# PART-ARO1 (1 & 2)

## **Aviation Recreation Organization**

This new part of Jordanian Civil Aviation Regulations is hereby adopted under the authority and provisions of the Civil Aviation Law No. (41) 2007

Capt. Mohammad Amin Al-Quran

Chief Commissioner/CEO
Civil Aviation Regulatory Commission





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This new part of Jordanian Civil Aviation Regulations is hereby adopted under the authority and provisions of the Civil Aviation Law No. (41) 2007, and its amendments.

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#### Subpart- A General

#### **ARO1.000 Definitions:**

- "Aerobatic flight" An intentional maneuver involving an abrupt change in an aircraft's attitude, an abnormal attitude, or abnormal acceleration, not necessary for normal flight.
- "Aerodrome" A take off and/or landing site which meets the physical specifications required for the safe operation of a balloon.
- "Airship" A power driven lighter than air aircraft, with the exception of hot air airships, which, for the purposes of this Part, are included in the definition of balloon.
- "Approved parachute" A parachute manufactured under a type certificate or approved Technical Standard Order.
- "Automatic Activation Device" A self-contained mechanical or electromechanical device that is attached to the interior of the reserve parachute container, which automatically initiates parachute deployment of the reserve parachute at a pre-set altitude, time, percentage of terminal velocity, or combination thereof.
- "Balloon" A lighter than air aircraft that is not engine-driven and sustains flight through the use of either gas or an airborne heater. For the purposes of this part, a hot air airship, although engine driven, is also considered a balloon.
- "Basket" The container, suspended beneath the envelope, for the balloon occupants.
- "Class of balloon" A categorization of balloons taking into account the lifting means used to sustain flight.
- "Direct Supervision" A certificated rigger personally observes a non-certificated person packing a main parachute to the extent necessary to ensure that it is being done properly, and takes responsibility for that packing.
- "Drop Zone" Any pre-determined area upon which parachutists or objects land after making an intentional parachute jump or drop. The center-point target of a drop zone is expressed in nautical miles from the nearest VOR facility when 30 nautical miles or less; or from the nearest airport, town, or city depicted on the

appropriate Coast and Geodetic Survey World Aeronautical Chart, when the nearest VOR facility is more than 30 nautical miles from the drop zone.

"Envelope" The enclosure in which the lifting means is contained.

#### Flight time:

- "For airships" The total time from the moment an airship is released from the mast for the purpose of taking off until the moment the airship finally comes to rest at the end of the flight, and is secured on the mast;
- "For sailplanes" The total time from the moment the sailplane commences the ground run in the process of taking off until the moment the sailplane finally comes to a rest at the end of flight;
- "For balloons" The total time from the moment the basket leaves the ground for the purpose of taking off until the moment it finally comes to a rest at the end of the flight.
- "Foreign parachutist" A parachutist who is not a Jordanian citizen or a permanent resident in Jordan and is participating in parachute operations within Jordan using parachute equipment not manufactured in Jordan.
- "Free Balloon" An un-tethered balloon.
- "Freefall" The portion of a parachute jump or drop between aircraft exit and parachute deployment in which the parachute is activated manually by the parachutist at the parachutist's discretion or automatically, or, in the case of an object, is activated automatically.
- "Glider" A heavier-than-air A/C, that is supported in flight by the dynamic reaction of the air against its lifting surfaces and whose free flight does not depend principally on an engine.

- "Gliding Organization" The holder of an aviation recreation organization certificate issued in accordance with JCAR's, which authorizes specified privileges associated with the operation of gliders.
- "Group of balloon" A categorization of balloons taking into account the size or capacity of the envelope.
- "Hot Air Balloon" A balloon that derives its lift from heated air.
- "Light Aircraft (LA)". Single-engine piston airplanes-land or touring motor gliders (TMG) with a maximum certificated take-off mass of 2000 kg or less.
- "Main Parachute" A parachute worn as the primary parachute used or intended to be used in conjunction with a reserve parachute.
- "Manned Balloon" 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" The design maximum mass of the balloon, Less the lifting gas or air.
- "Object" Any item other than a person that descends to the surface from an aircraft in flight when a parachute is used or is intended to be used during all or part of the descent.
- "Parachute drop" The descent of an object to the surface from an aircraft in flight when a parachute is used or intended to be used during all or part of that descent.
- "Parachute jump" A parachute operation that involves the descent of one or more persons to the surface from an aircraft in flight when an aircraft is used or intended to be used during all or part of that descent.
- "Parachute operation" The performance of all activity for the purpose of, or in support of, a parachute jump or a parachute drop. This parachute operation can involve, but is not limited to, the following persons: parachutist, parachutist in command and passenger in tandem parachute operations, drop zone or owner or operator, jump master, certificated parachute rigger, or pilot.
- "Parachutist" A person who intends to exit an aircraft while in flight using a single-harness, dual parachute system to descend to the surface.

