test contents and sections set out in this point should be used for the skill test for the issue of a BPL with privileges for the hot-air balloon class:

Note: Use of checklist(s), airmanship, control of balloon by external visual reference, look-out procedures, etc. apply in all sections.

SECTION 1: PRE-FLIGHT OPERATIONS, INFLATION AND TAKE-OFF	
a	Pre-flight documentation (licence, medical certificate, permits to take off, insurance certificate, aeronautical charts, aircraft flight manual (AFM), logbook, technical logbook, checklists, etc.), flight planning, NOTAM(s) and weather briefing
b	Balloon inspection and servicing
c	Suitability of launch site
d	Load calculation
e	Crowd control, crew and passenger briefings
f	Assembly and layout
g	Inflation and pre-take-off procedures
h	Take-off
i	ATC compliance (if applicable)
SECTION 2: GENERAL AIRWORK	
a	Climb to level flight
b	Level flight
c	Descent to level flight
d	Operating at low level
e	ATC compliance (if applicable)
SECTION 3: EN-ROUTE PROCEDURES	
a	Dead reckoning and map reading
b	Marking positions and time

c	Orientation and airspace structure
d	Maintenance of altitude
e	Fuel management
f	Communication with retrieve crew
g	ATC compliance (if applicable)
SECTION 4: APPROACH AND LANDING PROCEDURES	
a	Approach from low level, missed approach and fly on
b	Approach from high level, missed approach and fly on
c	Pre-landing checks
d	Passenger pre-landing briefing
e	Selection of landing field
f	Landing, dragging and deflation
g	ATC compliance (if applicable)
h	Actions after flight (recording of the flight, closing flight plan (if applicable), briefing passengers for packing balloon, contact landowner)
SECTION 5: ABNORMAL AND EMERGENCY PROCEDURES	
This section may be combined with Sections 1 through 4.	
a	Simulated fire on the ground and in the air
b	Simulated pilot light and burner failures
c	Other abnormal and emergency procedures as outlined in the appropriate flight manual
d	Simulated passenger health problems
e	Oral questions

(2) The skill test contents and sections set out in this point should be used for the skill test for the issue of a BPL with privileges for the gas balloon class:

Note: Use of checklist(s), airmanship, control of balloon by external visual reference, look-out procedures, etc. apply in all sections.

SECTION 1: PRE-FLIGHT OPERATIONS, INFLATION AND TAKE-OFF	
a	Pre-flight documentation (licence, medical certificate, permits to take off, insurance certificate, aeronautical charts, AFM, logbook, technical logbook, checklists, etc.), flight planning, NOTAM(s) and weather briefing
b	Balloon inspection and servicing

c	Suitability of launch site
d	Load calculation
e	Crowd control, crew and passenger briefings
f	Assembly and layout
g	Inflation and pre-take-off procedures
h	Take-off
i	ATC compliance (if applicable)
SECTION 2: GENERAL AIRWORK	
a	Climb to level flight
b	Level flight
c	Descent to level flight
d	Operating at low level
e	ATC compliance (if applicable)
SECTION 3: EN-ROUTE PROCEDURES	
a	Dead reckoning and map reading
b	Marking positions and time
c	Orientation and airspace structure
d	Maintenance of altitude
e	Ballast management
f	Communication with retrieve crew
g	ATC compliance (if applicable)
SECTION 4: APPROACH AND LANDING PROCEDURES	
a	Approach from low level, missed approach and fly on
b	Approach from high level, missed approach and fly on
c	Pre-landing checks
d	Passenger pre-landing briefing
e	Selection of landing field
f	Landing, dragging and deflation

g	ATC compliance (if applicable)
h	Actions after flight (recording of the flight, closing flight plan (if applicable), briefing passengers for packing balloon, contact landowner)
SECTION 5: ABNORMAL AND EMERGENCY PROCEDURES	
This Section may be combined with Sections 1 through 4.	
a	Simulated closed appendix during take-off and climb
b	Simulated parachute or valve failure
c	Other abnormal and emergency procedures as outlined in the appropriate flight manual
d	Simulated passenger health problems
e	Oral questions

AMC1 BFCL.150(b) BPL – Extension of privileges to another balloon class or group
EXTENSION OF HOT-AIR BALLOON CLASS PRIVILEGES TO ANOTHER HOT- AIR BALLOON GROUP

(a) The training flights should concentrate on the differences between the group for which privileges are sought and the group(s) for which the pilot already has privileges. For example, handling needs to consider balloon performance differences arising from greater mass, inertia, response to the burner and, in some cases, differing deflation systems. Additional requirements arise for dealing with larger numbers of passengers.
(b) Instructors should only sign off as 'training completed' when they are satisfied that the pilot under training has achieved full technical and operational competence for balloons of all sizes included in the given group.
(c) An extension to group C is also valid for groups A and B. An extension to group D is also valid for groups A, B and C.

GM1 BFCL.150(b) BPL – Extension of privileges to another balloon class or group
EXTENSION OF HOT-AIR BALLOON CLASS PRIVILEGES TO ANOTHER HOT- AIR BALLOON GROUP

The two training flights stipulated in point BFCL.150(b)(1) constitute the minimum amount of training needed in the case of experienced pilots who seek to extend their privileges by one group size. The instructor may conduct additional training flights, as necessary for the candidate to acquire the competence needed, before entering the completion of training in the candidate's logbook.

AMC1 BFCL.150(c)(1) BPL – Extension of privileges to another balloon class or group
FLIGHT INSTRUCTION FOR THE EXTENSION OF PRIVILEGES TO THE HOT-AIR AIRSHIP CLASS
(a) The numbering of the exercises set out in point (d) should be used primarily as an exercise reference list and as a broad instructional sequencing guide; therefore, the demonstrations and practices need not necessarily be given in the order listed.
(b) In cases where the applicant already holds hot-air balloon privileges, the flight instruction should concentrate on all of the following:
  (1) added complication of the engine;
  (2) engine controls and different performance;
  (3) airship operating limitations; and

(4) airship procedures.

(c) In cases where the applicant does not hold hot-air balloon privileges, the ATO or DTO, based on the candidate's experience, may decide to conduct training elements as per point (c) of AMC2 BFCL.130 on hot-air balloons before starting with the flight instruction on hot-air airships, in order to allow the candidate to develop competence in hot-air aircraft operation.

(d) In any case, the flying exercises should cover the revision or explanation of the following exercises:

Exercise 1: Familiarisation with the hot-air airship

(i) characteristics of the hot-air airship;
(ii) aerostatic and aerodynamic lift;
(iii) operating limitations;
(iv) airworthiness limitations;
(v) the components or systems;
(vi) instruments, minimum equipment and other equipment; and
(vii) use of checklist(s) and procedures.

Exercise 2: Preparation for flight

(i) documentation and equipment;
(ii) weather forecast and actuals;
(iii) flight planning:
  (A) NOTAMs;
  (B) airspace structure;
  (C) sensitive areas;
  (D) expected track and distance;
  (E) pre-flight picture; and
  (F) possible landing fields;
(iv) launch field:
  (A) permission;
  (B) behaviour;
  (C) field selection;
  (D) adjacent fields; and
  (E) noise abatement; and
(v) load and fuel calculations.

Exercise 3: Crew and passenger briefing

(i) clothing;
(ii) crew briefing; and
(iii) passenger briefing.

Exercise 4: Assembly and layout

(i) crowd control;
(ii) rigging envelope, gondola, burner and engine;
(iii) burner test;
(iv) engine test; and
(v) pre-inflation checks.

Exercise 5: Inflation

(i) crowd control;
(ii) cold inflation:
  (A) use of restraint line; and
  (B) use of the inflation fan; and
(iii) hot inflation.

Exercise 6: Engine

(i) identification of main parts and controls;
(ii) familiarisation with operation and checking of the engine; and
(iii) engine checks before take-off.

Exercise 7: Pressurisation (if applicable)

(i) pressurisation fan operation;
(ii) super pressure and balance between pressure and temperature; and
(iii) pressure limitations.

Exercise 8: Take-off

(i) before take-off checks and briefings;
(ii) heating for controlled climb;
(iii) procedure for ground crew; and
(iv) assessment of wind and obstacles.

Exercise 9: Climb to level flight

(i) climbing with a predetermined rate of climb;
(ii) effect on envelope temperature and pressure;
(iii) maximum rate of climb according to the manufacturer's flight manual; and
(iv) level off at selected altitude.

Exercise 10: Level flight

(i) maintaining level flight by:
  (A) use of instruments only;
  (B) use of visual references only; and
  (C) all available means;
(ii) maintaining level flight at different air speeds by taking aerodynamic lift into account;
(iii) turns; and
(iv) stationary flight.

Exercise 11: Descent to level flight

(i) descent with a predetermined rate of descent;
(ii) maximum rate of descent according to the manufacturer's flight manual; and
(iii) levelling off at selected altitude.

Exercise 12A: Emergencies — systems

(i) engine failure;
(ii) pressurisation failure;
(iii) rudder failure;
(iv) pilot light failure;
(v) burner failure, valve leaks, flame out and re-light;
(vi) fuel leaks;
(vii) envelope over temperature; and
(viii) envelope damage in-flight.

Exercise 12B: Other emergencies

(i) fire extinguishers;
(ii) fire on ground;
(iii) fire in the air;
(iv) electrical power supply failure;
(v) hard landing;
(vi) landing in strong wind;
(vii) contact with electrical power lines;
(viii) obstacle avoidance;
(ix) escape drills, location and use of emergency equipment.

Exercise 13: Navigation

(i) map selection and preparation;
(ii) plotting and steering expected track;
(iii) marking positions and time;
(iv) calculation of distance, speed and fuel consumption;
(v) ceiling limitations (ATC, weather and envelope temperature);
(vi) planning ahead;
(vii) monitoring of weather development and acting so;
(viii) monitoring of fuel and envelope temperature or pressure;

(ix) ATC liaison (if applicable);
(x) communication with ground crew; and
(xi) use of GNSS (if applicable).

Exercise 14: Fuel management

(i) engine arrangement and tank system;
(ii) cylinder arrangement and burner systems;
(iii) pilot light supply (vapour or liquid);
(iv) fuel requirement and expected fuel consumption for engine and burner;
(v) fuel state and pressure;
(vi) fuel reserves; and
(vii) cylinder and petrol tank contents gauge.

Exercise 15: Approach and go-around

(i) pre-landing checks;
(ii) selection of field into wind;
(iii) use of burner and engine;
(iv) look-out procedures; and
(v) missed approach and go-around.

Exercise 16: Approach with simulated engine failure

(i) pre-landing checks;
(ii) selection of field;
(iii) use of burner;
(iv) look-out procedures; and
(v) missed approach and go-around.

Exercise 17: Operating at low level

(i) use of burner and engine;
(ii) look-out procedures;
(iii) avoidance of low-level obstacles;
(iv) avoidance of sensitive areas and nature protection area;
(v) landowner relations; and
(vi) noise abatement procedures.

Exercise 18: Steering

(i) assessment of wind; and
(ii) correcting for wind to steer a given course.

Exercise 19: Final landing

(i) pre-landing checks;
(ii) use of burner and engine;
(iii) look-out;
(iv) deflation; and
(v) landowner relations.

AMC2 BFCL.150(c)(1) BPL – Extension of privileges to another balloon class or group
FLIGHT INSTRUCTION FOR THE EXTENSION OF PRIVILEGES TO THE GAS BALLOON CLASS

(a) The flight instruction for extending the privileges of a BPL to gas balloon privileges should follow the syllabus for initial BPL training on gas balloons, as set out in point (d) of AMC2 BFCL.130.
(b) Specific emphasis should be given to handling differences, related to class privileges held, and specific safety requirements for gas balloons.

