



SPECIAL PURPOSE OPERATIONS

SECTION E – MANNED BALLOONING OPERATIONS

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SUB-SECTION 1 APPLICABILITY

1.1 GENERAL

1.1.1 Ballooning operations within Yemen. shall be conducted in accordance with the regulations set forth in this Sub-Section E

1.1.2 This Sub-Section prescribes rules governing the operation of manned balloons by an organization or operator approved by CAMA.

1.1.3 For the purposes of this Sub-Section, a balloon is an aircraft, which is capable of free flight, but may be tethered, that:

- (a) is used or intended to be used for manned operation in the air; and
- (b) is used or intended to be used for recreation or sport purposes; or
- (c) is used or intended to be used on commercial operations under an Air Operator's Certificate.

1.2 DEFINITIONS

In this Sub-Section, the following definitions apply:

- | | | |
|------------------|---|--|
| Aerodrome | - | means a take off and/or landing site which meets the physical specifications required for the safe operation of a balloon. |
| ATS | - | means Air Traffic Service |
| Balloons | - | is a lighter than air aircraft, that is not engine driven, and that sustains flight through the use of gas buoyancy or heated air. |
| Basket | - | means the container, suspended beneath the envelope, for the balloon occupants. |
| Category | - | means either free or tethered balloon |
| Class | - | Means |
| | | Hot air balloon |
| | | Gas filled balloon |
| | | Pressurized balloon |
| | | Combination gas and hot air balloon |



Envelope	-	means the enclosure in which the lifting means is contained.
Free Balloon	-	means an un-tethered balloon.
CAMA	-	means Civil Aviation & Met.Authority
Hot Air Balloon	-	means a balloon that derives its lift from heated air.
Manned Balloon	-	means a non-power driven lighter-than-air aircraft capable of carrying one or more persons and equipped with controls to permit the pilot to control the altitude of the aircraft.
Maximum Mass	-	means the design maximum mass of the balloon, Less the lifting gas or air.
Organization	-	means either the holder of an Air Operator's Certificate Balloons, or a non-commercial sporting group, registered with Yemen. authorities and approved by CAMA to conduct ballooning operations.
Tethered Balloon	-	means a manned balloon which is tethered to the Surface.
Type rating	-	means an envelope capacity;
Group A		not exceeding 3000 cubic meters volume.
Group B		exceeding 3000 cubic meters but not exceeding 9000 cubic meters.
Group C		exceeding 9000 cubic meters.

1.3 APPROVED ORGANIZATION

1.3.1 Balloon operations shall only be conducted by an organization approved by the CAMA.

1.3.2 The approved organization shall nominate a person(s) to be responsible for the conduct of all balloon operations conducted by their pilots.

1.3.3 The organization shall have sufficient experienced pilots, including instructors for all category, class and types of balloons operated by the organization.

1.3.4 The organization shall have sufficient experienced approved maintenance personnel to issue the required documentation and to ensure balloons meet the manufacturer's specifications.



- 1.3.5 The organization shall ensure operations are in compliance with this Sub-Section and publish, in a CAMA approved Operations Manual, all requirements, procedures and instructions necessary to ensure the safe operation of balloons by pilots of the organization.
- 1.3.6 The organization shall maintain flying records for each pilot.
- 1.3.7 The organization shall ensure that a maintenance logbook is maintained for each balloon operated by that organization.

1.4 **INSPECTION REQUIREMENTS**

- 1.4.1 Any person operating a balloon under this Sub-Section of the CARs shall, upon request, allow CAMA, or his designee, to inspect any facility, documentation or balloon to determine the applicability of this Sub-Section.
- 1.4.2 The pilot or operator of a balloon shall, upon request of the CAMA, furnish satisfactory evidence that the balloon is subject only to the provisions of this Sub-Section.

1.5 **CERTIFICATION AND REGISTRATION**

- 1.5.1 Pilots shall hold the appropriate licence as required by CAR Part II.
- 1.5.2 Operators of balloons required to maintain radio communication with an ATS, shall hold a Radio Telephone Operator's Licence issued by CAMA.
- 1.5.3 Balloons are required to be registered and shall be issued with registration identification marking by CAMA once the aircraft has a valid Flight Permit.
- 1.5.4 An owner of a balloon shall hold a current insurance policy for third party personnel and property damage liability.

SUB-SECTION 2 OPERATING RULES

2.1 **GENERAL**

- 2.1.1 No person may operate a balloon unless under the direct control of a CAMA approved organization and in accordance with the Operations Manual of that organization.
- 2.1.2 The minimum age to fly as pilot in command is 18 years.
- 2.1.3 No organization or person shall conduct a ballooning operation without the approval of CAMA
- 2.1.4 No organization or person shall conduct a ballooning operation over or in a built up area without the approval of the appropriate municipality.



