

ADDITIONAL REQUIREMENTS FOR COMMERCIAL OPERATIONS

SUBPART: ADDITIONAL REQUIREMENTS FOR COMMERCIAL OPERATIONS

Section 1

General organisation requirements

49. Scope

This Subpart establishes the requirements to be met, in addition to the requirements of Subpart BASIC, by any operator engaged in commercial operations with balloons, other than the operators referred to in the last subparagraph Article 3(2).

50. Responsibilities of the Operator

- a) The operator shall be responsible for the operation of the balloon in accordance, with the requirements of this Subpart and with its declaration.
- b) Every flight shall be conducted in accordance with the provisions of the operations manual.
- c) The operator shall ensure that the balloon is equipped and all crew members are qualified as required for the area and type of operation.
- d) The operator shall ensure that all crew members assigned to, or directly involved in, flight operations comply with all of the following conditions:
 - a. they are properly trained and instructed;
 - b. they are aware of the rules and procedures relevant to their particular duties;
 - c. they have demonstrated their abilities in their particular duties;
 - d. they are aware of their responsibilities and the relationship of such duties to the operation of the balloon as a whole.
- e) The operator shall establish procedures and instructions for the safe operation of each balloon type, containing duties and responsibilities of the crew members, for all types of operations. Those procedures and instructions shall not require crew members to perform any activity during critical phases of flight other than those required for the safe operation of the balloon.
- f) The operator shall make arrangements for the supervision of crew members and personnel involved in the operation of the balloon by individuals with adequate experience and skills in order to ensure the attainment of the standards specified in the operations manual.
- g) The operator shall ensure that all crew members and personnel involved in the operation of the balloon are made aware that they are to comply with the laws, regulations and procedures of the States in which operations are conducted that are pertinent to the performance of their duties
- h) The operator shall specify flight planning procedures to provide for the safe conduct of the flight, based on considerations of balloon performance, other operating limitations and relevant expected conditions on the route to be followed and at the operating sites concerned. Those procedures shall be included in the operations manual.

51. Notification of Alternative Means Of Compliance

The operator shall, when making the declaration, notify to the competent authority the list of alternative means of compliance (AltMoC), where it intends to use AltMoC to demonstrate compliance when so requested. That list shall contain references to the acceptable means of compliance (AMC) which they replace in case associated AMC have been adopted by the DGCA.

NOTE:

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 DGCA or EASA is reached.

52. Access

- a) For the purpose of determining compliance with the requirements of this CAR, the operator shall grant access to any person authorised by the competent authority at any time to any facility, balloon, document, records, data, procedures or any other material relevant to the operator's activity falling within the scope of this CAR, irrespective of whether the activity is contracted or not.
- b) Access to the balloon shall, in the case of commercial passenger ballooning, include the possibility to enter and remain in the balloon during flight operations, unless to do so would endanger the flight.

53. Findings

After receipt of the notification of findings raised by the competent authority in accordance with this CAR, the operator shall do all of the following:

- a) identify the root cause of the non-compliance;
- b) define a corrective action plan;
- c) demonstrate implementation of the corrective action plan to the satisfaction of the competent authority within the time period specified by that authority in accordance with this CAR.

53.1. Corrective Action Plan

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

53.2 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.

54. Occurrence Reporting

- a) The operator shall implement, as part of its management system, an occurrence reporting scheme which is to provide for mandatory and voluntary reporting.
- b) Without prejudice to point a), the operator shall report to the competent authority and to the organisation responsible for the design of the balloon any malfunction, technical defect, exceeding of technical limitations or occurrence that would highlight inaccurate, incomplete or ambiguous information contained in AFM or any manual provided by manufacturer, and any other occurrence which constitutes an incident but not an accident or serious incident.
- c) The operator shall take the necessary measures to ensure compliance with these provisions by the pilot-in-command, any other crew member and all its personnel in respect of any serious incident or accident associated with the operation of a balloon.

