United Kingdom

Civil Aviation Authority

Official Record Series 9

CAA Decision to adopt Acceptable Means of Compliance and Guidance Material pursuant to Article 76(3) UK Reg (EU) 2018/1139

DECISION No. 0051

Publication date: 18 July 2025

Decision adopting Acceptable Means of Compliance (AMC) and Guidance Material (GM) for UK Regulation (EU) 2018/395

Background

1. Statutory Instrument (SI) 2025 No. 878, The Aviation Safety (Amendment) (No.2) Regulations 2025 laid before Parliament on 16 July 2025, amends Annex III (Part-BFCL) of UK Regulation (EU) No 2018/395 with regards to the licensing and training requirements for pilots engaged in operations with balloons and airships.

2. By this decision the Civil Aviation Authority ("the CAA") is amending and adopting the relevant AMC as means by which the requirements of UK Regulation (EU) No 2018/395 may be met. This decision also amends and adopts the relevant GM as non-binding explanatory and interpretation material.

Decision

3. The CAA, under Article 76(3) of UK Regulation (EU) 2018/1139, has decided to adopt the AMC and GM attached at Schedule 1.

4. This AMC and GM supplements and/or replaces that which was adopted for UK Reg (EU) No 2018/395 by CAA UK-EU Transition Decision No. 1 dated 22 December 2020.

5. The AMC and GM attached at Schedule 1 to this Decision comes into force on 1 October 2025.

6. This Decision will remain in force unless revoked or amended by the CAA.

Definitions

7. All references to Regulations are to assimilated law pursuant to the Retained European Union Law (Revocation and Reform) Act 2023.

Rob Bishton
For the Civil Aviation Authority

Date of Decision: 18 July 2025
Date of Decision Coming into force: 1 October 2025

Schedule 1

Includes the Guidance Material (GM) referenced below.

The text of the amendment is arranged to show deleted text, new or amended text as shown below:

(a) ~~Text to be deleted is shown struck through~~;

(b) New text is highlighted in grey;

(c) ~~Text to be deleted is shown struck through~~ followed by the replacement text which is highlighted in grey.

(d) […] Text not shown for brevity

UK Regulation (EU) 2018/395, Balloons

~~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.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 (f) of point SERA.5005 of the Annex to UK Regulation (EU) No 923/2012; 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); 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 II (Part-BOP) is still valid, provided that this operator proficiency check included procedures for commercial passenger ballooning.~~

~~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)(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 II (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~~

~~(ii) passengers are made aware that the intended flight will be a training flight.~~

~~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 III (Part-BFCL) to Regulation (EU) 2018/395.			
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 III (Part-BFCL) to Regulation (EU) 2018/395; - 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 applicant's competent authority 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.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 III (Part-BFCL) to Regulation (EU) 2018/395: ☐ Balloon pilot licence (BPL) ☐ Commercial operation rating		
	I hereby report the following, in accordance with Annex III (Part-BFCL) to Regulation (EU) 2018/395: ☐ 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 III (Part-BFCL) to Regulation (EU) 2018/395; - 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 applicant's competent authority 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)		

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 competent authority 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 competent authority; and

(3) have conducted a number of skill tests or proficiency checks as an FE(B).

(b) The competent authority 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 competent authority.

(c) Applicants should be required to attend a senior examiner briefing, course or seminar arranged by the competent authority. The content and duration will be determined by the competent authority 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 competent authority.~~

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:~~ on the CAA website.

~~(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.~~

AMC1 BFCL.050 Recording of flight time

(…)

(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 the logbook entry is signed by the supervising instructor or examiner, as applicable.

(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~~s~~ 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.

(3) Coaching time

A summary of all time logged by an applicant, for the gaining of a licence, as coaching time, may be logged if certified by the appropriately rated and experienced BPL holder who was acting as PIC of the flight in accordance with BFCL.130(c).

(…)

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) or FI(B) 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 or FI(B) 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.

(…)

AMC2 BFCL.130 BPL — Training course and experience requirements

FLIGHT INSTRUCTION FOR THE BPL

(…)

(c) Syllabus of flight instruction (hot-air balloon)

(3) List of exercises

(…)

Exercise 6A: Take-off in ~~different~~ wind conditions less than 8 knots

(…)

~~(vii) take-off in wind of different speeds, with and without shelter; and~~

(viii) preparation for false lift.; and

(viii) discussion about use of the parachute immediately after take-off.