AMC3 BFCL.150(c)(1) BPL – Extension of privileges to another balloon class or group
FLIGHT INSTRUCTION FOR THE EXTENSION OF PRIVILEGES TO THE HOT- AIR BALLOON CLASS

(a) The flight instruction for extending the privileges of a BPL to hot-air balloon privileges should follow the syllabus for initial BPL training on hot-air balloons, as set out in point (c) of AMC2 BFCL.130.
(b) Specific emphasis should be given to handling differences, related to class privileges held, and specific safety requirements for hot-air balloons.

AMC1 BFCL.150(c)(2) BPL – Extension of privileges to another balloon class or group

(a) SKILL TEST FOR THE EXTENSION OF PRIVILEGES TO THE HOT-AIR AIRSHIP CLASS
  (1) The take-off site should be chosen by the applicant depending on the actual meteorological conditions, the area which has to be overflown, and the possible options for suitable landing sites. The applicant should be responsible for the flight planning and should ensure that all equipment and documentation for the execution of the flight are on board.
  (2) An applicant should indicate to the FE the checks and duties carried out. Checks should be completed in accordance with the flight manual or the authorised checklist for the balloon on which the test is being taken. During pre-flight preparation for the test, the applicant should be required to perform crew and passenger briefings and demonstrate crowd control. The load calculation should be performed by the applicant in compliance with the operations manual or flight manual for the hot-air airship used.
  (3) The flight time of the skill test should be at least 30 minutes.
(b) FLIGHT TEST TOLERANCE
  The applicant should demonstrate the ability to:
  (1) operate the hot-air airship within its limitations;
  (2) complete all manoeuvres with smoothness and accuracy;
  (3) exercise good judgment and airmanship;
  (4) apply aeronautical knowledge; and
  (5) maintain control of the airship at all times in such a manner that the successful outcome of a procedure or manoeuvre is never seriously in doubt.
(c) CONTENT OF THE SKILL TEST
  The following skill test contents and sections should be used for the skill test for the issue of a BPL hot-air airship extension:

  Note: Use of checklist(s), airmanship, control of hot-air airship by external visual reference, look-out procedures, etc. apply in all sections.

SECTION 1: PRE-FLIGHT OPERATIONS, INFLATION AND TAKE-OFF	
a	Pre-flight documentation (licence, medical certificate, permits to take off, insurance certificate, aeronautical charts, AFM, logbook, technical logbook, checklists etc.), flight planning, NOTAM(s) and weather briefing
b	Hot-air airship inspection and servicing
c	Suitability of launch site
d	Load calculation
e	Crowd control, crew and passenger briefings
f	Assembly and layout
g	Inflation and pre-take-off procedures
h	Take-off

i	ATC compliance (if applicable)
SECTION 2: GENERAL AIRWORK	
a	Climb to level flight
b	Level flight
c	Turns
d	Stationary flight
e	Descent to level flight
f	Operating at low level
g	ATC compliance (if applicable)
SECTION 3: EN-ROUTE PROCEDURES	
a	Dead reckoning and map reading
b	Marking positions and time
c	Orientation and airspace structure
d	Plotting and steering expected track
e	Maintenance of altitude
f	Fuel management
g	Pressure and engine parameter checks
h	Communication with ground crew
i	ATC compliance (if applicable)
SECTION 4: APPROACH AND LANDING PROCEDURES	
a	Approach, missed approach and go-around
b	Pre-landing checks
c	Selection of landing field
d	Landing and deflation
e	ATC compliance (if applicable)
f	Actions after flight (recording of the flight, closing flight plan (if applicable), briefing passengers for packing hot-air airship, contact landowner)
SECTION 5: ABNORMAL AND EMERGENCY PROCEDURES	
This section may be combined with Sections 1 through 4	

a	Simulated fire on the ground and in the air
b	Simulated pilot light, burner and engine failures
c	Approach with simulated engine failure, missed approach and go-around
d	Simulated passenger health problems
e	Other abnormal and emergency procedures as outlined in the appropriate flight manual
f	Oral questions

AMC2 BFCL.150(c)(2) BPL – Extension of privileges to another balloon class or group
SKILL TEST FOR THE EXTENSION OF PRIVILEGES TO THE GAS BALLOON CLASS

To extend the privileges of a BPL to gas balloon privileges, BPL holders should take the skill test for the initial issue of a BPL on gas balloons, as set out in AMC1 BFCL.145.

AMC3 BFCL.150(c)(2) BPL – Extension of privileges to another balloon class or group
SKILL TEST FOR THE EXTENSION OF PRIVILEGES TO THE HOT-AIR BALLOON CLASS

To extend the privileges of a BPL to hot-air balloon privileges, BPL holders should take the skill test for the initial issue of a BPL on hot-air balloons, as set out in AMC1 BFCL.145.

AMC4 BFCL.150(c)(2) BPL – Extension of privileges to another balloon class or group
THEORETICAL KNOWLEDGE FOR EXTENSION OF PRIVILEGES TO ANOTHER BALLOON CLASS

During the skill test as per point BFCL.150(c)(2), the demonstration of an adequate level of theoretical knowledge for the other balloon class should cover all of the following from the syllabus set out in point (b) of AMC1 BFCL.130:

Note: The content of the below syllabus should contain aspects as relevant for the class of balloon used for the training, unless a certain element is specifically marked as relevant for particular classes only.

5.	**PRINCIPLES OF FLIGHT**
5.1.	Principles of flight
5.2.	Aerostatics
5.3.	Loading limitations
5.4.	Operational limitations
6.	**OPERATIONAL PROCEDURES**
6.1.	General requirements
6.2.	Special operational procedures and hazards
6.3.	Emergency procedures

7.	**FLIGHT PERFORMANCE AND PLANNING**
7.1.	Mass
7.1.1.	Purpose of mass considerations
7.1.2.	Loading
7.2.	Performance
7.3.	Flight planning and flight monitoring
7.3.2.1.	Fuel planning (extension to hot-air balloons & hot-air airships only)
7.3.2.2.	Ballast planning (extension to gas balloons only)
7.3.3.	Pre-flight preparation
7.3.4.	ICAO flight plan (ATS flight plan)
7.3.5.	Flight monitoring and in-flight re-planning
8.	**AIRCRAFT GENERAL KNOWLEDGE, ENVELOPE, SYSTEMS AND EMERGENCY EQUIPMENT**
8.1.	System design, loads, stresses and maintenance
8.2.	Envelope
8.3.1.	Burner (extension to hot-air balloons or hot-air airships only)
8.3.2.	Basket (extension to hot-air balloons or gas balloons only)
8.3.3.	Gondola (extensions to hot-air airships only)
8.4.1	Fuel cylinders (extension to hot-air balloons or hot-air airships only)
8.4.2.	Lifting gas (extension to gas balloons only)
8.5.1.	Ballast (extension to gas balloons only)
8.6.	Fuel (extension to hot-air balloons or hot-air airships only)
8.7.	Instruments
8.8.	Emergency equipment

AMC1 BFCL.160 BPL – Recency requirements

CREDITS FOR FLIGHT TIME COMPLETED ON BALLOONS AS PER CAA DECISION OR AS WELL AS ANNEX NO.2 TO THE AVIATION CODE

All hours flown on balloons that are subject to a CAA decision or that are specified in Annex no.2 to the Aviation Code should count in full towards fulfilling the hourly requirements of point BFCL.160 of Part-BFCL under the following conditions:

(a) the balloon matches the definition and criteria of the respective Part-BFCL balloon class and, in the case of hot-air balloons, the applicable hot-air balloon group as specified in point (a) of point BFCL.010;

(b) a balloon that is used for a training flight with an instructor is an aircraft as per Annex no.2 to the Aviation Code that is subject to an authorisation specified in point ORA.ATO.135 of Annex no.7 (Part-ORA) or point DTO.GEN.240 of Annex no.8 (Part-DTO) to the Aircrew Regulation.

AMC1 BFCL.160(a)(1)(ii) Recency requirements
TRAINING FLIGHT
(a) A training flight as stipulated in point BFCL.160(a)(1)(ii) should be a flight that:
  (1) follows the content of the skill test for the relevant balloon class, as set out in AMC1 BFCL.145 or AMC1 BFCL.150(c)(2), as applicable; and
  (2) is conducted on a one-to-one basis between one pilot and one instructor only, with no other pilot on board who is taking credit for that flight.
(b) Each training flight should be preceded with a briefing and closed with a debriefing between the instructor and the candidate. In order to add value to the training flight, any element of flying a balloon where candidates feel they would benefit from instruction should be discussed. The flight should then be focused on those specific elements with an instructor demonstration prior to candidate practice being performed.
(c) If the instructor considers that the candidate during the training flight did not perform to an adequate standard, they should not sign the logbook of the candidate but recommend further training flights instead.
(d) At the discretion of the flight instructor, non-fare-paying passengers are accepted on board of the balloon during such training flights, provided that:
  (1) passengers are made aware that the intended flight will be a training flight; and
  (2) abnormal and emergency procedures are practised on the ground and without passengers on board.
(e) The 48-month period should be counted from the last day of the month in which the preceding training flight took place.

AMC1 BFCL.160(a)(2) Recency requirements
PROFICIENCY CHECK

For the proficiency check, the skill test for the initial issue of a BPL in the relevant balloon class, as set out in AMC1 BFCL.145, should be taken.

SUBPART ADD — Additional ratings

GM1 BFCL.200 Tethered hot-air balloon flight rating
TETHERED ACTIVITY WITHOUT TAKING OFF

A tethered activity where the balloon does not leave the ground is not considered a flight. Such an activity is not eligible to count for initial training or recency for the tethered hot-air balloon flight rating.

AMC1 BFCL.200(b)(2) Tethered hot-air balloon flight rating
FLIGHT INSTRUCTION FOR THE HOT-AIR BALLOON TETHERED FLIGHT RATING

The instruction flights should cover the following training items:
(a) ground preparations;
(b) weather suitability;
(c) tether points:
  (1) upwind; and
  (2) downwind;

(d) tether ropes (at least a three-point system, as per the applicable flight manual);
(e) maximum all-up-weight limitation;
(f) crowd control;
(g) pre-take-off checks and briefings;
(h) heating for controlled lift off;
(i) 'hands off and hands on' procedure for ground crew;
(j) assessment of lift;
(k) assessment of wind and obstacles;
(l) take-off and controlled climb (at least up to 60 ft (20 m)); and
(m) passenger exchange procedures.

AMC1 BFCL.210(b) Night rating
INSTRUCTION FLIGHTS FOR THE NIGHT RATING

The instruction flights should cover the following training items:
(a) medical or physiological aspects of night vision;
(b) flight planning, taking into account the obstacles on the ground, night VMC minima and airspace;
(c) use of lights for assembly, layout and inflation;
(d) requirement for torch to be carried, (pre-flight inspection, etc.);
(e) use of the external and instrument lights;
(f) night take-off procedure;
(g) checklist procedures at night;
(h) emergency procedures at night;
(i) night cross-country techniques, as appropriate;
(j) navigation principles at night;
(k) night landings (emergency procedure in the case of hot-air balloons);
(l) balloon performance (e.g. fuel/ballast consumption) at night; and
(m) map marking for night use (highlighting built-up or lit areas with thicker lines, etc.).

GM1 BFCL.210(c) Night rating
DURATION OF THE NIGHT RATING TRAINING

The two training flights stipulated in point BFCL.210(b) constitute the minimum amount of training needed in the case of experienced pilots. The instructor may conduct additional training flights, as necessary for the candidate to acquire the competence needed for night flying, before entering the completion of training in the candidate's logbook.