55. Management System

- a)** The operator shall establish, implement and maintain a management system that includes all of the following:
 - a.** clearly defined lines of responsibility and accountability throughout the organisation of the operator, including a direct safety accountability of the accountable manager;
 - b.** a description of the overall philosophies and principles of the operator with regard to safety, which shall be known as the safety policy;
 - c.** the identification of aviation safety hazards entailed by the activities of the operator, the evaluation of those hazards and the management of associated risks, including by taking actions to mitigate those risks where necessary and verifying the effectiveness of those actions;
 - d.** maintaining personnel trained and competent to perform their tasks;
 - e.** documentation of all key processes of the management system, including a process for making personnel aware of their responsibilities and the procedure for amending that documentation;
 - f.** a function to monitor compliance of the operator with the requirements of this Annex. Such compliance monitoring shall include a feedback system of findings to the accountable manager of the operator to ensure effective implementation of corrective actions as necessary;
- b)** The management system shall correspond to the size of the operator and the nature and complexity of its activities, taking into account the hazards and associated risks of those activities.

55.1 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

55.2 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.

55.3 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.

55.4 Management System Documentation

- a)** The operator's management system documentation should at least include the following information:
 - a.** 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;
 - b.** the operator's scope of activities;
 - c.** the titles and names of persons;
 - d.** an organisation chart showing the lines of responsibility among the persons;
 - e.** a general description and location of the facilities;
 - f.** procedures specifying how the operator ensures compliance with the applicable requirements; 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 CAR. A cross reference should be included.

55.5 COMPLIANCE MONITORING — AUDIT AND ORGANISATIONAL REVIEW

- a) Methodology
 - a. The operator should accomplish the compliance monitoring by means of internal auditing.
 - b. Notwithstanding a., 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
 - a. The operator should specify the basic structure of the compliance monitoring function applicable to the activities conducted.
 - b. 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.
- c) 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:
 - a. all activities for which the declaration is required;
 - b. manuals, logs and records;
 - c. training standards;
 - d. management system procedures; and
 - e. standard operating procedures (SOPs).
 - f. 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.
 - g. 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.
- d) Provisions, in addition to b), for auditing
 - a. 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.
 - b. 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 competent authority; and
 - v. the scope of changes not requiring prior competent authority approval.
- e) Provisions, in addition to b), for the organisational review
 - a. The organisational review should be performed at intervals not exceeding 12 months.
 - b. As part of the management system documentation, the operator should describe the organisational review programme and related responsibilities.
 - c. 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.

55.6 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.

55.7 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:
 - i) review of records and documentation;
 - ii) interview of the personnel involved; and
 - iii) feedback provided by contractors.

56. Contracted Activities

When contracting any part of its activity falling within the scope of this CAR, the operator shall be responsible for ensuring that the contracted organisation carries out the activity in accordance with the requirements of this CAR. The operator shall also ensure that the competent authority is given access to the contracted organisation in order to determine that the operator is compliant with those requirements.

56.1 Contracted Activities-Responsibility When Contracting Activities

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

56.2 Contracting — General

- 1) Operators may decide to contract certain activities to external organisations for the provision of services related to areas such as:
 - a) ground handling;
 - b) flight support;
 - c) training; and
 - d) manual preparation.
- 2) 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.
- 3) The ultimate responsibility for the product or service provided by external organisations always remains with the operator.

56.3 Responsibility When Contracting Activities

- 1) 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, and to compliance monitoring.
- 2) 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.

57. Personnel Requirements

- 1) The operator shall appoint an accountable manager who has the authority to ensure that all activities falling within the scope of this CAR can be financed and carried out in accordance with the requirements of this Regulation. The accountable manager shall be responsible for establishing and maintaining an effective management system.
- 2) The operator shall:
 - a) identify the responsibilities of its personnel for all tasks and activities to be performed;
 - b) have sufficient qualified personnel to carry out those tasks and activities; and
 - c) maintain appropriate experience, qualification and training records of its personnel.
- 3) The operator shall nominate one or more persons responsible for the management and supervision of all of the following areas:
 - a) flight operations;
 - b) ground operations;
 - c) continuing airworthiness, in accordance with applicable regulations.