2.2 **HAZARDOUS OPERATIONS**

- 2.2.1 No person may operate a balloon in a manner that creates a hazard to other persons or property.
- 2.2.2 No person may allow an object to be dropped from a balloon if such action creates a hazard to other persons or property.

2.3 **DAYLIGHT OPERATIONS**

Unless specifically authorized by CAMA, no person may operate a balloon except between the hours of sunrise and sunset.

2.4 **OPERATIONS NEAR OTHER AIRCRAFT; RIGHT OF WAY RULES**

- 2.4.1 Balloons shall have right of way from other powered aircraft, gliders and airships.
- 2.4.2 A balloon shall not be operated in such proximity to other aircraft as to create a collision hazard.
- 2.4.3 Nothing in these rules shall relieve the pilot in command of a balloon from the responsibility of taking such action as will best avert collision.

2.5 **OPERATIONS OVER CONGESTED AREAS**

Unless specifically authorized by CAMA, no person may operate a balloon over any congested area of a city, town, or settlement, or over any open-air assembly of persons.

2.6 **OPERATIONS IN CONTROLLED AIRSPACE**

No person may operate a balloon within Controlled Airspace, unless that person has prior authorisation from the ATS facility having jurisdiction over that airspace and the balloon has appropriate two way communications equipment and a Mode C transponder. The pilot shall hold a valid Radio Telephone Operator's Licence issued by CAMA.

2.7 **OPERATIONS IN PROHIBITED, RESTRICTED OR DANGER AREAS**

- 2.7.1 No person may operate a balloon in a prohibited area at any time.
- 2.7.2 No person may operate a balloon within a restricted area or danger area unless the controlling agency of the area concerned has authorized that operation.

2.8 **HEIGHT LIMITATIONS**

- 2.8.1 Unless specifically authorized by CAMA, no person may conduct free flight operations below 500 feet above ground level unless taking off or landing except within the confines of a CAMA approved area.
- 2.8.2 Unless specifically authorized by CAMA, no person may fly above 10,000 feet AMSL.



2.9 **VISUAL REFERENCE**

No person may operate a balloon on free flight operations except with visual reference with the surface, clear of cloud, with a minimum cloud ceiling of 1000 feet above ground level, and a minimum visibility of 3 kilometres.

2.10 **OPERATIONS OVER WATER**

Unless specifically authorized by CAMA, no person may operate a balloon over water.

2.11 **OTHER REQUIREMENTS**

2.11.1 **Liquor And Drugs**

No person may operate as pilot in command of a balloon if that person has consumed alcohol within the preceding 8 hours, or appears to be under the influence of intoxicating liquor, or using any drug that affects his or her faculties in any way contrary to safety.

2.11.2 **Exception To Operating Requirements**

A person who wishes to pilot a balloon otherwise than in accordance with the operating rules set out in this Sub-Section, or in accordance with the organization's Operations Manual, may apply to CAMA for approval of the flight(s). Written application should be made from the organization detailing the proposed flight(s) at least 14 days prior to the proposed flight(s). CAMA may approve the application and may specify conditions of the approval. Any such conditions shall be complied with.

SUB-SECTION 3 PILOT IN COMMAND RESPONSIBILITIES

3.1 **GENERAL**

3.1.1 No person shall operate a balloon with more than one pilot unless, when the flight is planned, the crew or the organization designates a pilot in command for each period of the flight. The pilot in command of a balloon is directly responsible for, and is the final authority as to, the operation of that balloon.

3.1.2 If a pilot in command of a balloon becomes aware of a defect in a balloon, aviation facility or service that may endanger safety, he or she shall report the matter to the organization.

3.1.3 Before commencing a flight, the pilot in command of a balloon operating under this Sub-Section shall take all reasonable steps to ensure that:

- (a) the balloon has a valid Flight Permit and insurance and is in compliance with the manufacturer's specifications;
- (b) the maintenance log book has been inspected;



- (c) the balloon's maximum permitted lift shall not be exceeded and that the balloon's flight performance will enable the balloon to undertake the flight with safety having regard to the prevailing weather conditions, terrain, navigation, the available departure area, gross weight and load distribution;
- (d) all instruments and equipment required for the flight are securely fitted to, or provided in the balloon, are functioning properly, and are adjusted correctly;
- (e) the balloon is carrying enough fuel for the flight, including allowance for any possible alternative course which may be required;
- (f) a load sheet has been prepared;
- (g) any passenger is given adequate information in regard to any emergency procedures and emergency equipment used in conjunction with the balloon;
- (h) all ground-handling personnel are appropriately trained.
- (i) The launch and landing areas are suitable.