AMC1 BFCL.215(b)(4) Commercial operation rating
SKILL TEST FOR THE COMMERCIAL OPERATION RATING

(a) GENERAL
  (1) The take-off site should be chosen by the applicant depending on the actual meteorological conditions, the area which has to be overflown, and the possible options for suitable landing sites. The applicant should be responsible for the flight planning and should ensure that all equipment and documentation for the execution of the flight are on board.
  (2) The skill test may be conducted in two flights. The total duration of the flight(s) should be at least 45 minutes.
  (3) An applicant should indicate to the FE(B) the checks and duties carried out. Checks should be completed in accordance with the flight manual or the authorised checklist for the balloon or hot-air airship on which the test is being taken. During pre-flight preparation for the test, the applicant should be required to perform crew and passenger briefings and demonstrate crowd control. The load calculation should be performed by the applicant in compliance with the operations manual or flight manual for the balloon used.
(b) FLIGHT TEST TOLERANCE

(1) The applicant should demonstrate the ability to:
  (i) operate the balloon or hot-air airship within its limitations;
  (ii) complete all manoeuvres with smoothness and accuracy;
  (iii) exercise good judgment and airmanship;
  (iv) apply aeronautical knowledge; and
  (v) maintain control of the balloon or the hot-air airship at all times in such a manner that the successful outcome of a procedure or manoeuvre is never seriously in doubt.

(2) The following limits are for general guidance. The FE(B) should make allowance for turbulent conditions and the handling qualities and performance of the balloon or hot-air airship used:

Height
  (i) normal flight: ± 100 ft
  (ii) with simulated emergency: ± 150 ft

(c) CONTENT OF THE SKILL TEST

(1) The skill test contents and sections set out in this point should be used for the skill test for the issue of a commercial operation rating in the hot-air balloon class:

Note: Use of checklist(s), airmanship, control of balloon by external visual reference, look-out procedures, etc. apply in all sections.

SECTION 1: PRE-FLIGHT OPERATIONS, INFLATION AND TAKE-OFF	
a	Pre-flight documentation (licence, medical certificate, permits to take off, insurance certificate, aeronautical charts, AFM, logbook, technical logbook, checklists, etc.), flight planning, NOTAM(s) and weather briefing, knowledge of Part-BOP
b	Balloon inspection and servicing, minimum equipment list (MEL)
c	Suitability of launch site
d	Load calculation
e	Crowd control, crew and passenger briefings
f	Assembly and layout
g	Inflation and pre-take-off procedures including passenger involvement and briefing
h	Take-off
i	ATC compliance (if applicable), operation of radio and/or transponder (including emergency procedures)
SECTION 2: GENERAL AIRWORK	
a	Climb to level flight
b	Level flight
c	Descent to level flight
d	Operating at low level
e	ATC compliance (if applicable)

SECTION 3: EN-ROUTE PROCEDURES	
a	Dead reckoning and map reading
b	Marking positions and time
c	Orientation and airspace structure
d	Maintenance of altitude
e	Fuel management
f	Communication with retrieve crew and passengers
g	ATC compliance (if applicable)
SECTION 4: APPROACH AND LANDING PROCEDURES	
a	Approach from low level, missed approach and fly on: Passenger briefing and execution of exercise
b	Approach from high level, missed approach and fly on: Passenger briefing and execution of exercise
c	Pre-landing checks
d	Passenger pre-landing briefing
e	Selection of landing field
f	Final passenger briefing, landing, dragging and deflation
g	ATC compliance (if applicable)
h	Actions after flight (recording of the flight, closing flight plan (if applicable), briefing passengers for packing balloon, contact landowner)
SECTION 5: ABNORMAL AND EMERGENCY PROCEDURES	
This section may be combined with Sections 1 through 4.	
a	Simulated fire on the ground and in the air
b	Simulated pilot light and burner failures
c	Simulated passenger health problems
d	Other abnormal and emergency procedures as outlined in the appropriate flight manual
e	Oral questions

(2) The skill test contents and sections set out in this point should be used for the skill test for the issue of a commercial operation rating in the gas balloon class:

Note: Use of checklist(s), airmanship, control of balloon by external visual reference, look-out procedures, etc. apply in all sections.

SECTION 1: PRE-FLIGHT OPERATIONS, INFLATION AND TAKE-OFF	
a	Pre-flight documentation (licence, medical certificate, permits to take off, insurance certificate, aeronautical charts, AFM, logbook, technical logbook, checklists etc.), flight planning, NOTAM(s) and weather briefing, knowledge of Part-BOP
b	Balloon inspection and servicing, MEL
c	Suitability of launch site
d	Load calculation
e	Crowd control, crew and passenger briefings
f	Assembly and layout
g	Inflation and pre-take-off procedures including passenger involvement and briefing
h	Take-off
i	ATC compliance (if applicable), operation of radio and/or transponder (including emergency procedures)
SECTION 2: GENERAL AIRWORK	
a	Climb to level flight
b	Level flight
c	Descent to level flight
d	Operating at low level
e	ATC compliance (if applicable)
SECTION 3: EN-ROUTE PROCEDURES	
a	Dead reckoning and map reading
b	Marking positions and time
c	Orientation and airspace structure
d	Maintenance of altitude
e	Ballast management
f	Communication with retrieve crew and passengers
g	ATC compliance (if applicable)
SECTION 4: APPROACH AND LANDING PROCEDURES	

a	Approach from low level, missed approach and fly on: Passenger briefing and execution of exercise
b	Approach from high level, missed approach and fly on: Passenger briefing and execution of exercise
c	Pre-landing checks
d	Passenger pre-landing briefing
e	Selection of landing field
f	Final passenger briefing, landing, dragging and deflation
g	ATC compliance (if applicable)
h	Actions after flight (recording of the flight, closing flight plan (if applicable), briefing passengers for packing balloon, contact landowner)
SECTION 5: ABNORMAL AND EMERGENCY PROCEDURES	
This section may be combined with Sections 1 through 4.	
a	Simulated closed appendix during take-off and climb
b	Simulated parachute or valve failure
c	Simulated passenger health problems
d	Other abnormal and emergency procedures as outlined in the appropriate flight manual
e	Oral questions

(3) The skill test contents and sections set out in this point should be used for the skill test for the issue of a commercial operation rating in the hot-air airship class:

Note: Use of checklist(s), airmanship, control of hot air airship by external visual reference, look-out procedures, etc. apply in all sections.

SECTION 1: PRE-FLIGHT OPERATIONS, INFLATION AND TAKE-OFF	
a	Pre-flight documentation (licence, medical certificate, permits to take off, insurance certificate, aeronautical charts, AFM, logbook, technical logbook, checklists etc.), flight planning, NOTAM(s) and weather briefing, knowledge of Part-BOP
b	Hot air airship inspection and servicing, MEL
c	Suitability of launch site
d	Load calculation
e	Crowd control, crew and passenger briefings
f	Assembly and layout

g	Inflation and pre-take-off procedures including passenger involvement and briefing
h	Take-off
i	ATC compliance (if applicable), operation of radio and/or transponder (including emergency procedures)
SECTION 2: GENERAL AIRWORK	
a	Climb to level flight
b	Level flight
c	Turns
d	Stationary flight
e	Descent to level flight
f	Operating at low level
g	ATC compliance (if applicable)
SECTION 3: EN-ROUTE PROCEDURES	
a	Dead reckoning and map reading
b	Marking positions and time
c	Orientation and airspace structure
d	Plotting and steering expected track
e	Maintenance of altitude
f	Fuel management
g	Pressure and engine parameter checks
h	Communication with ground crew
i	ATC compliance (if applicable)
SECTION 4: APPROACH AND LANDING PROCEDURES	
a	Approach, missed approach and go-around
b	Pre-landing checks
c	Selection of landing field
d	Landing and deflation
e	ATC compliance (if applicable)

f	Actions after flight (recording of the flight, closing flight plan (if applicable), briefing passengers for packing balloon, contact landowner)
SECTION 5: ABNORMAL AND EMERGENCY PROCEDURES	
This section may be combined with Sections 1 through 4.	
a	Simulated fire on the ground and in the air
b	Simulated pilot light, burner and engine failures
c	Approach with simulated engine failure, missed approach and go-around
d	Simulated passenger health problems
e	Other abnormal and emergency procedures as outlined in the appropriate flight manual
f	Oral questions

AMC1 BFCL.215(d)(1)(i) Commercial operation rating
CRITERIA FOR RECENCY FLIGHTS AS PIC

(a) In order to count as a flight in terms of point BFCL.215(d)(1)(i), the flight should:
  (1) have a duration of at least 10 minutes;
  (2) reach the minimum standard flight altitude as per point 4.6 from CT-RA; and
  (3) be completed by a full stop of the basket on the ground.
(b) Every flight phase that complies with points (1) to (3) of point (a) during a single balloon operation should be deemed as a separate flight.

AMC1 BFCL.215(d)(2)(i) Commercial operation rating
PROFICIENCY CHECK

(a) For the proficiency check as per point BFCL.215(d)(2)(i), the content of the skill test for initial issue of the commercial operation rating as set out in AMC1 BFCL.215(b)(4) should be used. Additionally, the examiner should assess the candidate's knowledge of recent aeronautical information circulars (AICs) and NOTAMs.
(b) The proficiency check may be conducted during a commercial passenger ballooning (CPB) operation, provided that abnormal and emergency procedures are simulated before or after the flight on the ground without passengers on board.

AMC1 BFCL.215(d)(2)(i); BFCL.215(h) Commercial operation rating
CREDITS FOR A PROFICIENCY CHECK IN ACCORDANCE WITH PART-BOP

The holder of a commercial operation rating should be deemed to comply with point BFCL.215(d)(2)(i) as long as the latest operator proficiency check completed in accordance with point BOP.ADD.315 of Annex no.2 (Part-BOP) is still valid, provided that this operator proficiency check included procedures for commercial passenger ballooning.

AMC1 BFCL.215(d)(2)(ii) Commercial operation rating
REFRESHER COURSE

(a) THEORETICAL KNOWLEDGE INSTRUCTION
  The 6 hours of theoretical knowledge instruction should include at least all of the following:
  (1) Evaluation of passengers:

(i) assessment of fitness of passengers;
(ii) criteria to decline to carry a passenger; and
(iii) special factors for disabled or limited mobility passengers;

(2) Passenger briefings:
(i) use of briefing cards;
(ii) pre-inflation briefing;
(iii) pre-launch briefing; and
(iv) pre-landing briefing;

(3) Passenger embarkation:
(i) procedures for safe embarkation;
(ii) use of ground crew to assist with embarkation;
(iii) positioning of passengers in the basket for weight, balance and management; and
(iv) factors concerning passengers' personal property;

(4) Passenger care for landing:
(i) use of seats where fitted;
(ii) stowage of passengers' personal equipment; and
(iii) special factors in case of more than 19 passengers on board, in which case an additional crew member is required in accordance with point BOP.ADD.410 of Annex no.2 (Part-BOP);

(5) Emergency procedures:
(i) fire in the air;
(ii) fire on the ground;
(iii) fuel system failures;
(iv) deflation system failures;
(v) fast landing;
(vi) hard landing; and
(vii) passenger incapacitation in flight; and

(6) Documentation:
(i) loading calculation;
(ii) fuel calculation;
(iii) completion of passenger manifest; and
(iv) dealing with last-minute changes.

(b) TRAINING FLIGHT

(1) A training flight as stipulated in point BFCL.215(d)(2)(ii) should be a flight that:
(i) follows the content of the skill test for initial issue of the commercial operation rating as set out in AMC1 BFCL.215(b)(4); and
(ii) is conducted on a one-to-one basis between one pilot and one instructor only, with no other pilot on board who is taking credit for that flight.

(2) Each training flight should be preceded with a briefing and closed with a debriefing between the instructor and the candidate. In order to add value to the training flight, any element of flying a balloon where candidates feel they would benefit from instruction should be discussed. The flight should then be focused on those specific elements with an instructor demonstration prior to candidate practice being performed.