57.1 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.

57.2 Nominated Persons

- 1) A description of the functions and the responsibilities of the nominated persons, including their names, should be contained in the operations manual.
- 2) The operator should make arrangements to ensure continuity of supervision in the absence of nominated persons.
- 3) A person nominated by the operator, who has already been nominated by another operator, may be acceptable subject to the agreement of the competent authorities concerned.
- 4) Nominated persons should work sufficient hours to fulfil the management functions associated with the scale and scope of the operation.
- 5) 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.
- 6) 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.
- 7) As regards competence in different areas of responsibility, there should not be any difference from the requirements applicable to persons holding only one post.
- 8) 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.

57.3 Competence of Nominated Persons

- 1) Nominated persons possess the experience and meet the licensing provisions that are listed below in 2) to 5). Exceptionally, in particular cases, the competent authority 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.
- 2) Nominated persons have:
 - a) practical experience and expertise in the application of aviation safety standards and safe operating practices;
 - b) comprehensive knowledge of:
 - i) the applicable DGCA safety regulations and any associated requirements and procedures; and

- ii) the need for, and content of, the relevant parts of the operations manual; and
 - c) 3 years of relevant work experience.
- 3) Flight operations
The nominated person:
- a) holds or has held a valid flight crew licence and the associated ratings appropriate to the relevant type of operation; or
 - b) has demonstrated in another manner thorough knowledge of the relevant flight operations.
- 4) Ground operations
The nominated person has a thorough knowledge of the operator's ground operations concept.
- 5) Continuing airworthiness.
- a) The nominated person has the relevant knowledge and meets the appropriate experience requirements related to balloon continuing airworthiness.

58. Facility Requirements

The operator shall have facilities that are sufficient to allow for the performance and management of all tasks and activities required to ensure compliance with the requirements of this CAR.

Section 2

Declaration, airworthiness and wet and dry lease

59. Declaration

- 1) In the declaration referred to in the second subparagraph of Article 3(2) the operator shall confirm that the operator complies and will continue to comply with the requirements of this CAR.
- 2) The operator shall include in the declaration all of the following information:
 - a) the name of the operator;
 - b) the place where the operator has its principal place of business;
 - c) the name and contact details of the accountable manager of the operator;
 - d) the starting date of the commercial operation and, where relevant, the date at which the change to an existing commercial operation takes effect;
 - e) in respect of all balloons used for the commercial operation, the balloon type, registration, main base, type of operation and continuing airworthiness management organisation.
 - f) Where applicable, the operator shall annex to the declaration the list of alternative means of compliance (AltMoC)
 - g) When making the declaration, the operator shall use the form contained in the Appendix to this CAR.

59.1 General

The intent of the declaration is to:

1. have the operator acknowledge its responsibilities under the applicable safety regulations and that it holds all necessary approvals;
2. inform the competent authority of the existence of an operator; and
3. enable the competent authority to fulfil its oversight responsibilities.

60. Changes to the Declaration and Cessation of Commercial Operations

- 1) The operator shall notify the competent authority without delay of any changes in circumstances affecting its compliance with the requirements of this Regulation, as declared to the competent authority, and of any changes in respect of change of management or nominated persons and the list of AltMoC, as included in or annexed to the declaration.
- 2) The operator shall notify the competent authority without delay when it is no longer engaged in commercial operations with balloons.

NOTE: NOTIFICATION OF CHANGES

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

61. Airworthiness Requirements

Balloons shall have a certificate of airworthiness issued by DGCA or, in the case of a balloon registered in a third country, shall be subject to either a wet lease agreement or a dry lease agreement.