3.2 **AERODROMES**

3.2.1 The use of an aerodrome does not confer any rights under Yemen. civil law and the pilot should take all reasonable steps to ensure approval is granted from the owner of the site before operating.

3.2.2 The pilot in command of a balloon, which is subject to this Sub-Section, shall not permit the balloon to take off from, or land at, an aerodrome unless:

- (a) the site, is suitable for the taking off and/or landing of the balloon; and
- (b) the balloon can take off and/or land safely, having regard to the prevailing surface and weather conditions, and any other relevant circumstances.

3.2.3 An aircraft shall not land at, or takeoff from any place unless the place is suitable for use as an aerodrome for the purpose of landing and taking off of aircraft in safety, having regard to all circumstances, including the prevailing weather conditions.

3.3 **REFUELLING**

3.3.1 The organization or pilot in command, or any other person refuelling an balloon, shall ensure that the correct grade of fuel, as specified by the balloon or in approved documents, is used when replenishing the fuel in a balloon.

3.3.2 Any person refuelling a balloon shall do so in accordance with established safe practices and requirements for handling of flammable substances.



SUB-SECTION 4 BALLOON SERVICEABILITY REQUIREMENTS

4.1 GENERAL

No person may operate a balloon unless it:

- (a) displays approved registration markings;
- (b) has been inspected and certified fit to fly by a CAMA approved and qualified representative of the organization within the previous 12 months;
- (c) has a valid Flight Permit, issued by a CAMA approved person;
- (d) has been maintained in compliance with the manufacturer's specifications;
- (e) has the required and serviceable equipment and instrumentation; and
- (f) has a current maintenance log.

4.2 DAMAGE AND DEFECTS

The pilot in command of a balloon shall report any damage or defects affecting safety of flight to the organization.

- (a) The pilot in command shall ensure that an entry is made in the maintenance logbook describing the damage or defect.
- (b) The owner of a balloon shall not permit the balloon to be flown if not airworthy or not in compliance with manufacturer's specifications.
- (c) The organization shall not permit a member to operate a balloon if it is not considered airworthy or not in compliance with manufacturer's specifications.
- (d) The organization, once aware of, or advised of any damage or defect, shall ensure an entry is made in the maintenance logbook.
- (e) Any damage or defect shall be endorsed in the maintenance logbook once repaired and declared serviceable for flight.

4.3 MAINTENANCE LOG BOOKS

4.3.1 The owner of a balloon shall maintain a current maintenance log book indicating:

- (a) balloon type and model;
- (b) registration;
- (c) identifying marks and colours;
- (d) year of manufacture;



- (e) modifications to basic balloon basket and envelope;
- (f) flight hours; and
- (g) damage, defects and repairs carried out.

4.3.2 The maintenance log book shall include copies of the:

- (a) Fight Permit; and
- (b) manufacturer's specifications and pilot operating handbook.

4.4 **FOREIGN REGISTERED BALLOONS**

A foreign registered balloon may be approved to operate in Yemen. by CAMA upon application provided:

- (a) a certificate of validation is issued to the pilot, or a letter of no objection is issued to the organization, by the State of Registry to permit flight; and
- (b) maintenance is conducted in accordance with the requirements of the State of Registry.

4.5 **OPERATIONS MANUAL**

4.5.1 An operator/organization shall be required to have a CAMA approved Operations Manual.

4.5.2 An operator/organization shall provide CAMA with a copy of the Operations Manual together with all amendments and/or revisions, for review and approval. The operator shall incorporate in the Operations Manual such mandatory material as CAMA may require.

4.5.3 An operator/organization shall provide, for the use and guidance of operations personnel concerned, an Operations Manual. The Operations Manual shall be amended or revised as is necessary to ensure that the information contained therein is kept up-to-date. All such amendments or revisions shall be issued to all personnel that are required to use this Manual.

4.5.4 Every person provided with an Operations Manual shall keep it up-to-date with amendments or revisions supplied by the operator.

4.5.5 Each crew member shall have readily available during flight a copy of those parts of the Operations Manual that relate to his duties.



SUB-SECTION 5 PENALTIES AND CONTRAVENTIONS

5.1 GENERAL

In the case of any contravention of a provision of these Regulations, CAMA may take the following action:

- (a) revoke, or suspend for a specified period of time, any approval granted to a ballooning organization.
- (b) forbid the pilot in command of the balloon from flying for a specified period of time or permanently.
- (c) ground the balloon for a specified period of time.
- (d) these provisions shall be applied without prejudice to any other Yemen. law.