(3) The training flight may be conducted during CPB operation, provided that:
(i) abnormal and emergency procedures are simulated before or after the flight on the ground without passengers on board; and
passengers are made aware that the intended flight will be a training flight.

SUBPART FI — FLIGHT INSTRUCTORS

Section 2 – Flight instructor certificate for balloons – FI(B)

AMC1 BFCL.315(a)(4)(ii) FI(B) certificate – Privileges and conditions

ADDITIONAL TRAINING REQUIRED BEFORE INSTRUCTING DURING FI(B) TRAINING COURSES

The 1 hour of flight instruction, as required in point BFCL.315(a)(4)(ii), should consist of exercises from the FI(B) training course, as selected by the supervising FI(B), and should, in any case, include all of the following:

(a) one take-off and one landing exercise;
(b) a selection of flight exercises; and
(c) one emergency exercise.

AMC1 BFCL.325 FI(B) competencies and assessment

(a) Training should be both theoretical and practical. Practical elements should include the development of specific instructor skills, particularly in the area of teaching and assessing TEM.
(b) The training and assessment of instructors should be made against the following performance standards:

Competency	Performance	Knowledge/understanding of
Prepare resources	(a) ensures adequate facilities; (b) prepares briefing material; (c) manages available tools.	(a) objectives; (b) available tools; (c) (c) competency-based training methods.
Create a climate conducive to learning	(a) establishes credentials, role models appropriate behaviour; (b) clarifies roles; (c) states objectives; (d) ascertains and supports student pilot's needs.	(a) barriers to learning; (b) learning styles.
Present knowledge	(a) communicates clearly; (b) creates and sustains realism; (c) looks for training opportunities.	teaching methods
Integrate human factors and TEM	makes human factors and TEM links with technical training.	(a) human factors and TEM; (b) causes and countermeasures against undesired aircraft states.
Manage time to achieve training objectives	allocates the appropriate time to achieve the competency objective.	syllabus time allocation
Facilitate learning	(a) encourages trainee participation; (b) shows motivating, patient, confident and assertive manner;	(a) facilitation; (b) how to give constructive feedback;

	(c) conducts one-to-one coaching; (d) encourages mutual support.	(c) (c) how to encourage trainees to ask questions and seek advice.
Assesses trainee performance	(a) assesses and encourages trainee self-assessment of performance against competency standards; (b) makes assessment decision and provides clear feedback; (c) (c) observes crew-resource management (CRM) behaviour.	(a) observation techniques; (b) (b) methods for recording observations.
Monitor and review progress	(a) compares individual outcomes to defined objectives; (b) identifies individual differences in learning rates; (c) applies appropriate corrective action.	(a) learning styles; (b) (b) strategies for training adaptation to meet individual needs.
Evaluate training sessions	(a) elicits feedback from student pilots; (b) tracks training session processes against competency criteria; (c) keeps appropriate records.	(a) competency unit and associated elements; (b) performance criteria.
Report outcome	Reports accurately using only observed actions and events.	(a) training phase objectives; (b) individual versus systemic weaknesses.

BFCL.330 FI(B) – Training course

(a) Applicants for an FI(B) certificate shall first pass a specific pre-entry assessment at an ATO or a DTO within the 12 months preceding the start of the training course, to assess his or her ability to take the course.
(b) The FI(B) training course shall include at least:
  (1) the elements specified in point BFCL.325;
  (2) 25 hours of teaching and learning;
  (3) 12 hours of theoretical knowledge instruction, including progress tests; and
  (4) three hours of flight instruction, including three take-offs and landings.
(c) Applicants who already hold an instructor certificate in accordance with Annex no.3 (Part-SFCL) or with Annex no.1 (Part-FCL) to the Aircrew Regulation shall be fully credited towards the requirement in paragraph (b)(2).

AMC1 BFCL.330(a) FI(B) – Training course
PRE-ENTRY ASSESSMENT

The content of the pre-entry assessment should be determined by the ATO or the DTO, taking into account the experience of a particular candidate. It may include interviews and/or an assessment during a simulated training session with the candidate.

AMC1 BFCL.330(b) FI(B) – Training course

(a) GENERAL

(1) The aim of the FI(B) training course is to train BPL holders to the level of competence defined in point BFCL.325.

(2) Throughout the training course, its content and structure should allow the student instructor to develop safety awareness by teaching the knowledge, skills and attitudes relevant to the FI(B) task including at least the following:

(i) refresh the technical knowledge of the student instructor;

(ii) train the student instructor to teach:

(A) the ground subjects and air exercises; and

(B) how to access all related sources of information;

(iii) ensure that the student instructor's flying is of a sufficiently high standard; and

(iv) teach the student instructor the principles of basic instruction and how to apply them at all training levels.

(3) With the exception of the section on teaching and learning, all the subject details contained in the ground and flight training syllabus is complementary to the BPL course syllabus.

(4) The FI(B) training course should give particular stress to the role of the individual in relation to the importance of human factors in the man-machine interface as well as in the instructor-student interaction during theoretical knowledge instruction. Special attention should be paid to the applicant's maturity and judgement including an understanding of adults, their behavioural attitudes and variable levels of education.

(5) During the training course, applicants should be made aware that their own attitudes are key to flight safety. Identifying and avoiding complacency and improving safety awareness should be a fundamental objective throughout the training course. It is of major importance for the training course to aim at giving applicants the knowledge, skills and attitudes relevant to a flight instructor's task.

(b) STRUCTURE AND CONTENT

The training course consists of two parts:

(1) PART 1 — THEORETICAL KNOWLEDGE INSTRUCTION

Part 1 includes the training specified in points (2) and (3) of point BFCL.330(b).

The content of the teaching and learning part of the FI(B) course, as established in AMC1 BFCL.325, should be used as guidance to develop the syllabus for the training specified in point BFCL.330(b)(2).

(2) PART 2 — FLIGHT INSTRUCTION

Part 2 includes the training specified in point BFCL.330(b)(4).

(i) General

(A) The air exercises are similar to those of the BPL training course but with additional items designed to cover the needs of a flight instructor.

(B) The numbering of exercises should be used primarily as an exercise reference list and as a broad instructional sequencing guide. Therefore, the demonstrations and practices need not necessarily be given in the order listed. The actual order and content will depend upon the following interrelated factors:

(a) the applicant's progress and ability;

(b) the weather conditions affecting the flight;

(c) the flight time available;

(d) the instructional technique considerations;

(e) the local operating environment; and

(f) the applicability of the exercises to the aircraft type.

(C) At the discretion of the instructors, some of the exercises may be combined whereas some other exercises may be done in several flights.

(D) It follows that student instructors will eventually be faced with similar inter-related factors. They should be shown and taught how to develop flight lesson plans, taking

these factors into account, so as to make the best use of each flight lesson, combining parts of the set exercises as necessary.

(ii) Briefings and debriefings

(A) The briefing normally includes a statement of the aim and a brief allusion to principles of flight only if relevant. An explanation is to be given of exactly which air exercises are to be taught by the instructor and practised by the student during the flight. It should include how the flight will be conducted with regard to who is to fly the aircraft and what airmanship, weather and flight safety aspects currently apply. The nature of the lesson will govern the order in which the constituent parts are to be taught.

(B) The five basic components of the briefing will be:

(a) the aim;
(b) the air exercise(s) (what, how and by whom);
(c) flight briefing;
(d) check of understanding; and
(e) airmanship.

(C) After each exercise, the student instructor will conduct a debriefing of the pilot who acted as the student pilot during the training flight, be it the FI(B) instructor or an additional pilot (as described in point (k)(2)). The debriefing is to evaluate:

(a) whether the objectives have been fulfilled;
(b) whether the errors are minor or major;
(c) what can be corrected or improved; and
(d) whether the student pilot has reached the required level of competence or the exercise must be done again.

The FI(B) instructor will validate the debriefing.

(iii) Planning of flight lessons

The development of lesson plans is an essential prerequisite of good instruction and the student instructor is to be given supervised practice in the development and practical application of flight lesson plans.

(iv) General considerations

(A) The student instructor should complete flight training in order to practise the principles of basic instruction at the BPL level.

(B) The instructor providing this instructor training may take over the role of the student pilot. An additional person holding a BPL or a student pilot for the BPL may be on board in order to act as a student pilot under the supervision of the student instructor.

(C) 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.

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

(v) Long briefings and air exercises

Exercise 1: Familiarisation with the balloon

(a) Objective

To advise the student instructor on how to familiarise the student with the balloon which will be used for the training and to test the student's position in the basket for comfort, visibility, and ability to use all controls and equipment. Furthermore, the student instructor should learn how to identify student errors and how to correct them properly.

(b) Briefing and exercise

The student instructor has to:

(1) present the type of balloon which will be used;
(2) explain the characteristics of the balloon;
(3) explain the components, instruments and equipment;
(4) explain the re-fuelling procedures (in the case of hot-air balloons);

(5) familiarise the student with the balloon controls; and
(6) explain all checklists, drills and controls.

(c) Debriefing

Exercise 2: Preparation for the flight

(a) Objective

To advise the student instructor on how to explain all the operations and the necessary preparation to be completed before the flight. Furthermore, the student instructor should learn how to identify student errors and how to correct them properly.

(b) Briefing

The student instructor has to explain:
(1) the need for a pre-flight briefing;
(2) the structure and the content of this briefing;
(3) which documents are required on board;
(4) which equipment is required for a flight;
(5) the use of weather forecasts or actuals;
(6) the flight planning with particular regard to NOTAMs, airspace structure, sensitive areas, expected track and distance, pre-flight picture and possible landing fields;
(7) the use of load calculation chart; and
(8) the selection of a launch field with particular regard to permission, behaviour and adjacent fields.

(c) Exercise

The student instructor has to prepare and give a pre-flight briefing during which they have to demonstrate:
(1) that the required documents are on board;
(2) that the equipment required for the intended flight is on board;
(3) how to perform a load calculation;
(4) how to advise the student to do the pre-planning procedures for each flight;
(5) how to perform a pre-launch check;
(6) how to select a launch field with particular regard to permission, behaviour and adjacent fields;
(7) how to teach the student pilot to perform the preparation to be completed prior to flight; and
(8) how to analyse and correct errors of the student pilot as necessary.

(d) Debriefing

Exercise 3: Crew and passenger briefing

(a) Objective

To advise the student instructor on how to explain the importance of appropriate clothing for pilot, passengers and crew and how to perform the briefing of ground and retrieve crew and the briefing of passengers. Furthermore, the student instructor should learn how to identify student errors and how to correct them properly.

(b) Briefing

The student instructor has to explain:
(1) the appropriate clothing for passengers and crew; and
(2) the briefings for ground and retrieve crew and passengers.

(c) Exercise:

The student instructor has to demonstrate:
(1) how to advise the passengers and crew about the correct clothing;
(2) the briefing of ground and retrieve crew;
(3) the briefing of passengers;
(4) how to familiarise the student pilot with the different type of briefings; and
(5) how to analyse and correct errors of the student pilot.

(d) Debriefing

Exercise 4: Assembly and layout

(a) Objective

To advise the student instructor on how to familiarise the student pilot on crowd control and how to perform the securing of the launch site. Furthermore, the student instructor has to demonstrate how to familiarise the student pilot with the correct rigging of envelope and basket, the burner test procedure (hot-air balloons) and the pre-inflation checks. Finally, the student instructor should learn how to identify student errors and how to correct them properly.

(b) Briefing

The student instructor has to explain:

(1) the crowd control;
(2) the securing of the launch site;
(3) the correct rigging procedure;
(4) the use of the restraint line; and
(5) the pre-inflation checks and use of checklist(s).

(c) Exercise

The student instructor has to demonstrate:

(1) the crowd control and securing of launch site;
(2) the correct rigging of envelope and basket;
(3) the correct use of the restraint line;
(4) the burner test procedure (hot-air balloons);
(5) the pre-inflation checks and correct use of checklist(s);
(6) how to teach the student pilot to perform the correct rigging; and
(7) how to analyse and correct assembly errors of the student pilot as necessary.