62. Wet Lease and Dry Lease of a Balloon Registered In a Third Country

- 1) The operator shall notify to the competent authority any wet lease agreement or dry lease agreement concerning a balloon registered in a third country

- 2) that the level of safety resulting from the application of the safety standards with regard to continuing airworthiness and air operations to which the third country operator of the balloon is subject, is at least equivalent to that resulting from the application of this CAR.
- 3) Where a balloon registered in a third country is subject to a dry lease agreement, the operator shall ensure compliance with the requirements of this CAR.

62.1 General

- 1) The operator intending to lease-in a third-country balloon should provide the competent authority with the following information:
 - a) the name and address of the registered owner;
 - b) a copy of the valid certificate of airworthiness;
 - c) a copy of the lease agreement or description of the lease provisions, except financial arrangements; and
- 2) duration of the lease.
- 3) 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

63. Operations Manual

- 1) The operator shall establish an operations manual.
- 2) The content of the operations manual shall reflect the requirements set out in this CAR and shall not contravene any information contained in the operator's declaration.
- 3) The operations manual may be established as separate parts
- 4) All personnel of the operator shall have easy access to the portions of the operations manual that are relevant to their duties.
- 5) The operations manual shall be kept up-to-date. All personnel of the operator shall be made aware of any amendment of the operations manual that are relevant to the performance of their duties.
- 6) The operator shall ensure that any information used as the basis for the content of the operations manual and any amendment thereof is correctly reflected in the operations manual.
- 7) The operator shall ensure that all personnel are able to understand the language in which those parts of the operations manual which are relevant to their duties are written. The content of the operations manual shall be presented in a form that can be used without difficulty.

63.1 General

- 1) The operations manual may vary in detail according to the complexity of the operation and of the type of balloons operated.
- 2) 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.
- 3) The operations manual should be such that:
 - a) all its parts are consistent and compatible in form and content;
 - b) it can be easily amended; and
 - c) its content and amendment status is controlled and clearly indicated.
- 4) The operations manual should include a description of its amendment and revision process specifying:
 - a) the person(s) who may approve amendments or revisions;
 - b) the conditions for amendments and revisions; and
 - c) the methods by which operator personnel are advised of the changes.
- 5) The operations manual content may be based on, or may refer to, industry codes of practice.
- 6) 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.
- 7) 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.
- 8) 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.

63.2 Operations Manual Content

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

- 1) table of contents;
- 2) 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;
- 3) duties, responsibilities, and succession of management and operating personnel;
- 4) description of the management system;
- 5) flight time limitations;
- 6) standard operating procedures;
- 7) weather limitations;
- 8) emergency procedures;
- 9) accident and incident considerations;
- 10) personnel qualifications and training;
- 11) record-keeping;
- 12) normal flight operations;
- 13) performance operating limitations; and
- 14) handling of dangerous goods, if applicable.

63.3 More Conservative Data and Procedures

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

64. Record-keeping

- 1) The operator shall establish a system of record-keeping that allows adequate storage and reliable traceability of its activities.
- 2) The format of the records shall be specified in the operator's procedures or manuals.

64.1 Record –Keeping General

- 1) 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.
- 2) 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.
- 3) 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.
- 4) 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.

64.2 B Record- Keeping

Storage Periods and Availability

- 1) The following records should be stored for at least 5 years:
 - a) records of the activities referred to this CAR for commercial operations;
 - b) a copy of the operator's declaration;
 - c) details of approvals held; and
 - d) operations manual.
- 2) The following information used for the preparation and execution of a flight, and associated reports, should be stored for 3 months:
 - a) the operational flight plan, if applicable;
 - b) mass documentation;

- c) notification of special loads, including written information to the pilot-in-command about dangerous goods, if applicable; and
 - d) flight report(s) for recording details of any occurrence, or any event that the pilot-in-command deems necessary to report or record.
- 3) Flight crew records should be stored for the periods indicated below:
- a) The operator should make such records available, on request, to the crew member concerned.
 - b) 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 1).
 - c) 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 1).
 - d) 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