Exercise 6B: Take-off in wind conditions greater than or equal to 8 knots

(i) pre-take-off checks and briefings;

(ii) heating for controlled climb;

(iii) assessment of lift;

(iv) use of quick release;

(v) assessment of wind and obstacles;

(vi) preparation for false lift; and

(vii) discussion about use of the parachute immediately after take-off.

Exercise 7: Climb to level flight

(…)

(iv) maximum rate of climb according to the manufacturer's flight manual; and

(v) levelling off at selected altitude.; and

(vi) flight to a minimum of 5,000 ft above ground level.

(…)

Exercise 14: Approach from high level

(…)

(v) use of ballast burner and parachute or valve;

(vi) use of trail rope (if applicable);

(vii) look-out procedures; and

(viii) missed approach and fly on.

(…)

Exercise 16A: Landing in different wind conditions less than 8 knots

(…)

(iv) turbulence (in the case of landings with high wind speed only);

(iv) use of burner and pilot lights;

(v~~i~~) use of parachute (or other deflation system) and turning vents (if applicable);

(vi~~i~~) look-out procedures;

(vii~~i~~) dragging and deflation;

(i~~x~~viii) landowner relations; and

(ix) airmanship.

Exercise 16B: Landing in wind conditions greater than or equal to 8 knots

(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.

(…)

(d) Syllabus of flight instruction (gas balloon)

(…)

(3) List of exercises

(…)

Exercise 6A: Take-off in ~~different~~ wind conditions less than 8 knots

(i) pre-take-off checks and briefings;

(ii) transfer of load from ground anchors or ground ballast onto airframe;

(iii) preparation for controlled climb;

(~~ii~~iv) 'hands off and hands on' procedure for ground crew;

(~~i~~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 6B: Take-off in wind conditions greater than or equal to 8 knots

(i) pre-take-off checks and briefings;

(ii) transfer of load from ground anchors or ground ballast onto airframe;

(iii) preparation for controlled climb;

(iv) 'hands off and hands on' procedure for ground crew;

(v) assessment of wind and obstacles; and

(vi) preparation for false lift.

Exercise 7: Climb to level flight

(…)

(iii) maximum rate of climb according to the manufacturer's flight manual; ~~and~~

(iv) levelling off at selected altitude~~.~~; and

(v) flight to a minimum of 5,000 ft above ground level.

(…)

Exercise 16A: Landing in ~~different~~ wind conditions less than 8 knots

(…)

~~(iv) turbulence (in the case of landings with high wind speed only);~~

(iv) use of ballast and parachute or valve;

(v~~i~~) look-out procedures;

(vi~~i~~) use of rip panel;

(viii~~i~~) dragging;

(~~ix~~viii) deflation;

(ix) avoidance of electrostatic discharge; and

(xi) landowner relations.

Exercise 16B: Landing in wind conditions greater than or equal to 8 knots

(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.

(…)

(new) AMC3 BFCL.130 Training course and experience requirements

TRAINING COURSE SUPERVISED BY FI(B)

(a) Where the FI(B) is responsible for the supervision of training, the FI(B) should ensure that the applicant completes the training course.

(b) The FI(B) is responsible for maintaining training records and making these available to the examiner in accordance with point BFCL.030(b).

(c) The FI(B) should keep for each individual student the following records throughout the training course and for three years after completion of the last training session:

(1) Details of ground and flight training;

(2) Information on individual progress;

(3) Information on the licences and associated ratings relevant to the training provided, including expiry dates of ratings and medical certificates or declarations.

(d) The FI(B) should, in accordance with the applicable law on the protection of personal data, store the records referred to in point (c) in a manner that ensures protection by appropriate tools and protocols and take the necessary measures to restrict the access to those records to persons who are duly authorised to access them.

(e) Upon request by the CAA, the FI(B) should make available all records and reports, and any other information, as required, for oversight activities.

(f) If the applicant changes to a different supervising FI(B) during their training, the training records should be transferred to the new supervising FI(B).

(g) Training records can be kept in paper or electronic format.

(h) The training should follow a training programme acceptable to the CAA, and include:

(1) the aim of the course;

(2) crediting of previous experience and pre-entry requirements (including appropriate procedures for students that wish to complete their training after having started at a different training organisation or with a different FI(B));

(3) a syllabus summary;

(4) structure and content of the theoretical knowledge instruction;

(5) structure of the entire course and integration of theoretical knowledge instruction and flight training;

(6) student progress checks for theoretical knowledge and flight training, as appropriate.