- "Parachutist in command" The person responsible for the operation and safety of a tandem parachute operation.
- "Passenger parachutist". A person who boards an aircraft, acting as other than the parachutist in command of a tandem parachute operation, with the intent of exiting the aircraft while in-flight using the forward harness of a dual harness tandem parachute system to descend to the surface.
- "Pilot chute" A small parachute used to initiate and/or accelerate deployment of a main or reserve parachute.
- "Powered sailplane. An aircraft equipped with one or more engines having, with engines inoperative, the characteristics of a sailplane.
- "Ram-air parachute" A parachute with a canopy consisting of an upper and lower surface that is inflated by ram air entering through specially designed openings in the front of the canopy to form a gliding airfoil.
- "Reserve parachute" An approved parachute worn for emergency use to be activated only upon failure of the main parachute or in any other emergency where use of the main parachute is impractical or use of the main parachute would increase risk.
- "Sailplane" A heavier than air aircraft that is supported in flight by the dynamic reaction of the air against its fixed lifting surfaces, the free flight of which does not depend on an engine.
- "Single-harness, dual parachute system" The combination of a main parachute, approved reserve parachute, and approved single person harness and dual-parachute container. This parachute system may have an operational automatic activation device installed.
- "Tandem parachute operation" A parachute operation in which more than one person simultaneously uses the same tandem parachute system while descending to the surface from an aircraft in flight.
- "Tandem parachute system" The combination of a main parachute, approved reserve parachute, and approved harness and dual parachute container, and a separate approved forward harness for a passenger parachutist. This parachute system must have an operational automatic activation device installed.
- "Tethered Balloon" A manned balloon which is tethered to the surface.

"Type rating" 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.

"Very Light Aircraft (VLA)" Airplanes with a single engine (spark or compression-ignition) having not more than two seats, with a Maximum Certificated Take-off Weight of not more than 750 kg and a stalling speed in the landing configuration of not more than 83 km/h (45 knots)(CAS), to be approved for day-VFR only.

#### ARO1.005 Applicability.

This subpart prescribes rules governing the certification and operation of aviation recreation organizations.

#### **ARO1.010 Requirement for Certificate.**

No aviation recreation organization shall administer the issue of an aviation document that is required by CARC for the certification or rating of personnel, except in accordance with the provisions of an aviation recreation organization certificate issued under this part.

#### **ARO1.015** Issue of Certificate.

An applicant is entitled to an aviation recreation organization certificate, if CARC is satisfied that:

- (a) The applicant meets the requirements of Subpart B; and
- (b) The granting of the certificate is not contrary to the interests of an aviation safety.

#### **ARO1.020** Privileges of Certificate Holder.

The holder of an aviation recreation organization certificate may:

- (a) Recommend the issuance of personnel certificates and ratings that are specified on that certificate; and,
- (b) Organize aviation events in accordance with JCAR's.

#### ARO1.025 Duration of Certificate.

- (a) An aviation recreation organization certificate may be granted or renewed for a period of up to 2 years.
- (b) An aviation recreation organization certificate remains in force until it expires, suspended or revoked.
- (c) The holder of an aviation recreation organization certificate that is revoked shall surrender this certificate to CARC.

#### ARO1.030 Approval, Amendment and Renewal of Certificate.

Application for approval, amendment and renewal of an aviation recreation organization, under this part must be made on a form as showed in appendix -1 of this section .

#### **Subpart-B**

#### **Certification Requirements**

#### **ARO1.035 Personnel Requirements.**

- (a) Each applicant for the grant of an aviation recreation organization certificate shall employ:
  - (1) A senior person identified as the Accountable Manager who has the authority within the applicant's organization to ensure that all activities undertaken by the organization can be carried out in accordance with the requirements prescribed by this subpart.
  - (2) A senior person or group of senior persons who are responsible for ensuring that the applicant's organization complies with the requirements of this subpart. Such nominated person or persons shall be ultimately responsible to the Chief Executive of ARO.
  - (3) Sufficient personnel to carry out the activities listed in the applicant's exposition.

## (b) The applicant shall:

(1) Establish procedures to assess, and to maintain, the competence of those personnel who are responsible for carrying out the activities listed in the applicant's exposition; and (2) Provide personnel with responsibilities under this rule with written authorization to fulfill those responsibilities.

