



EASA
European Aviation Safety Agency

Part-BOP – Subpart ADD III

Additional requirements for commercial operations III

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Part-BOP – Subpart ADD 9

Cover Regulation

**Annex I
Definitions**

**Annex II
Part-BOP**

Subpart-
BAS

Subpart-
ADD



Subpart ADD

- Section 1 – General organisation requirements
- **Section 2 – Balloon operator certificate and declaration**
- Section 3 – Manuals and records
- Section 4 – Flight crew
- Section 5 – General operating requirements
- Section 6 – Operating procedures
- Section 7 – Performance and operating limitations



Part-BOP – Subpart ADD 11

- **BOP.ADD.100 Application for a balloon operator certificate (BOC)**
 - To be issued by the competent authority prior to **commencing CPB**
 - Application in form and manner as established by competent authority
 - Applicants shall demonstrate to competent authority that
 - They comply with the applicable requirements
 - Its organisation and management system corresponds to the
 - Size of the operator
 - Nature and complexity of its activities



Part-BOP – Subpart ADD 12

Part-ARO of Reg. 965/2012

BALLOON OPERATOR CERTIFICATE		
Types of operation: Commercial passenger ballooning (CPB) Passengers; Other:.....		
	State of the Operator	
	Issuing Authority	
BOC #:	Operator Name	Operational Points of Contact: Contact details, at which operational management can be contacted without undue delay, are listed in
	Db a Trading Name	
	Operator address: Telephone, Fax, E-mail:	
This certificate certifies that is authorised to perform commercial air operations, as defined in the attached operations specifications, in accordance with the operations manual, Annex IV to Regulation (EC) No 216/2008 and its Implementing Rules.		
Date of issue:	Name and Signature:	



- **BOP.ADD.105 Privileges of a BOC holder and operations specifications**
 - Privileges shall be specified in the operations specifications attached to the BOC
 - The BOC holder shall comply with the scope and privileges as specified



Part-BOP – Subpart ADD 14

Part-ARO of Reg. 965/2012

BALLOON OPERATIONS SPECIFICATIONS				
Issuing Authority Contact Details				
Telephone: _____; Fax: _____;				
E-mail: _____				
BOC:		Operator Name:		Date:
Signature:				
Doing business as (Db) Trading Name				
Operations Specifications#:				
Balloon Model:				
Registration Marks:				
Commercial operations				
Area of operation:				
Special Limitations:				
Specific Approvals:	Yes	No	Specification	Remarks
Continuing airworthiness				
Others				



Part-BOP – Subpart ADD 15

➤ **BOP.ADD.110 Changes related to a BOC holder**

➤ Changes requiring prior approval

- Changes to the scope or the operations specifications

*(Note: for typical changes see **GM1 BOP.ADD.110(a)(1)**)*

- To be approved by the competent authority before the change takes place
- The operator shall provide the competent authority with necessary documentation

➤ Changes not requiring prior approval

- Minor changes, not listed in the GMs to this paragraph
- Changes shall be managed and notified to competent authority



Part-BOP – Subpart ADD 16

➤ **BOP.ADD.115 Continued validity of a BOC**

- The BOC shall remain valid as long as
 - The operator complies with the requirements
 - The competent authority has being granted access to the operator
 - The BOC has not being surrendered or revoked
- Upon surrender or revocation
 - The BOC shall be returned



Part-BOP – Subpart ADD 17

➤ **BOP.ADD.120 Declaration**

- The operator shall provide the competent authority with a declaration prior to **commencing commercial specialised operations**
- Exemption: Declaration is sufficient for **CPB with six persons or less**
- For the form see Appendix I at the end of WS Paper 3
- The operator shall
 - Maintain compliance with requirements
 - Notify the competent authority
 - On AltMOCs
 - Of any changes
 - When it ceases operation



HOT TOPIC

‘3-level-approach’ for passenger ballooning

Level	Measure	Category	Persons	Provision
1	Cost sharing	Non-CPB	4 or less	Direct + annual cost sharing
2	Declaration	CPB	6 or less	<ul style="list-style-type: none">• Operator to provide competent authority with declaration• Additional national rules possible (?)
3	BOC	CPB	Not limited	Operator to apply and obtain a BOC issued by competent authority



Part-BOP – Subpart ADD 19

➤ **BOP.ADD.125 Airworthiness requirements**

Balloon shall

- Have a certificate of airworthiness
- Be leased-in from a third country



Part-BOP – Subpart ADD 20

- **BOP.ADD.130 Lease-in of a third country balloon**
 - Any lease-in
 - To be approved by competent authority before operation
 - Wet lease-in (balloon + crew)
 - The applicant shall demonstrate that the **safety standards are equivalent** with regard to
 - Continuing airworthiness + Air Ops
 - Dry lease-in (balloon only)
 - The applicant shall demonstrate **compliance** with
 - Continuing airworthiness + Air Ops

Note: requirements still discussed internally by EASA



➤ **BOP.ADD.135 Documentation requirements**

The operator is responsible for production and distribution of manuals and documentation without delay



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Part-BOP – Subpart ADD 23

➤ **BOP.ADD.200 Operations manual (OM)**

- The operator shall establish an OM
- The OM shall reflect operational requirements
- The OM may be issued in separate parts
- All operations personnel shall have easy access
- The OM shall be kept up-to-date
- For BOC holders
 - According to BOP.ADD.110 ('Application for a BOC'), amendments either
 - to be notified to the competent authority; or
 - prior approval is needed by the competent authority



Part-BOP – Subpart ADD 24

➤ **AMC2 BOP.ADD.200 Operations manual (OM)**

CONTENT

- Table of content
- Amended control status and list of effective pages
- Duties, responsibilities
- Description of management system
- Standard operating procedures (SOPs)
- Weather limitations
- Emergency procedures
- Accidents/incidents considerations
- Personnel qualification and training
- Record keeping, etc.