(new) AMC1 BFCL.130(c) Training course and experience requirements

FLIGHT INSTRUCTION FOR HOT-AIR BALLOON TETHERED FLIGHTS

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.

(new) GM1 BFCL.130(c) Training course and experience requirements

TETHERED ACTIVITY WITHOUT TAKING OFF

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

AMC1 BFCL.135 BPL – Theoretical knowledge examinations

(…)

(c) (…)

* 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.~~

(…)

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

THEORETICAL KNOWLEDGE INSTRUCTION FOR EXTENSION OF PRIVILEGES TO THE MIXED BALLOON CLASS

(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 delivered in a course (that has been accepted by the CAA) 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 individual 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 addition of the rating.

(b) Syllabus

The following table contains the syllabus for theoretical knowledge instruction for the mixed balloon class:

Note: The following syllabus is considered to be the minimum required. It is likely that other topics would be included during training, as appropriate to the activity that will be undertaken.

Syllabus for theoretical knowledge instruction for the mixed balloon class	
1.	AIRCRAFT GENERAL KNOWLEDGE
1.1.	Envelope
1.1.1.	Rozière envelope structures

1.1.2.	Envelope control systems
1.1.3.	Envelope instrumentation
1.2.	Gondola
1.2.1.	Types of gondola
1.3.	Burners
1.3.1.	Difference between Rozière Burners and standard hot-air balloon burners
1.3.2.	Duplication of burners and separate liquid burners
1.3.3.	Fuel requirements
1.3.4.	Practical exercise in burner operation
1.4.	Fuel cylinders
1.4.1.	Types of fuel cylinder
1.4.2.	Valves, gauges and other fittings
2.	FLYING PROCEDURES
2.1.	Inflation
2.1.1.	Layout and inspection
2.1.2.	Gas filling
2.2.	Take-Off
2.2.1.	Temperature stabilisation
2.2.2.	Use of ballast or heat
2.3.	Control in flight
2.3.1.	Day flying (AM)
2.3.2.	Day flying (PM)
2.3.3.	Night flying (first night)
2.3.4.	Night flying (second and subsequent nights)
2.3.5.	Use of autopilots and altitude alarms
2.3.6.	Use of ballast
2.3.7.	Safety when dropping indivisible ballast
2.3.8.	Effect of clouds
2.3.9.	Ice formation from products of combustion
2.3.10.	Gas Laws (scientific)
2.3.11.	Altitude excursions to establish wind profile
2.3.12.	Procedure when maximum altitude is required
2.4.	Landing
2.4.1.	Landfall timing and planning
2.4.2.	Conversion to hot-air mode
3.	EMERGENCY PROCEDURES
3.1.	Helium loss (gradual)
3.2.	Helium loss (sudden)
3.2.1.	Conversion to hot-air or parachute mode
3.2.2.	Use of parachutes
3.3.	Failure of the Gas valve
3.3.1.	Gas valve fails open
3.3.2.	Gas valve fails closed
3.4.	Sea landings
3.4.1.	Emergency communications
3.4.2.	Preparation – jettisonable items
3.4.3.	Envelope cutaway
3.5.	Fire on the ground

3.6. Fire in the air

AMC1 BFCL.160 BPL – Recency requirements

CREDITS FOR FLIGHT TIME COMPLETED ON BALLOONS AS PER ARTICLE 2(8) OF AS WELL AS ANNEX I TO THE BASIC REGULATION

(…)

(b) a balloon that is used for a training flight with an instructor is an aircraft as per points 1(a), 1(b), 1(c), ~~or~~ 1(d) or 1(h) (double occupancy only) of Annex I to the Basic Regulation ~~that is subject to an authorisation specified in point ORA.ATO.135 of Annex VII (Part-ORA) or point DTO.GEN.240 of Annex VIII (Part-DTO) to UK Regulation (EU) No 1178/2011~~.

(new) AMC1 BFCL.160(a)(1)(i) BPL – Recency requirements

CRITERIA FOR RECENCY FLIGHTS AS PIC

(a) In order to count as a flight in terms of point BFCL.160(a)(1)(i), the flight should:

(1) have a duration of at least 5 minutes;

(2) reach the minimum standard flight altitude as per point (f) of point SERA.5005 of the Annex to UK Regulation (EU) No 923/2012; 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.160(a)(1)(ii) BPL – Recency requirements

TRAINING FLIGHT

(…)

(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.