#### **ARO1.040 Facility Requirements.**

Each applicant for the grant of an aviation recreation organization certificate shall ensure the provision of facilities and resources appropriate to the activities listed in the applicant's exposition.

#### ARO1.045 Documentation.

- (a) Each applicant for the grant of an aviation recreation organization certificate shall hold copies of all relevant equipment manuals, technical standards and practices, technical bulletins and instructions, legislation, and any other document that is necessary to establish procedures for the activities listed in the applicant's exposition.
- (b) The applicant shall establish a procedure to control and amend all applicable documents required by paragraph (a).

#### ARO1.050 Records.

Each applicant for the grant of an aviation recreation organization certificate shall establish procedures to identify, collect, index, store, maintain, and dispose of the records that are necessary for the activities listed in the applicant's exposition for at least 5 years.

#### **ARO1.055 Personnel Certification.**

Each applicant for the grant of an aviation recreation organization certificate for the issue of personnel certificates or ratings shall establish assessment procedures of competency of persons holding certificates or ratings satisfying the requirements of CARC.

#### **ARO1.060** Aviation Events.

All aviation events conducted within the scope of an aviation recreation organization shall be in accordance with an established set of procedures accepted by CARC.

#### **ARO1.065** Internal Quality Assurance.

- (a) An aviation recreation organization shall establish an internal quality assurance system to ensure compliance with the procedures required by this subpart.
- (b) The internal quality assurance system shall include:
  - (1) A safety policy procedures that are relevant to the organizational goals; and
  - (2) A procedure for corrective action, to ensure existing problems that have been identified within the system are corrected; and
  - (3) A procedure for preventive action, to ensure that potential causes of problems that have been identified within the system are remedied; and
  - (4) An internal audit program to audit the organization; and
- (c) The safety policy procedures shall be understood, implemented, and maintained at all levels of the organization.

#### ARO1.070 Organization Exposition.

An applicant for the grant of an aviation recreation organization certificate shall provide CARC with an exposition which shall contain, where applicable:

- (a) A statement signed by the Accountable Manager on behalf of the applicant's organization confirming that the exposition included manuals:
  - (1) Define the organization, demonstrate its means and methods for ensuring ongoing compliance with this subpart; and
  - (2) Will be enforced at all times; and
- (b) The titles and names of the senior person or persons required by this part; and
- (c) The duties and responsibilities of the senior person or persons specified in this Part, including matters for which they have responsibility to deal directly with the Director or the CARC on behalf of the organization; and
- (d) An organization chart showing lines of responsibility of the senior persons.

# **Subpart- C Operating Requirements**

#### **ARO1.075 Continued Compliance**.

Each holder of an aviation recreation organization certificate shall:

- (a) Hold at least one complete and current copy of their exposition at each principal location specified in their exposition; and
- (b) Comply with all procedures detailed in the exposition; and
- (c) Make each applicable part of their exposition available to personnel who require those parts to carry out their duties; and
- (d) Continue to meet the standards and comply with the requirements of Subpart B.

#### ARO1.080 Changes to Certificate holder's Organization.

- (a) Each holder of an aviation recreation organization certificate shall ensure that their organization exposition is amended so as to remain a current description of the holder's organization.
- (b) The certificate holder shall ensure that any amendments made to the holder's exposition meet the applicable requirements of this Part and comply with the amendment procedures contained in the holder's exposition.

#### **ARO1.085** Safety Inspections and Audits.

- (a) The holder of an aviation recreation organization certificate will be subjected to CARC's inspections and audits encompassing all holders' activities at their principal locations including facilities, documents, and records as CARC considers necessary in the interests of civil aviation safety and security.
- (b) CARC may require the holder of an aviation recreation organization certificate to provide such information as CARC considers relevant to the inspection or audit.

#### Subpart -D Moored Balloons, Kites, Unmanned Free Balloons and Manned Balloons

#### Section-1 General

#### ARO1.090 Applicability.

- (a) This subpart prescribes rules governing the operation of the following in Jordan:
  - (1) Any balloon that is moored to the surface of the earth or an object thereon and that has a diameter of more than 6 ft or a gas capacity of more than 115 cubic ft.
  - (2) Any kite that weighs more than 5 pounds and is intended to be flown at the end of a rope or cable.
  - (3) Any unmanned free balloon that:
    - (i) Carries a payload package that weighs more than four pounds and has a weight/size ratio of more than three ounces per square inch on any surface of the package, determined by dividing the total weight in ounces of the payload package by the area in square inches of its smallest surface;
    - (ii) Carries a payload package that weighs more than six pounds;
    - (iii) Carries a payload, of two or more packages, that weighs more than 12 pounds; or
    - (iv) Uses a rope or other device for suspension of the payload that requires an impact force of more than 50 pounds to separate the suspended payload from the balloon.
- (b) For the purposes of this subpart, a *gyro-glider* attached to a vehicle on the surface of the earth is considered to be a kite.