(d) Debriefing

Exercise 5: Inflation

(a) Objective

To advise the student instructor on how to familiarise the student pilot with the different phases of the inflation procedure, the use of restraint line and inflation fan (hot-air balloons) and the avoidance of electrostatic discharge (gas balloons). Furthermore, the student instructor should learn how to identify student errors and how to correct them properly.

(b) Briefing

The student instructor has to explain:

(1) the different phases of the inflation procedure;
(2) the crowd control and securing procedures during inflation;
(3) the use of the inflation fan (hot-air balloons); and
(4) how to avoid electronic discharge (gas balloons).

(c) Exercise

The student instructor has to demonstrate:

(1) the crowd control and securing of the launch site during inflation procedure;
(2) the cold inflation procedure and use of restraint line and inflation fan (hot-air balloons);
(3) the hot inflation procedure (hot-air balloons);
(4) the avoidance of electrostatic discharge (gas balloons);
(5) the inflation procedure (gas balloons);
(6) how to teach the student pilot to perform the inflation procedures; and
(7) how to analyse and correct errors of the student pilot during the inflation procedure as necessary.

(d) Debriefing

Exercise 6: Take-off in different wind conditions

(a) Objective

To advise the student instructor how to explain the pre take-off checks and briefings, the preparation for controlled climb and the use of restraint equipment. Furthermore, the student instructor should be able to demonstrate the assessment of wind and obstacles, the preparation for false lift and the take-off techniques in different wind conditions. In addition to this, the student instructor should learn how to identify student errors and how to correct them properly.

(b) Briefing

The student instructor has to explain:

(1) the pre take-off checks and briefings;
(2) the preparation for controlled climb;
(3) the 'hands off and hands on' procedure for ground crew;
(4) the assessment of lift;
(5) the use of the restraint equipment;
(6) the assessment of wind and obstacles;
(7) the preparation for false lift; and
(8) the take-off techniques from sheltered and non-sheltered launch fields.

(c) Air exercise

The student instructor has to demonstrate:

(1) how to perform the pre take-off checks and briefings;
(2) how to prepare for controlled climb;
(3) how to perform the 'hands off and hands on' procedure for ground crew;
(4) how to perform the assessment of lift without endangering the ground crew;
(5) how to use the restraint equipment;
(6) how to perform the assessment of wind and obstacles;
(7) how to prepare for false lift;
(8) how to teach the student pilot the correct take off techniques from sheltered and non-sheltered launch fields; and
(9) how to analyse and correct errors of the student pilot as necessary.

(d) Debriefing

Exercise 7: Climb to level flight

(a) Objective

To advise the student instructor on how to explain and demonstrate the climb to flight level. Furthermore, the student instructor should learn how to identify student errors and how to correct them properly.

(b) Briefing

The student instructor has to explain:

(1) the climbing with a predetermined rate of climb;
(2) the effect on envelope temperature (hot-air balloons);
(3) the maximum rate of climb according to the manufacturer's flight manual; and
(4) how to level off at a selected altitude.

(c) Air exercise

The student instructor has to demonstrate:

(1) how to climb with a predetermined rate of climb;
(2) how to perform look-out techniques;
(3) the effect on envelope temperature (hot-air balloons);
(4) the maximum rate of climb according to the manufacturer's flight manual;
(5) the levelling off techniques at a selected altitude;
(6) how to advise the student pilot to perform the climb to level flight;
(7) how to analyse and correct faults or errors of the student pilot during the climb.

(d) Debriefing

Exercise 8: Level flight

(a) Objective

To advise the student instructor on how to explain and demonstrate level flight. Furthermore, the student instructor should learn how to identify student errors and how to correct them properly.

(b) Briefing

The student instructor has to explain:

(1) how to maintain level flight by use of instruments;
(2) how to maintain level flight by use of visual references;
(3) how to maintain level flight by use of all available means;
(4) the use of parachute; and
(5) the use of turning vents, if installed (hot -air balloons).

(c) Air exercise

The student instructor has to demonstrate:

(1) how to maintain level flight by use of instruments;
(2) how to maintain level flight by use of visual references;
(3) how to maintain level flight by use of all available means;
(4) the use of parachute;
(5) the use of turning vents, if installed (hot-air balloons);
(6) how to advise the student pilot to perform the level flight; and
(7) how to analyse and correct faults or errors of the student pilot during the level flight.

(d) Debriefing

Exercise 9: Descent to level flight

(a) Objective

To advise the student instructor on how to explain and demonstrate the descent to a certain flight level. Furthermore, the student instructor should learn how to identify student errors and how to correct them properly.

(b) Briefing

The student instructor has to explain:

(1) how to descend with a predetermined rate of descent;
(2) a fast descent;
(3) the maximum rate of descent according to the manufacturer’s flight manual;
(4) the use of parachute;
(5) a parachute stall and cold descent (hot-air balloons); and
(6) the levelling off technique at selected altitude.

(c) Air exercise

The student instructor has to demonstrate:

(1) a descent with a predetermined rate of descent;
(2) how to perform look-out techniques;
(3) a fast descent;
(4) the maximum rate of descent according to the manufacturer’s flight manual;
(5) the use of parachute;
(6) how to level off at selected altitudes;
(7) how to advise the student pilot to perform a descent to a certain flight level; and
(8) how to analyse and correct faults or errors of the student pilot during the descent.

(d) Debriefing

Exercise 10: Emergencies

(a) Objective

To advise the student instructor on how to explain and demonstrate the different emergency situations and how to react. Furthermore, the student instructor should learn how to identify student errors during the simulated emergency exercises and how to correct them properly.

(b) Briefing

The student instructor has to explain:

(1) the pilot light failure (hot-air balloons);
(2) burner failures, valve leaks, flame out and re-light (hot-air balloons);
(3) the gas leaks (gas balloons);
(4) the closed appendix during take-off and climb (gas balloons);
(5) the envelope over temperature (hot-air balloons);
(6) the envelope damage in flight;
(7) the parachute or rapid deflation system failure;
(8) the fire on ground and in the air;
(9) how to avoid an obstacle contact including contact with electrical power lines; and
(10) escape drills, location and use of emergency equipment.

(c) Air exercise

The student instructor has to demonstrate (in the air or during a simulation on the ground):

(1) a pilot light failure (hot-air balloons);
(2) a burner failure, valve leaks, flame out and re-light (hot-air balloons);
(3) the gas leaks;
(4) a closed appendix during take-off and climb (gas balloons);
(5) the envelope over temperature (hot-air balloons);
(6) the envelope damage in flight;
(7) the parachute or rapid deflation system failure;
(8) a fire on ground and in the air;
(9) the escape drills, location and use of emergency equipment;
(10) how to advise the student pilot in performing the different emergency drills; and
(11) how to analyse and correct faults or errors of the student pilot.

(d) Debriefing

Exercise 11: Navigation

(a) Objective

To advise the student instructor on how to explain and demonstrate the advanced navigational flight preparation. Furthermore, the student instructor should learn how to identify student errors and how to correct them properly.

(b) Briefing

The student instructor has to explain:

(1) the maps selection;
(2) the plotting of the expected track;
(3) the marking of positions and time;
(4) the calculation of distance and speed;
(5) the calculation of fuel consumption (hot-air balloons);
(6) the calculation of ballast consumption (gas balloons);
(7) the ceiling limitations (ATC or weather);
(8) how to plan ahead;
(9) the monitoring of weather development;
(10) the monitoring of fuel or ballast consumption;
(11) ATC liaison (if applicable);
(12) the communication with retrieve crew; and
(13) the use of GNSS (if applicable).

(c) Air exercise

The student instructor has to demonstrate:

(1) the use of selected maps;
(2) the plotting of the expected track;
(3) the marking of positions and time;
(4) how to monitor distance and speed;

(5) how to monitor the fuel or ballast consumption;
(6) the observance of ceiling limitations (ATC or weather);
(7) the planning ahead;
(8) the monitoring of weather development;
(9) the monitoring of envelope temperature (hot-air balloons);
(10) the ATC liaison (if applicable);
(11) the communication with retrieve crew;
(12) the use of GNSS (if applicable);
(13) how to advise the student pilot on performing the navigational preparation;
(14) how to advise the student pilot on performing the different navigational in-flight tasks; and
(15) how to analyse and correct faults or errors of the student pilot.

(d) Debriefing

Exercise 12a: Fuel management (hot-air balloons)

(a) Objective

To advise the student instructor on how to explain and demonstrate the fuel management techniques. Furthermore, the student instructor should learn how to identify student errors and how to correct them properly.

(b) Briefing

The student instructor has to explain:
(1) the cylinder arrangement and the burner systems;
(2) the function of the pilot light supply (vapour or liquid);
(3) the use of master cylinders (if applicable);
(4) the fuel requirement and expected fuel consumption;
(5) the fuel state and pressure;
(6) the minimum fuel reserves;
(7) cylinder contents gauge and change procedure; and
(8) the use of cylinder manifolds (if applicable).

(c) Air exercise

The student instructor has to demonstrate:
(1) the cylinder arrangement and burner systems;
(2) the pilot light supply (vapour or liquid);
(3) the use of master cylinders (if applicable);
(4) how to monitor the fuel requirement and expected fuel consumption;
(5) the monitoring of fuel state and pressure;
(6) the monitoring of fuel reserves;
(7) the use of cylinder contents gauge and change procedure;
(8) the use of cylinder manifolds (if applicable);
(9) how to advise the student pilot to perform the fuel management; and
(10) how to analyse and correct faults or errors of the student pilot.

(d) Debriefing

Exercise 12b: Ballast management (gas balloons)

(a) Objective

To advise the student instructor on how to explain and demonstrate the ballast management. Furthermore, the student instructor should learn how to identify student errors and how to correct them properly.

(b) Briefing

The student instructor has to explain:
(1) the minimum ballast;
(2) the arrangement and securing of ballast;
(3) the ballast requirement and expected ballast consumption; and
(4) the ballast reserves.

(c) Air exercise

The student instructor has to demonstrate:
(1) the determination of the minimum ballast requirement;
(2) the arrangement and securing of ballast;
(3) the ballast requirement calculation and expected ballast consumption;
(4) how to secure ballast reserves;
(5) how to advise the student pilot to perform the ballast management; and
(6) how to analyse and correct faults or errors of the student pilot.

(d) Debriefing

Exercise 13: Approach from low level

(a) Objective

To advise the student instructor on how to explain and demonstrate the approach from level. Furthermore, the student instructor should learn how to identify student errors and how to correct them properly.

(b) Briefing

The student instructor has to explain:
(1) pre-landing checks;
(2) the passenger pre-landing briefing;
(3) the selection of fields;
(4) the use of burner and parachute (hot-air balloons);
(5) the use of ballast or parachute and valve (gas balloons);
(6) the use of trail rope (if applicable) (gas balloons);
(7) look-out procedures; and
(8) missed approach and fly-on procedures.

(c) Air exercise

The student instructor has to demonstrate:
(1) the use of the pre landing checks;
(2) the selection of fields;
(3) the use of burner and parachute (hot-air balloons);
(4) the use of ballast or parachute and valve (gas balloons);
(5) the use of trail rope (if applicable) (gas balloons);
(6) the look-out procedures and how to avoid possible distractions;
(7) the missed approach and fly-on techniques;
(8) how to advise the student pilot to perform an approach from low level; and
(9) how to analyse and correct faults or errors of the student pilot.

(d) Debriefing

Exercise 14: Approach from high level

(a) Objective

To advise the student instructor on how to explain and demonstrate the approach from high level. Furthermore, the student instructor should learn how to identify student errors and how to correct them properly.