(new) AMC1 BFCL.160(b)(2) BPL – Recency requirements

THEORETICAL KNOWLEDGE REFRESHER TRAINING FOR THE MIXED BALLOON CLASS

For the refresher training as per point BFCL.160(b)(2), the content of the training course as set out in AMC1 BFCL.150(e) should be used.

(new)AMC1 BFCL.215(b)(3a) Commercial non-passenger operation rating

COMMERCIAL NON-PASSENGER OPERATION RATING TRAINING 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; and

(ii) stowage of passengers' personal equipment;

(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) Tethered hot-air balloon flights:

(i) tethering as a commercial activity;

(ii) assessment of location;

(iii) set up of equipment; and

(iv) passenger procedures.

(b) TRAINING FLIGHTS

(1) The training flights as stipulated in point BFCL.215(b)(4) should be flights that:

(i) follow the content of the skill test for initial issue of the commercial non-passenger operation rating as set out in AMC1 BFCL.215(b)(5); and

(ii) are 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.

AMC1 BFCL.215(b)(4) Commercial non-passenger operation rating

SKILL TEST FOR THE COMMERCIAL NON-PASSENGER OPERATION RATING

All occurrences of "commercial operation rating" *in this AMC should be updated to* "commercial non-passenger operation rating".

(new) AMC1 BFCL.220(b)(4) Commercial passenger operation rating

COMMERCIAL PASSENGER OPERATION RATING TRAINING 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 II (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 FLIGHTS

(1) The training flights as stipulated in point BFCL.220(b)(4) should be flights that:

(i) follow the content of the skill test for initial issue of the commercial passenger operation rating as set out in AMC1 BFCL.220(b)(5); and

(ii) are 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.

(new) AMC1 BFCL.220(b)(5) Commercial passenger operation rating

SKILL TEST FOR THE COMMERCIAL PASSENGER OPERATION RATING

This is a copy of the text in AMC1 BFCL.215(b)(4), but with all occurrences of "commercial non-passenger operation rating" *updated to* "commercial passenger operation rating".

(new) AMC1 BFCL.220(d)(2)(i) Commercial passenger operation rating

CRITERIA FOR RECENCY FLIGHTS AS PIC

(a) In order to count as a flight in terms of point BFCL.220(d)(2)(i), the flight should:

(1) have a duration of at least 5 minutes;

(2) reach the minimum standard flight altitude as per point (f) of point SERA.5005 of the Annex to UK Regulation (EU) No 923/2012; 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.

(new) AMC1 BFCL.220(d)(3); BFCL.220(h) Commercial passenger operation rating

CREDITS FOR A PROFICIENCY CHECK IN ACCORDANCE WITH PART-BOP

The holder of a commercial passenger operation rating should be deemed to comply with point BFCL.220(d)(3) as long as the latest operator proficiency check completed in accordance with point BOP.ADD.315 of Annex II (Part-BOP) is still valid, provided that this operator proficiency check included procedures for commercial passenger ballooning.

(new) AMC1 BFCL.220(d)(3) Commercial passenger operation rating

PROFICIENCY CHECK

(a) For the proficiency check as per point BFCL.220(d)(3), the content of the skill test for initial issue of the commercial passenger operation rating as set out in AMC1 BFCL.220(b)(5) 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 on the ground, before or after the flight, without passengers on board.

(new) AMC1 BFCL.220(d)(4) Commercial passenger operation rating

COMMERCIAL PASSENGER OPERATION RATING TRAINING COURSE

For the training course as per point BFCL.220(d)(4), the content of the training course as set out in AMC1 BFCL.220(b)(4)(a) should be used.

(new) AMC1 BFCL.315(a)(5) FI(B) certificate – privileges and conditions

COMMERCIAL NON-PASSENGER OPERATION RATING INSTRUCTION TRAINING

Note: This training may be completed during the initial FI(B) training course or as a separate training course, provided that the applicant holds the commercial non-passenger operation rating.

The content and structure of the training course should follow the content described in the training course in point AMC1 BFCL.215(b)(3A), allowing the student instructor to develop safety awareness by teaching the knowledge, skills and attitudes relevant to the FI(B) task.