65. Composition of Flight Crew

- 1) The composition of the flight crew shall be, as a minimum, as specified in the AFM or operating limitations prescribed for the balloon.
- 2) The flight crew shall include additional flight crew members when required by the type of operation. The number of the flight crew shall not be lower than the number specified in the operations manual.
- 3) All flight crew members shall hold a licence, ratings and authorisations issued or accepted by DGCA and appropriate to the duties assigned to them.
- 4) Flight crew members may be relieved during the flight of their duties at the controls by another suitably qualified flight crew member.
- 5) When engaging the services of flight crew members who are working on a freelance or part-time basis, the operator shall verify that all of the following requirements are complied with:
 - a) the requirements of this Subpart;
 - b) Schedule II, of Aircraft Rules 1937, including the requirements on recent experience;
 - c) the flight and duty time limitations and rest requirements taking into account all services rendered by the flight crew member to other operators.

66. Designation as Pilot-In-Command

- 1) The operator shall designate one pilot amongst the flight crew as pilot-in-command.
- 2) The operator shall only designate a pilot to act as pilot-in-command if he or she has:
 - a) valid PL(B) issued by DGCA or equivalent FATA;
 - b) valid class II medical;
 - c) attained the age of 18 years;
 - d) completed 50 hours of flight time and 50 take-offs and landings as PIC on balloons
 - e) passed a proficiency check on a balloon in specific class
 - f) has the minimum level of experience and recent experience specified in the operations manual; and
 - g) has adequate knowledge of the area to be flown.
- 3) In addition the designated PIC shall have not less than following experience as PIC on balloons
 - a) for balloons with an envelope capacity between 3 401 m³ and 6 000 m³, at least 100 hours PIC;
 - b) for balloons with an envelope capacity between 6 001 m³ and 10 500 m³, at least 200 hours PIC;
 - c) for balloons with an envelope capacity of more than 10 500 m³, at least 300 hours PIC;
 - d) for gas balloons with an envelope capacity of more than 1 260 m³, at least 50 hours PIC.

66.1 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.

67. Provision of Training And Checking

All training and checking of flight crew members shall be provided as follows:

- 1) in accordance with the training programmes and syllabi established by the operator in the operations manual;
- 2) by appropriately qualified persons and, as regards flight training and checking, by person who
 - a) hold a valid PL(B) with not less than 200 hours PIC on balloons and meeting requirements of rule 69; or
 - b) Instructor/Examiner Authorisation issued by DGCA.

68. Recurrent Training and Checking

- 1)** Each flight crew member shall complete every 2 years recurrent flight and ground training relevant to the class of balloon on which he or she operates, including training on the location and use of all emergency and safety equipment carried.
- 2)** Each flight crew member shall complete operator proficiency checks to demonstrate his or her competence in carrying out normal, abnormal and emergency procedures, covering the relevant aspects associated with the specialised tasks described in the operations manual. When carrying out those checks, due account shall be taken of crew members who undertake operations under VFR at night.
- 3)** The operator proficiency check shall be valid for 24 calendar months, counting from the end of the month during which the check was carried out or, in case the check is carried out within the last 3 months of the validity period of the previous check, from the last day of the validity period of that previous check.

68.1 Proficiency Check

The operator proficiency check should be conducted by

- 1)** an instructor/examiner or
- 2)** a person holding PL(B) with not less than 200 hours PIC experience on balloons and who meets requirements of 69 above.

Section 5

GENERAL OPERATING REQUIREMENTS

69. Responsibilities of The Pilot-In-Command

The pilot-in-command shall comply with both of the following:

- 1) The relevant requirements of the operator's occurrence reporting scheme;
- 2) all flight and duty time limitations and rest requirements applicable to his or her activities in accordance with the FDTL scheme laid down in the Operations Manual.

70. Authority of The Pilot-In-Command

The operator shall take all reasonable measures to ensure that all persons carried in the balloon obey all lawful commands given by the pilot-in-command for the purpose of ensuring the safety of the balloon, of any person or property carried therein or of any person or property on the ground.