(b) Briefing

The student instructor has to explain:
(1) the pre-landing checks;
(2) the passenger pre-landing briefing;
(3) selection of field;
(4) the rate of descent;
(5) the use of burner and parachute (hot-air balloons);
(6) the use of ballast and parachute (gas balloons);
(7) the use of trail rope (if applicable) (gas balloons);
(8) look-out procedures; and
(9) missed approach and fly-on procedures.

(c) Air exercise

The student instructor has to demonstrate:

(1) the pre-landing checks;
(2) the selection of field;
(3) the rate of descent;
(4) the use of burner and parachute (hot-air balloons);
(5) the use of ballast and parachute (gas balloons);
(6) the use of trail rope (if applicable) (gas balloons);
(7) the look-out procedures and how to avoid potential distraction;
(8) the missed approach and fly-on techniques;
(9) how to advise the student pilot to perform an approach from a higher level; and
(10) how to analyse and correct faults or errors of the student pilot.

(d) Debriefing

Exercise 15: Operation at low level

(a) Objective

To advise the student instructor on how to explain and demonstrate the operation at a low height (1-20 metres). Furthermore, the student instructor should learn how to identify student errors and how to correct them properly.

(b) Briefing

The student instructor has to explain:
(1) the use of burner and parachute (hot-air balloons);
(2) the use of ballast and parachute (gas balloons);
(3) the look-out procedures;
(4) how to avoid a contact with low-level obstacles;
(5) how to avoid sensitive areas (for example, nature protection areas); and
(6) the landowner relations.

(c) Air exercise

The student instructor has to demonstrate:
(1) the use of burner and parachute (hot-air balloons);
(2) the use of ballast and parachute (gas balloons);
(3) look-out procedures and how to avoid potential distraction;
(4) how to avoid low-level obstacles;
(5) good landowner relations;
(6) how to advise the student pilot to operate the balloon at a low level; and
(7) how to analyse and correct faults or errors of the student pilot.

(d) Debriefing

Exercise 16: Landing in different wind conditions

(a) Objective

To advise the student instructor on how to explain and demonstrate landings in different wind conditions. Furthermore, the student instructor should learn how to identify student errors and how to correct them properly.

(b) Briefing

The student instructor has to explain:
(1) the correct actions for turbulences during the approach or landing;
(2) the passenger pre-landing briefing;
(3) the use of burner and pilot lights (hot-air balloons);
(4) the use of ballast, parachute, valve and rip panel (gas balloons);
(5) the use of parachute and turning vents (if applicable);
(6) look-out;
(7) the landing, dragging and deflation;
(8) the use of drop line; and
(9) landowner relations.

(c) Air exercise

The student instructor has to demonstrate:
(1) the pre-landing checks;

(2) the passenger briefing;
(3) the selection of field;
(4) the effect of turbulence;
(5) the use of burner and pilot lights (hot-air balloons);
(6) the use of ballast, parachute, valve and rip panel (gas balloons);
(7) the use of parachute rapid deflation systems (if applicable) and turning vents (if applicable) (hot-air balloons);
(8) the look-out procedures and how to avoid potential distraction;
(9) the landing, dragging and deflation procedures;
(10) the use of drop line (when appropriate)
(11) how to advise the student pilot to perform a safe landing in different wind conditions; and
(12) how to analyse and correct faults or errors of the student pilot.

(d) Debriefing

Exercise 17: First solo flight

(a) Objective

To advise the student instructor on how to prepare students for the first solo flight. Furthermore, the student instructor should learn how to properly assess the readiness and fitness of a student to fly solo on the day of the intended solo flight.

(b) Briefing

The student instructor has to explain:
(1) the limitations of the flight;
(2) the use of required equipment; and
(3) the flight planning and references to manoeuvres.

(c) Air exercise

The student instructor has to:
(1) evaluate whether the student should be authorised to fly solo, taking into consideration at least all of the following:
(i) the experience of the student;
(ii) the physical and mental fitness of the student;
(iii) weather conditions; and
(iv) the suitability of balloons for a solo flight;
(2) monitor the pre-flight preparation;
(3) brief the student (expected flight time or emergency actions);
(4) monitor the flight as far as possible; and
(5) debrief the flight with the student.

(d) Debriefing

Exercise 18: Tethered flight (hot-air balloons)

Note: This exercise constitutes the specific training referred to in point BFCL.315(a)(3) regarding instructional privileges for the tethered flight rating. It may be completed during the initial FI(B) training course or as a separate training, provided that the applicant holds the tethered flight rating.

(a) Objective

To advise the student instructor on how to explain and demonstrate the tethering techniques. Furthermore, the student instructor should learn how to identify student errors and how to correct them properly.

(b) Briefing

The student instructor has to explain:
(1) the ground preparations;
(2) the weather suitability;
(3) the tethering techniques and equipment;
(4) the maximum all-up-weight limitation;
(5) crowd control;

(6) the pre-take-off checks and briefings;
(7) the heating for controlled lift-off;
(8) the 'hands-off and hands-on' procedure for ground crew;
(9) the procedures for boarding and disembarking passengers;
(10) the assessment of wind and obstacles; and
(11) the controlled climb to a pre-defined altitude (at least 60 ft (20 m)).

(c) Air exercise

The student instructor has to demonstrate:
(1) the ground preparations;
(2) the tethering techniques;
(3) the understanding of maximum all-up-weight limitation;
(4) how to perform crowd control;
(5) the pre-take-off checks and briefings;
(6) the heating for controlled lift-off;
(7) the 'hands-off and hands-on' procedure for ground crew;
(8) the passenger boarding and disembarkation; exchange of passengers between flights
(9) the assessment of wind and obstacles;
(10) the controlled climb;
(11) the landing techniques;
(12) how to advise the student pilot on how to perform a tethered flight; and
(13) how to analyse and correct faults or errors of the student pilot.

(d) Debriefing

Exercise 19: Night flying

Note: This exercise constitutes the specific training referred to in point BFCL.315(a)(3) regarding instructional privileges for the night rating. It may be completed during the initial FI(B) training course or as a separate training, provided that the applicant holds the night rating.

(a) Objective

To advise the student instructor on how to explain and demonstrate the night flying techniques. Furthermore, the student instructor should learn how to identify student errors and how to correct them properly.

(b) Briefing

The student instructor has to explain:
(1) the medical or physiological aspects of night vision;
(2) the flight planning, taking into account the obstacles on the ground, night VMC minima, airspace;
(3) the use of lights for assembly, layout and inflation;
(4) the requirement for torch or lights to be carried, (pre-flight inspection, etc.);
(5) the use of the external and instrument lights;
(6) the night take-off procedure;
(7) the checklist procedures at night;
(8) the emergency procedures at night;
(9) the navigation principles at night; and
(10) the map marking for night use (highlighting built up or lit areas with thicker lines, etc.).

(c) Air exercise

The student instructor has to demonstrate:
(1) the use of lights for assembly, layout and inflation;
(2) the flight planning, taking into account the obstacles on the ground, night VMC minima, airspace;
(3) the use of torch or lights for pre-flight inspection;
(4) the use of external and instrument lights;

(5) the night take-off procedure;
(6) how to perform the checklist procedures at night;
(7) how to maintain safety altitude;
(8) the simulated night emergency procedures;
(9) the navigation principles at night;
(10) the night cross-country techniques, as appropriate;
(11) how to advise the student pilot to perform a flight at night; and
(12) how to analyse and correct faults or errors of the student pilot.

(d) Debriefing

AMC1 BFCL.345 FI(B) – Assessment of competence

GENERAL

(a) The format and application form for the assessment of competence are determined by the CAA.
(b) The balloon that is used for the assessment should meet the requirements for training aircraft.
(c) The FE(B) acts as the PIC, except in circumstances agreed upon by the FE(B) when another FI(B) is designated as PIC for the flight.
(d) The 'student' is either a real balloon student pilot under training or, in all other cases, the FE(B) or another FI(B). The applicant is required to explain the relevant exercises and to demonstrate their conduct to the 'student', where appropriate. Thereafter, the 'student' executes the same manoeuvres which can include typical mistakes of inexperienced students. The applicant is expected to correct mistakes orally or, if necessary, by intervening physically.
(e) If more than one flight is necessary in order to complete all relevant exercises, these flights should be completed as close together in time as practicable and, in any case, within a period of 6 months. In principle, failure in any exercise requires a retest covering all exercises, with the exception of those that may be retaken separately. The FE(B) may terminate the assessment at any stage if they consider that a retest is required.
(f) The total flight time of the assessment of competence should be at least 45 minutes.

AMC2 BFCL.345 FI(B) – Assessment of competence

CONTENT OF THE ASSESSMENT OF COMPETENCE

(a) The content of the assessment of competence for the FI(B) should be the following:

SECTION 1: ORAL THEORETICAL KNOWLEDGE EXAMINATION	
1.1	Air law
1.2	Aircraft general knowledge
1.3	Flight performance and planning
1.4	Human performance and limitations
1.5	Meteorology
1.6	Navigation
1.7	Operational procedures
1.8	Principles of flight
1.9	Training administration
1.10	Assessment of a BPL student's readiness for first solo flight

1.11	Particularities of pre-flight briefing prior to the first solo flight of a BPL student

SECTION 2: PRE-FLIGHT BRIEFING	
2.1	Visual presentation
2.3	Technical accuracy
2.4	Clarity of explanation
2.5	Clarity of speech
2.6	Instructional technique
2.7	Use of models and aids
2.8	Student participation

SECTION 3: FLIGHT	
3.1	Arrangement of demonstration
3.2	Synchronisation of speech with demonstration
3.3	Correction of faults
3.4	Aircraft handling
3.5	Instructional technique
3.6	General airmanship and safety
3.7	Positioning and use of airspace

SECTION 4: POST-FLIGHT DE-BRIEFING	
4.1	Visual presentation
4.2	Technical accuracy
4.3	Clarity of explanation
4.4	Clarity of speech
4.5	Instructional technique
4.6	Use of models and aids
4.7	Student participation

(b) Section 1, the oral theoretical knowledge examination part of the assessment of competence, is divided into two parts:

(1) The applicant is required to give a lecture under test conditions to other 'student(s)', one of whom will be the FE(B). The test lecture is to be selected from items of Section 1. The amount of time for the preparation of the test lecture is agreed upon beforehand with the FE(B). Appropriate literature may be used by the applicant. The test lecture should not exceed 45 minutes.
(2) The applicant is tested orally by an FE(B) for knowledge of items of Section 1 and the core instructor competencies (teaching and learning content given in the FI(B) training course).

(c) Sections 2, 3 and 4 comprise exercises to demonstrate the ability to be an FI(B) (for example, instructor demonstration exercises) chosen by the FE(B) from the flight syllabus of the FI(B) training course. The applicant is required to demonstrate FI(B) abilities, including briefing, flight instruction and de-briefing.

AMC3 BFCL.345 FI(B) – Assessment of competence

APPLICATION AND REPORT FORM FOR THE FI(B) ASSESSMENT OF COMPETENCE

APPLICATION AND REPORT FORM FOR THE FI(B) ASSESSMENT OF COMPETENCE			
I hereby apply for the issue of a flight instructor certificate for balloons (FI(B)) in accordance with Annex no.3 (Part-BFCL) to Annex no.1 to Government decision no.85/2023.			
1	**Applicant's personal particulars:**		
Applicant's last name(s):		First name(s):	
Date of birth:	Telephone:		Email:
Address:		Country:	
Date:		Signature of the applicant:	
2	**Licence details**		
Licence number (BPL):			
Class extension(s): *(tick as applicable)*	☐ Hot-air balloons/Groups: ☐ A ☐ B ☐ C ☐ D ☐ Gas balloons ☐ Hot-air airships		
Additional privileges: *(tick as applicable)*	☐ Tethered hot-air balloon flight rating ☐ Night rating		
3	**Pre-course flying experience**		

Flying hours in different classes	Hot-air balloon	Gas balloon	Hot-air airship
PIC			

Total time			

4	**Pre-entry assessment**

I recommend .....for the FI(B) course.