Part-BOP – Subpart ADD 25

➤ **BOP.ADD.205 Record-keeping**

- The operator shall establish a system of record-keeping that allows
 - Adequate storage
 - Reliable traceability
- The format shall be specified in the procedures or manuals



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Part-BOP – Subpart ADD 27

- **BOP.ADD.300 Composition of flight crew (FC)**
 - FC not to be less than the minimum specified in AFM or operating limitations
 - FC shall
 - Include additional members when required by type of operation
 - Not be reduced below the number specified in the OM
 - FC members shall hold an appropriate licence and ratings
 - FC member may be relieved by another suitable qualified FC member



Part-BOP – Subpart ADD 28

➤ **BOP.ADD.305 Designation as PIC**

- One pilot, when qualified, shall be designated as PIC
- Prerequisites
 - Minimum level of experience specified in the OM
 - Adequate knowledge of the area to be flown



Part-BOP – Subpart ADD 29

➤ **BOP.ADD.310 Provision of training and checking**

➤ All training shall be conducted

- In accordance with training programmes established in the OM

- By appropriately qualified personnel

➤ For CPB: training and checking programmes to be approved by competent authority



Part-BOP – Subpart ADD 30

➤ **BOP.ADD.315 Recurrent training and checking**

Each FC member shall complete

- Bi-annual recurrent flight and ground training
- Operator proficiency checks
 - Validity period of 24 months



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Part-BOP – Subpart ADD 32

➤ **BOP.ADD.400 Responsibilities of the PIC**

➤ The PIC shall

- Comply with the requirements of occurrence reporting schemes
- Comply with all flight and duty time limitations

➤ The PIC shall not perform duties

- When under the influence of alcohol
- Until reasonable time has elapsed after deep water diving or blood donation
- If medical requirements are not fulfilled
- If there is any doubt that PIC can accomplish assigned duties



➤ **BOP.ADD.405 Authority of PIC**

Notwithstanding Subpart-BAS, the operator shall ensure that all persons carried obey commands given by the PIC for securing the

- Safety of the balloons
- The persons or property carried



Part-BOP – Subpart ADD 34

➤ **BOP.ADD.410 Additional balloon crew member**

- When a balloon carries more than 19 passengers, at least one additional crew member shall
 - Be present on board
 - Assist passengers in emergency case
- The additional crew member shall not perform duties
 - When under the influence of alcohol
 - Until reasonable time has elapsed after deep water diving or blood donation
 - When incapacitated by injury, sickness, medication, fatigue, etc.



Part-BOP – Subpart ADD 35

➤ **BOP.ADD.415 Common language**

The operator shall ensure that crew members can communicate in a common language

➤ **BOP.ADD.420 Information on emergency and survival equipment carried**

For communication with rescue coordination centres

- The operator shall have available lists on emergency and survival equipment carried



Part-BOP – Subpart ADD 36

➤ **BOP.ADD.425 Alcohol and drugs**

The operator shall ensure that no person on board is under the influence of alcohol to the extent that the safety is endangered of

- The balloon
- Its occupants

➤ **BOP.ADD.430 Endangering**

The operator shall ensure that no person acts to

- Endanger a balloon or person therein or on the ground
- Cause a balloon to endanger any person or property



Part-BOP – Subpart ADD 37

- **BOP.ADD.435 Documents, manuals and information to be carried**
 - To be carried on each flight as originals or copies
 - BOC or declaration
 - Information on search and rescue services
 - Operational flight plan, if applicable
 - To be stowed as originals at a safe place
 - Documents above, when copies are carried
 - Operations specifications, if applicable
 - Parts of OM, SOPs or AFM (that are relevant to crew)
 - To make available the original documentation in a timeframe required by the competent authority, with a minimum of 24 hours



➤ **BOP.ADD.440 Dangerous goods**

The operator shall

- Establish procedures to prevent dangerous goods from being carried inadvertently
- Provide crew members with necessary information to carry out their responsibilities



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Part-BOP – Subpart ADD 40

➤ **BOP.ADD.500 Fuel or ballast supply and planning**

The operator shall ensure that calculations are documented in an operational flight plan

➤ **BOP.ADD.505 Carriage of special categories of passengers (SCPs)**

The operator shall establish procedures for carrying SCPs under conditions that ensure the safety of the balloon and its occupants



Part-BOP – Subpart ADD 41

➤ **BOP.ADD.510 Specialised operations – standard operating procedures (SOPs)**

Notwithstanding BOP.BAS.185 (checklist specialised operations)

- Before commencing a commercial specialised operation, the operator shall
 - Conduct a risk assessment
 - Establish SOPs based on the risk assessment
 - Ensure that operations are performed in accordance with the SOPs
- SOPs shall be part of the operations manual or a separate document



Part-BOP – Subpart ADD 42

➤ **Specialised operations – SOPs**

➤ SOPs should cover

- Nature and complexity of activity
- Balloon and equipment
- Crew member(s)
- Performance
- Normal procedure
- Emergency procedure
- Ground equipment
- Records

Note: EASA to provide additional AMC?



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Part-BOP – Subpart ADD 44

➤ **BOP.ADD.600 System for determining the mass**

- The operator shall establish a system specifying how the following items are determined
 - Balloon empty mass
 - Mass of traffic load
 - Mass of fuel or ballast load
 - Take-off mass, etc.
- The mass computation shall
 - Be replicable by the PIC
 - Be prepared prior to each flight and documented in an operational flight plan



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The End

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