(new) AMC1 BFCL.315(a)(6) FI(B) certificate – privileges and conditions

COMMERCIAL PASSENGER OPERATION RATING INSTRUCTION TRAINING

Note: This training may be completed during the initial FI(B) training course or as a separate training course, provided that the applicant holds the commercial passenger operation rating.

The content and structure of the training course should follow the content described in the training course in point AMC1 BFCL.220(b)(4), allowing the student instructor to develop safety awareness by teaching the knowledge, skills and attitudes relevant to the FI(B) task.

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

(…)

(b) STRUCTURE AND CONTENT

(…)

(2) PART 2 — FLIGHT INSTRUCTION

(…)

(v) Long briefings and air exercises

(…)

Exercise 6A: Take-off in ~~different~~ wind conditions less than 8 knots

(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 less than 8 knots. 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.; and

(9) the use of the parachute immediately after take-off.

(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 6B: Take-off in wind conditions greater than or equal to 8 knots

(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 wind conditions greater than or equal to 8 knots. 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 assessment of lift;

(4) the use of the restraint equipment;

(5) the assessment of wind and obstacles;

(6) the preparation for false lift;

(7) the take-off techniques from sheltered and non-sheltered launch fields; and

(8) the use of the parachute immediately after take-off.

(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 assessment of lift without endangering the ground crew;

(4) how to use the restraint equipment;

(5) how to perform the assessment of wind and obstacles;

(6) how to prepare for false lift;

(7) how to teach the student pilot the correct take off techniques from sheltered and non-sheltered launch fields; and

(8) 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~~.~~; and

(5) flight to a minimum of 5,000 ft above ground level.

(…)

Exercise 13: Approach from low level

(a) Objective

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

(…)

Exercise 16A: Landing in ~~different~~ wind conditions less than 8 knots

(a) Objective

To advise the student instructor on how to explain and demonstrate landings in ~~different~~ wind conditions less than 8 knots. 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 16B: Landing in wind conditions greater than or equal to 8 knots

(a) Objective

To advise the student instructor on how to explain and demonstrate landings in wind conditions greater than or equal to 8 knots. 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 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

(…)

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 Member States~~ should have due regard to geographical location, number of participants, and frequency ~~throughout the~~ ~~territory of the Member State concerned~~.

(…)

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

SPECIFIC TRAINING FOR EXAMINER PRIVILEGES RELATED TO THE COMMERCIAL NON-PASSENGER OPERATION RATING

The specific training for examiner privileges related to the commercial non-passenger 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 non-passenger operation rating;

(2) theoretical knowledge necessary for the conduct of skill tests and proficiency checks for the commercial non-passenger operation rating in accordance with AMC1 BFCL.215(b)(4); and

(3) the conduct of one skill test or proficiency check for the commercial non-passenger 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).

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

SPECIFIC TRAINING FOR EXAMINER PRIVILEGES RELATED TO THE COMMERCIAL PASSENGER OPERATION RATING

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

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

(b) include at least all of the following:

(1) the requirements of Part-BFCL for the commercial passenger operation rating;

(2) theoretical knowledge necessary for the conduct of skill tests and proficiency checks for the commercial passenger operation rating in accordance with AMC1 BFCL.220(b)(5); and

(3) the conduct of one skill test or proficiency check for the commercial passenger 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~~,~~ and 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.430 FE(B) certificate – Standardisation course

(b) CONTENT

(1) Theoretical training

(ii) Examiners should also be briefed on the protection requirements for personal data, liability, accident insurance and fees, as applicable ~~in the Member State concerned~~.

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

STANDARDISATION ARRANGEMENTS FOR EXAMINERS

(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 (a), (b), (c), or (d) of Annex I to the Basic Regulation can be used, provided that they are subject to an authorisation as~~

~~per point ORA.ATO.135 of Annex VII (Part- ORA) or point DTO.GEN.240 of Annex VIII (Part-DTO) to UK Regulation (EU) No 1178/2011.~~

(new) AMC1 BFCL.470 SE(B) certificate

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 candidate carrying out a skill test and proficiency check under the supervision of an inspector of the CAA.

(c) Candidates 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.

(new) GM1 BFCL.470 SE(B) certificate

QUALIFICATION OF SENIOR EXAMINERS

A candidate for the initial issue of an SE(B) should have completed 1000 hours of flight time as pilot on balloons.