Name of ATO/DTO:	Date of pre-entry assessment:

Name (capital letters) of HT of the ATO/DTO:

Name (capital letters), licence number and signature of the FI(B) conducting the flight assessment (if applicable):

5	**Declaration by the ATO/DTO**

I certify that ..... has satisfactorily completed an approved course of training for the FI(B) certificate in accordance with the relevant syllabus.

Flying hours during the course:	Take-offs during the course:

Name(s) of HT:

Signature:

Name of ATO/DTO:

FROM HERE TO BE COMPLETED BY THE EXAMINER

6	**Result of the assessment of competence**

Oral theoretical knowledge examination:	☐ Passed ☐ Partially passed ☐ Failed	Practical part:	☐ Passed ☐ Partially passed ☐ Failed

Reasons and details in case of fail or partial pass/other remarks as necessary:

In case of fail: *(tick as applicable)*	☐ *I recommend further ground training before retest.* ☐ *I recommend further flight training with an FI(B) before retest.*
	☐ *I do not consider further flight or theoretical instruction necessary before retest.*

I, the undersigning examiner:

- have received information from the applicant regarding their experience and instruction, and found that the experience and instruction comply with the applicable requirements of Annex no.3 (Part-BFCL) to Annex no.1 to Government decision no.85/2023.
- confirm that all the required manoeuvres and exercises have been completed, unless specified otherwise above in the case of fail; and
- where applicable, have reviewed and applied the national procedures and requirements of the CAA of the Republic of Moldova which is different from the competent authority that issued my examiner certificate.

Examiner's certificate number:	Examiner's BPL number:
Examiner's name (capital letters):	Date and examiner's signature:

7	**Attachments**
Detailed report as per AMC2 BFCL.345 to be attached	
Copy of the FE(B) certificate (in cases where the competent authority of the applicant is different from the competent authority of the examiner)	

AMC1 BFCL.360(a)(1)(i) FI(B) certificate – Recency requirements

INSTRUCTOR REFRESHER TRAINING

(a) The FI(B) refresher training should be held in the form of a seminar. Such seminars made available in ATO/DTO should have due regard to geographical location, number of participants, and frequency throughout the territory of the state concerned.

(b) Such seminars should run for at least 1 day (with a minimum of 6 hours of teaching time), and attendance from participants will be required for the whole duration of the seminar including breakout groups and workshops.

(c) Some experienced FI(B)s currently involved with flying training and with a practical understanding of the recency requirements and the current instructional techniques should be included as speakers at these seminars.

(d) The attendance form will be completed and signed by the organiser of the seminar as approved by ATO or DTO following attendance and satisfactory participation by the FI(B).

(e) The content of the FI(B) refresher seminar should be selected from the following:
   (1) new or current rules or regulations, with emphasis on knowledge of Part-BFCL and operational requirements;
   (2) teaching and learning;
   (3) instructional techniques;
   (4) the role of the instructor;
   (5) national regulations (as applicable);
   (6) human factors;
   (7) flight safety, incident and accident prevention;
   (8) airmanship;
   (9) legal aspects and enforcement procedures;
   (10) navigational skills including new or current radio navigation aids;
   (11) weather-related topics including methods of distribution; and
   (12) any additional topic selected by the ATO or DTO.

(f) Formal sessions should allow for a presentation time of 45 minutes, with 15 minutes for questions. The use of visual aids is recommended, with interactive video and other teaching aids (where available) for breakout groups and workshops.

GM1 BFCL.360(a)(1)(i) FI(B) certificate – Recency requirements

FREQUENCY OF INSTRUCTOR REFRESHER TRAINING

In order to maintain instructor privileges, point BFCL.360(a)(1)(i) requires FI(B) certificate holders to complete instructor refresher training once in 3 years. However, ATOs or DTOs may decide to provide more frequent internal standardisation/refresher training to their instructors.

AMC1 BFCL.360(a)(2) FI(B) certificate – Recency requirements

INSTRUCTION FLIGHT UNDER SUPERVISION

(a) The aim of the instruction flight under supervision as per point BFCL.360(a)(2) is to confirm continued instructor competency.

(b) The instruction flight under supervision should be arranged to ensure that the FI(B) being supervised demonstrates, on the ground and during at least one flight, knowledge, skills and attitudes relevant to the FI(B) task including at least all of the following:
   (1) technical knowledge;
   (2) ability to teach a sample of the air exercises from the BPL training course;
   (3) a sufficiently high standard of flying;
   (4) application of instructing principles; and
   (5) application of TEM.
   (6) The supervising instructor should enter the successful completion of the flight under supervision into the logbook of the applicant.

SUBPART FE — FLIGHT EXAMINERS

Section 1 – General requirements

GM1 BFCL.405 Limitation of privileges in case of vested interests

Examples of a situation where examiners should consider if their objectivity is affected are when the applicant is a relative or a friend of the examiner, or when they are linked by economic interests or political affiliations, etc. It is acknowledged that in small sport/industry like ballooning, it is likely that examiners and candidates will be known to each other in many cases.

GM1 BFCL.405(a) Limitation of privileges in case of vested interests

EXAMINERS WHO PROVIDED INSTRUCTION TO THE CANDIDATE

Point BFCL.405(a) allows an examiner to have been involved, as a flight instructor, into 50 % of the candidate's flight instruction. It is recommended that in such cases that 50 % should be spread throughout the course, and not performed towards the end of the course. ATOs and DTOs should plan and arrange assignments between instructors and students appropriately.

AMC1 BFCL.410(b)(3) Conduct of skill tests, proficiency checks and assessments of competence

APPLICATION AND REPORT FORM FOR THE BPL SKILL TEST OR PROFICIENCY CHECK

APPLICATION AND REPORT FORM FOR THE BPL SKILL TEST OR PROFICIENCY CHECK			
Tick as applicable	I hereby apply for the issue of the following, in accordance with Annex no.3 (Part-BFCL) to Annex no.1 to Government decision no.85/2023: ☐ Balloon pilot licence (BPL) ☐ Commercial operation rating		
	I hereby report the following, in accordance with Annex no.3 (Part-BFCL) to Annex no.1 to Government decision no.85/2023: ☐ Proficiency check (BPL — recency) ☐ Proficiency check (commercial operation rating)		
1	**Applicant's personal particulars:**		
Applicant's last name(s):		First name(s):	
Date of birth:	Telephone:		Email:
Address:		Country:	
Date:		Signature:	
2	**Licence details**		
Licence number (if applicable):			

Class extension(s): *(tick as applicable)*	☐ Hot-air balloons/Groups: ☐ A ☐ B ☐ C ☐ D ☐ Gas balloons ☐ Hot-air airships

FROM HERE TO BE COMPLETED BY THE EXAMINER

3	**Details of the skill test/proficiency check flight**

Date:	Class/group of balloon:	Registration:

Take-off site:	Take-off time:	Landing time:	Flight time:
		Total flight time:	

4	**Result of the test or check**

Skill test/proficiency check details (including information on oral theoretical knowledge examination, where applicable):

Passed ☐	Partially passed ☐	Failed ☐

5	**Remarks**

Reasons and details in case of fail or partial pass/other remarks as necessary:

6	**Examiner's declarations and details**

I, the undersigning examiner:
- have received information from the applicant regarding their experience and instruction, and found that the experience and instruction comply with the applicable requirements of Annex no.3 (Part-BFCL) to Annex no.1 to Government decision no.85/2023;
- confirm that all the required manoeuvres and exercises have been completed, unless specified otherwise above in the case of fail or partial pass; and
- where applicable, have reviewed and applied the national procedures and requirements of the CAA of the Republic of Moldova which is different from the competent authority that issued my examiner certificate.

Examiner's certificate number:	Examiner's BPL number:
Examiner's name (capital letters):	Date and examiner's signature:

7	**Attachments**

Detailed report of skill test or proficiency check as per AMC1 BFCL.145 or AMC1 BFCL.215 (as applicable) to be attached
Copy of the FE(B) certificate (in cases where the competent authority of the applicant is different from the competent authority of the examiner)

Section 2 – Flight examiner certificate for balloons – FE(B)

AMC1 BFCL.415(b) FE(B) certificate – Privileges and conditions

SPECIFIC TRAINING FOR EXAMINER PRIVILEGES RELATED TO THE COMMERCIAL OPERATION RATING

The specific training for examiner privileges related to the commercial operation rating should:

(a) be completed under the supervision of an FE(B) who holds the privileges in accordance with point BFCL.415(b); and

(b) include at least all of the following:
  (1) the requirements of Part-BFCL for the commercial operation rating;
  (2) theoretical knowledge necessary for the conduct of skill tests and proficiency checks for the commercial operation rating in accordance with AMC1 BFCL.215(b)(4); and
  (3) the conduct of one skill test or proficiency check for the commercial operation rating which, if conducted during an initial examiner standardisation course in accordance with point BFCL.430, should be completed in addition to the skill test or proficiency check for the BPL, as required by point BFCL.430(b)(1).

AMC1 BFCL.415(c)(2) FE(B) certificate – Privileges and conditions

SPECIFIC TRAINING FOR EXAMINER PRIVILEGES RELATED TO THE FI(B) CERTIFICATE

Specific training for examiner privileges related to the FI(B) certificate should:

(a) be completed under the supervision of an FE(B) who holds the privileges in accordance with point BFCL.415(c); and

(b) include at least all of the following:
  (1) the requirements of Part-BFCL for the FI(B) certificate;
  (2) the content of AMC1 BFCL.345, AMC2 BFCL.345 and AMC3 BFCL.345; and
  (3) the conduct of one assessment of competence for the FI(B) certificate which, if conducted during an initial examiner standardisation course in accordance with point BFCL.430, should be completed in addition to the skill test or proficiency check for the BPL, as required by point BFCL.430(b)(1).

AMC1 BFCL.420(d) FE(B) certificate – Prerequisites and requirements

EVALUATION OF THE RELEVANT BACKGROUND OF AN APPLICANT

When evaluating the applicant's background, the CAA should evaluate the personality and character of the applicant, and their cooperation with the CAA.

The CAA may also take into account whether the applicant has been convicted of any relevant criminal or other offences, taking into account national law and principles of non-discrimination.

AMC1 BFCL.430 FE(B) certificate – Standardisation course

(a) GENERAL

(1) When issuing an approval for the conduct of FE(B) standardisation courses to an ATO or a DTO, the CAA should monitor the execution of these courses through appropriate oversight measures.
(2) An FE(B) standardisation course should last at least 1 day, divided into theoretical and practical training.
(3) The CAA, the ATO or the DTO should determine any further training required before presenting the candidate for the examiner assessment of competence.

(b) CONTENT
(1) Theoretical training
(i) The theoretical training should cover at least:
(A) the contents of AMC2 BFCL.430 and the flight examiner manual (FEM);
(B) Part-BFCL and the related AMC and GM that are relevant to their duties;
(C) operational requirements and the related AMC and GM that are relevant to their duties;
(D) national requirements that are relevant to their examination duties;
(E) fundamentals of human performance and limitations that are relevant to flight examination;
(F) fundamentals of evaluation that are relevant to an applicant's performance; and
(G) the management system of ATOs and the organisational structure of DTOs.
(ii) Examiners should also be briefed on the protection requirements for personal data, liability, accident insurance and fees, as applicable in the Republic of Moldova.
(iii) All the items above are the core knowledge requirements for an examiner and are recommended as the core course material. This core course material may be studied before the recommended examiner training is commenced. The core course may utilise any suitable training format.
(2) Practical training
(i) Practical training should include at least:
(A) knowledge and management of the test for which the certificate is to be sought. These are described in the relevant modules in the FEM; and
(B) knowledge of the administrative procedures pertaining to that test or check.
(ii) For an initial examiner certificate, practical training should include the examination of the test profile sought, consisting of the conduct of at least one test or check profiles in the role of an examiner, including briefing, conduct of the skill test and proficiency check, assessment of the applicant to whom the test or check is given, debriefing and recording or documentation under the supervision of an examiner.