71. Additional Balloon Crew Member

When a balloon carries more than 19 passengers, at least one additional crew member shall be present on board the balloon in addition to the flight crew as required to assist passengers in the event of an emergency. That additional crew member shall be appropriately experienced and trained.

71.1 Training and Recency

- 1) For training, the additional crew member should have participated in:
 - a) three practical training inflations with subsequent flights on a balloon with a basket of a capacity of more than 19 passengers;
 - b) at least one landing under (1) with a ground speed of at least 8 kt; and
 - c) training in first-aid and in the use of the fire extinguisher, at intervals of maximum 36 months.
- 2) For recency, the additional crew member should perform at least 2 flights in this function in any 24-month period. Otherwise, he or she should, before resuming as additional crew member, fulfil again the training requirements.

72. Fitness Relating To Deep Water Diving and Blood Donation

Crew members shall not perform any duties on the balloon where their fitness might be impaired after deep water diving or following blood donation.

72.1 Lapsed 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.

73. Common Language

The operator shall ensure that all crew members can communicate with each other in a common language.

74. Psychoactive Substances

The operator shall take all reasonable measures to ensure that no person enters or is in a balloon when under the influence of psychoactive substances to the extent that the safety of the balloon, of any person or property

carried therein or of any person or property on the ground is likely to be endangered by the presence of that person.

75. Endangering

The operator shall take all reasonable measures to ensure that no person, intentionally, recklessly or negligently, acts or omits to act with one of the following consequences:

- 1) endanger a balloon or person therein or on the ground;
- 2) cause or permit a balloon to endanger any person or property.

75.1 Operational Flight Plan

The operational flight plan used and the entries made may contain the following items:

- a) balloon registration;
- b) date of flight;
- c) name of the pilot-in-command;
- d) place of departure;
- e) time of departure;
- f) type of operation
- g) balloon type;
- h) balloon size;
- i) balloon empty mass;
- j) mass of the traffic load;
- k) mass of the fuel or ballast load;
- l) take-off mass;
- m) fuel or ballast calculation;
- n) relevant meteorological information;

76. Documents, Manuals and Information To Be Carried In Balloon Or Retrieve Vehicle

- 1) All of the following documents, manuals and information or their copies shall be carried on each flight as originals or copies:
 - a) the declaration made by the operator;
 - b) information concerning search and rescue services for the area of the intended flight;
 - c) the operational flight plan.
- 2) The following documents, manuals and information shall be stowed at a safe place, not on board the balloon during a flight, as originals:
 - a) the documents, manuals and information referred to in point 1), when copies thereof are carried on board the balloon during a flight;
 - b) the current parts of the operations manual or the standard operating procedures (SOPs) that are relevant to the duties of crew members, which shall be easily accessible to them;
 - c) passenger lists/manifest, when passengers are carried;
- 3) When requested by the competent authority, the pilot-in-command or the operator shall make available to that authority the original documents, manuals and information within the time period specified by the authority which shall not be less than 24 hours.

77. Dangerous goods

- 1) The operator shall:
 - a) establish procedures to ensure that all reasonable measures are taken to prevent dangerous goods from being carried on board the balloon inadvertently; and

- b) provide crew members with the necessary information enabling them to adequately carry out their duties in respect of any dangerous goods carried or intended to be carried on board the balloon.

77.1 Procedures and Information to Crew Members and Passengers

1. 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.
2. 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.
3. 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

78. Fuel or Ballast Calculations

The operator shall ensure that the calculations as regards reserve fuel or ballast are documented in an operational flight plan.

79. Carriage of Special Categories of Passengers

The operator shall establish procedures for carrying persons requiring special conditions, assistance or devices when carried on board a balloon under conditions that ensure the safety of the balloon and of any person or property carried therein.