AMC2 BFCL.430 FE(B) certificate – Standardisation course

STANDARDISATION ARRANGEMENTS FOR EXAMINERS

(a) General
(1) An examiner should allow an applicant adequate time to prepare for a test or check.
(2) An examiner should plan a test or check flight so that all required exercises can be performed while allowing sufficient time for each of the exercises and with due regard to the weather conditions, traffic situation, ATC requirements and local procedures.

(b) Purpose of a test or check
(1) Determination through practical demonstration during a test or check that an applicant has acquired or maintained the required level of knowledge and skill or proficiency.
(2) Improvement of training and flight instruction in ATOs or DTOs through feedback from examiners about items or sections of tests or checks that are most frequently failed.
(3) Assistance in maintaining and, where possible, improving air safety standards by having examiners display good airmanship and flight discipline during tests or checks.

(c) Conduct of a test or check

(1) An examiner will ensure that an applicant completes a test or check in accordance with the Part-BFCL requirements and is assessed against the required test or check standards.
(2) Each item within a test or check section should be completed and assessed separately. The test or check schedule, as briefed, should normally not be altered by an examiner.
(3) A marginal or questionable performance of a test or check item should not influence an examiner's assessment of any subsequent items.
(4) An examiner should verify the requirements and limitations of a test or check with an applicant during the pre-flight briefing.
(5) When a test or check is completed or discontinued, an examiner should debrief the applicant and give reasons for items or sections failed. In case of a failed or discontinued skill test and proficiency check, the examiner should provide appropriate advice to assist the applicant in retests or rechecks.
(6) Any comment on, or disagreement with, an examiner's test or check evaluation or assessment made during a debriefing will be recorded by the examiner on the test or check report, and will be signed by the examiner and countersigned by the applicant.

(d) Examiner preparation
(1) An examiner should supervise all aspects of the test or check flight preparation, including, where necessary, obtaining or assuring an ATC clearance/liaison.
(2) An examiner will plan a test or check in accordance with the Part-BFCL requirements. Only the manoeuvres and procedures set out in the appropriate test or check form will be undertaken. The same examiner should not re-examine a failed applicant without the agreement of the applicant.

(e) Examiner approach
An examiner should encourage a friendly and relaxed atmosphere both before and during a test or check flight. A negative or hostile approach should not be used. During the test or check flight, the examiner should avoid negative comments or criticisms, and all assessments should be reserved for the debriefing.

(f) Assessment system
Although test or checks may specify flight test tolerances, an applicant should not be expected to achieve these at the expense of smoothness or stable flight. An examiner should make due allowance for unavoidable deviations due to turbulence, ATC instructions, etc. An examiner should terminate a test or check only either when it is clear that the applicant has not been able to demonstrate the required level of knowledge, skill or proficiency and that a full retest will be necessary or for safety reasons. An examiner will use one of the following terms for assessment:
(1) a 'pass' provided that the applicant demonstrates the required level of knowledge, skill or proficiency and, where applicable, remains within the flight test tolerances for the licence or rating;
(2) a 'fail' provided that any of the following apply:
(i) the flight test tolerances have been exceeded after the examiner has made due allowance for turbulence or ATC instructions;
(ii) the aim of the test or check is not met;
(iii) the aim of the exercise is met but at the expense of safe flight, violation of a rule or regulation, poor airmanship or poor control;
(iv) an acceptable level of knowledge is not demonstrated;
(v) an acceptable level of flight management is not demonstrated; and
(vi) the intervention of the examiner or safety pilot is required in the interest of safety; and
(3) a 'partial pass' in accordance with the criteria shown in the relevant skill test appendix to Part-BFCL.

(g) Method and contents of the test or check
(1) Before undertaking a test or check, an examiner will verify that the balloon intended to be used is suitable and appropriately equipped for the test or check. Aircraft that fall under points 1, 2, 3 or 4 of Annex no.2 to the Aviation Code can be used, provided that they are subject

to an authorisation as per point ORA.ATO.135 of Annex no.7 (Part-ORA) or point DTO.GEN.240 of Annex no.8 (Part-DTO) to the Aircrew Regulation.

(2) A test or check flight will be conducted in accordance with the AFM.

(3) A test or check flight will be conducted within the limitations contained in the operations manual of an ATO or the balloon operator for which the applicant is flying, as applicable, or, if available, within the limitations placed by the DTO.

(4) Contents

A test or check is comprised of:

(i) oral examination on the ground (where applicable) which should include:
  (A) balloon general knowledge and performance;
  (B) planning and operational procedures;
  (C) theoretical knowledge in the common subjects as per point BFCL.135(a)(1) in cases where the applicant receives a credit in accordance with point BFCL.140(a), based on a licence the privileges of which were not exercised for more than 2 years; and
  (D) other relevant items or sections of the test or check;

(ii) pre-flight briefing which should include:
  (A) test or check sequence; and
  (B) safety considerations.

(iii) in-flight exercises which should include each relevant item or section of the test or check; and

(iv) post-flight debriefing which should include:
  (A) assessment or evaluation of the applicant; and
  (B) documentation of the test or check with the applicant's FI(B) present, if possible.

(5) A test or check is intended to simulate a practical flight. Thus, an examiner may set practical scenarios for an applicant while ensuring that the applicant is not confused and air safety is not compromised.

(6) An examiner should maintain a flight log and assessment record during the test or check for reference during the post-flight debriefing.

(7) An examiner should be flexible with regard to the possibility of changes arising to pre-flight briefings due to ATC instructions, or other circumstances affecting the test or check.

(8) Where changes arise to a planned test or check, an examiner should be satisfied that the applicant understands and accepts the changes. Otherwise, the test or check flight should be terminated.

(9) Should an applicant choose not to continue a test or check for reasons considered inadequate by an examiner, the applicant will be assessed as having failed those items or sections not attempted. If the test or check is terminated for reasons considered adequate by the examiner, only these items or sections not completed will be tested during a subsequent test or check.

(10) An examiner may terminate a test or check at any stage if it is considered that the applicant's competency requires a complete retest or recheck.

GM1 BFCL.430 FE(B) certificate – Standardisation course

PLANNING OF TESTS AND CHECKS

(1) An FE(B) should plan not more than a total of two skill tests, proficiency checks or assessments of competence per day.

(2) An FE(B) should plan at least 2 hours for a skill test, proficiency check or assessment of competence, including pre-flight briefing and preparation, conduct of the test, check or assessment of competence, de-briefing, evaluation of the applicant and documentation.

AMC1 BFCL.445 FE(B) certificate – Assessment of competence

(a) GENERAL

The CAA may nominate either one of its inspectors or a senior examiner to assess the competence of applicants for the FE(B) certificate.

(b) DEFINITIONS

(1) 'Inspector/senior examiner': the inspector of the CAA or the senior examiner who is conducting the examiner competence assessment.

(2) 'Examiner applicant': the person seeking certification as an examiner.

(3) 'Candidate': the person being tested or checked by the examiner applicant. This person may be a pilot for whom the test or check would be required, or the inspector of the CAA or the senior examiner who is conducting the examiner certification acceptance test.

(c) CONDUCT OF THE ASSESSMENT

An inspector/senior examiner will observe all examiner applicants conducting a test on a 'candidate' in a balloon for which examiner certificate is sought. Items from the related training course and test or check schedule will be selected by the inspector/senior examiner for examination of the 'candidate' by the examiner applicant. Having agreed with the inspector/senior examiner the content of the test, the examiner applicant will be expected to manage the entire test. This will include briefing, the conduct of the flight, assessment and debriefing of the 'candidate'. The inspector/senior examiner will discuss the assessment with the examiner applicant before the 'candidate' is debriefed and informed of the result.

(d) BRIEFING THE 'CANDIDATE'

(1) The 'candidate' should be given time and facilities to prepare for the test flight. The briefing should cover the following:

(i) the objective of the flight;
(ii) licensing checks, as necessary;
(iii) freedom for the 'candidate' to ask questions;
(iv) operating procedures to be followed (for example, the operator's manual);
(v) weather assessment;
(vi) operating capacity of 'candidate' and examiner;
(vii) aims to be identified by 'candidate';
(viii) simulated weather assumptions (for example, wind speed and visibility cloud base);
(ix) contents of the exercise to be performed;
(x) use of R/T;
(xi) respective roles of 'candidate' and examiner (for example, during emergency); and
(xii) administrative procedures (for example, submission of flight plan).

(2) The examiner applicant should maintain the necessary level of communication with the 'candidate'. The following check details should be followed by the examiner applicant:

(i) the need to give the 'candidate' precise instructions;
(ii) responsibility for the safe conduct of the flight;
(iii) intervention by the examiner, when necessary;
(iv) liaison with ATC (where required) and the need for concise, easily understood intentions;
(v) prompting the 'candidate' about required sequence of events (for example, following an aborted landing); and
(vi) keeping brief, factual and unobtrusive notes.

(e) ASSESSMENT

The examiner applicant should refer to the flight test tolerances given in the relevant skill test. Attention should be paid to the following points:

(1) questions from the 'candidate';
(2) giving the results of the test and any sections failed; and
(3) giving the reasons for failure.

(f) DEBRIEFING

The examiner applicant should demonstrate to the inspector the ability to conduct a fair, unbiased debriefing of the 'candidate' based on identifiable factual items. A balance between friendliness and firmness should be evident. The following points should be discussed with the 'candidate', at the applicant's discretion:

(1) advising the candidate on how to avoid or correct mistakes;
(2) mentioning any other points of criticism noted; and
(3) giving any advice considered helpful.

(g) RECORDING OR DOCUMENTATION
The examiner applicant should demonstrate to the inspector the ability to complete the relevant records correctly. These records may be:
(1) the relevant test or check form;
(2) the licence entry;
(3) the notification of failure form; and
(4) relevant company forms where the examiner has privileges of conducting operator proficiency checks.

(h) DEMONSTRATION OF THEORETICAL KNOWLEDGE
The examiner applicant should demonstrate to the inspector a satisfactory knowledge of the regulatory requirements associated with the function of an examiner.

AMC1 BFCL.445; BFCL.460 FE(B) certificate – Assessment of competence; FE(B) certificate – Validity, revalidation and renewal

QUALIFICATION OF SENIOR EXAMINERS

(a) A senior examiner specifically tasked by the CAA to observe skill tests or proficiency checks for the revalidation of examiner certificates should:
(1) hold a valid or current examiner certificate appropriate to the privileges being granted;
(2) have examiner experience of a level acceptable to the CAA; and
(3) have conducted a number of skill tests or proficiency checks as an FE(B).

(b) The CAA may conduct a pre-assessment of the applicant or candidate carrying out a skill test and proficiency check under the supervision of an inspector of the CAA.

(c) Applicants should be required to attend a senior examiner briefing, course or seminar arranged by the CAA. The content and duration will be determined by the CAA and should include:
(1) pre-course self-study;
(2) legislation;
(3) the role of the senior examiner;
(4) an examiner assessment; and
(5) national administrative requirements.

(d) The validity of the authorisation should not exceed the validity of the examiner's certificate, and in any case should not exceed 5 years. The authorisation may be revalidated in accordance with procedures established by the CAA.

AMC1 BFCL.460(b)(1) FE(B) certificate – Validity, revalidation and renewal

EXAMINER REFRESHER COURSE

An FE(B) refresher course should be organised as a seminar that follows the content of the examiner standardisation course set out in AMC1 BFCL.430.