80. Commercial Balloon Specialised Operations — Standard Operating Procedures

- 1) Before commencing a commercial balloon specialised operation, the operator shall conduct a risk assessment, assessing the complexity of the intended operation in order to determine the hazards and associated risks of the operation and to establish mitigating measures where necessary.
- 2) Based on the risk assessment, the operator shall, before commencing the commercial balloon specialised operation, establish standard operating procedures (SOPs) appropriate to the intended operation and the balloon used. The SOPs shall either be part of the operations manual or be laid down in a separate document. The operator shall regularly review and update the SOPs where necessary in order to adequately take account of the risk assessment.
- 3) The operator shall ensure that commercial balloon specialised operations are performed in accordance with the SOPs.

79.1 Development of Standard Operating Procedures

- 1) Standard operating procedures (SOPs) should be developed to a standard format and should take into account the results of the risk assessment process.
- 2) 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.

TEMPLATE

- 1) Nature and complexity of the activity
 - a) The nature of the activity and exposure. The nature of the flight and the risk exposure should be described.
 - b) 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.
- 2) The operational environment and geographical area. The operational environment and geographical area over which the operation takes place should be described:
 - a) congested hostile environment: balloon performance standard, compliance with rules of the air, mitigation of third-party risk;
 - b) mountain areas: altitude, performance, the use or non-use of oxygen with mitigating procedures;
 - c) water areas: water state and temperature, risk of ditching, availability of search and rescue, survivability, carriage of safety equipment;
 - d) desert areas: carriage of safety equipment, reporting procedures, search and rescue information; and
 - e) other areas.

- 3) Equipment
 - a) All equipment required for the activity should be listed.
- 4) Crew members
 - a) The crew composition and their duties should be specified.
 - b) 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).
- 5) Performance

Details on applicable, specific performance requirements should be provided.
- 6) Normal, abnormal and emergency procedures
 - a) The normal, abnormal and emergency procedures to be applied in flight and on the ground should be described.
- 7) Ground equipment
 - a) Details on the nature, number and location of ground equipment required for the activity should be provided.
- 8) Records
 - a) 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

81. System For Determining The Mass

- 1) The operator shall establish a system specifying how all of the following items are accurately determined for each flight, so as to enable the pilot-in-command to verify that the limitations of the AFM are complied with:
 - a) balloon empty mass;
 - b) mass of the traffic load;
 - c) mass of the fuel or ballast load;
 - d) take-off mass;
 - e) loading of the balloon performed under the supervision of the pilot-in-command or qualified personnel;
 - f) preparation and disposition of all documentation.
- 2) The mass computation based on electronic calculations shall be replicable by the pilot-in-command.
- 3) The mass documentation, specifying the items listed in point 1), shall be prepared prior to each flight and documented in an operational flight plan

81.1 Traffic Load, and Mass Values For Passengers and Baggage

- 1) Traffic load should be determined by actual weighing, or by calculating masses for passengers, persons other than flight crew members and baggage as follows:
 - a) 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.
 - b) 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.
- 2) The passengers' stated mass, the mass of passengers' clothing and hand baggage should be checked prior to boarding and adjusted, if necessary.
- 3) When determining the actual mass by weighing, passengers' personal belongings and hand baggage should be included.

81.2 Documentation

- 1) Mass documentation should include the following:
 - a) balloon registration and type;
 - b) date and flight identification;
 - c) name of the pilot-in-command;
 - d) name of the person who prepared the document;
 - e) empty mass;
 - f) mass of the fuel or ballast at take-off;
 - g) load components including passengers, baggage and, if applicable, freight;
 - h) maximum take-off mass allowed by the AFM according to temperature and altitude; and
 - i) limiting mass values.
- 2) The mass documentation should enable the pilot-in-command to determine that the load is within the mass limits of the balloon.
- 3) The information above may be available in flight planning documents, or other documents readily available for use, or mass systems.
- 4) 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.

- 5) 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.
- 6) A copy of the final mass documentation should be made available to the pilot-in-command for his or her acceptance.

81.3 Limiting Mass Values

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