#### ARO1.095 Waivers.

No person may conduct operations that require a deviation from this part except under a certificate of waiver issued by CARC.

#### **ARO1.100** Operations in Prohibited or Restricted Areas.

No person may operate a moored balloon, kite, unmanned free balloon or manned balloon in a prohibited or restricted area unless he has permission from the using or controlling agency, as appropriate.

#### ARO1.105 Hazardous Operations.

- (a) No person may operate any moored balloon, kite, unmanned free balloon or manned balloon in a manner that creates a hazard to other persons, or their property.
- (b) No person operating any moored balloon, kite, unmanned free balloon or manned balloon may allow an object to be dropped there from, if such action creates a hazard to other persons or their property.

# Section-2 Moored Balloons and Kites

#### ARO1.110 Applicability.

This Section applies to the operation of moored balloons and kites. However, a person operating a moored balloon or kite within a restricted area must comply only with ARO1.105 and with additional limitations imposed by the using or controlling agency, as appropriate.

#### **ARO1.115** Operating Limitations.

- (a) Except as provided in paragraph (b) of this Section, no person may operate a moored balloon or kite:
  - (1) Less than 500 ft from the base of any cloud;
  - (2) More than 500 ft above the surface of the earth;
  - (3) From an area where the ground visibility is less than three miles; or

- (4) Within five miles of the boundary of any airport.
- (b) Paragraph (a) of this Section does not apply to the operation of a balloon or kite below the top of any structure and within 250 ft of it, if that shielded operation does not obscure any lighting on the structure.

#### ARO1.120 Notice Requirements.

No person may operate an unshielded moored balloon or kite more than 150 ft above the surface of the earth unless, at least 24 hrs before beginning the operation, he gives the following information to ATC facility that is nearest to the place of intended operation:

- (a) The names and addresses of the owners and operators.
- (b) The size of the balloon or the size and weight of the kite.
- (c) The location of the operation.
- (d) The height above the surface of the earth at which the balloon or kite is to be operated.
- (e) The date, time, and duration of the operation.

#### ARO1.125 Lighting and Marking Requirements.

- (a) No person may operate a moored balloon or kite, between sunset and sunrise unless the balloon or kite, and its mooring lines, are lighted so as to give a visual warning equal to that required for obstructions to air navigation in the CARC publication "Obstruction Marking and Lighting".
- (b) No person may operate a moored balloon or kite between sunrise and sunset unless its mooring lines have colored pennants or streamers attached at not more than 50 foot intervals beginning at 150 ft above the surface of the earth and visible for at least one mile.

### ARO1.130 Rapid Deflation Device.

No person may operate a moored balloon unless it has a device that will automatically and rapidly deflate the balloon if it escapes from its moorings. If the device does not function properly, the operator shall immediately notify the

nearest ATC facility of the location and time of the escape and the estimated flight path of the balloon.

# Section-3 Unmanned Free Balloons

#### ARO1.135 Applicability.

This Section applies to the operation of unmanned free balloons. However, a person operating an unmanned free balloon within a restricted area must comply only with ARO1.140(d)and(e) and with any additional limitations that are imposed by the using or controlling agency, as appropriate.

#### ARO1.140 Operating Limitations.

No person may operate an unmanned free balloon:

- (a) Unless otherwise authorized by ATC, below 2,000 ft above the surface within the lateral boundaries of the surface areas of Class B, Class C, Class D, or Class E airspace designated for an airport;
- (b) At any altitude where there are clouds or obscuring phenomena of more than five-tenths coverage;
- (c) At any altitude below 60,000ft standard pressure altitude where the horizontal visibility is less than 5 miles;
- (d) During the first 1,000 ft of ascent, over a congested area of a city, town, or settlement; or
- (e) In such a manner that impact of the balloon or part thereof including its payload, with the surface creates a hazard to persons or property.

#### ARO1.145 Equipment and Marking Requirements.

- (a) No person may operate an unmanned free balloon unless:
  - (1) It is equipped with at least two payload cut-down systems or devices that operate independently of each other;
  - (2) At least two methods, systems, devices, or combinations thereof, that function independently of each other, are employed for terminating the flight of the balloon envelope; and

(3) The balloon envelope is equipped with a radar reflective device(s) or material that will present an echo to surface radar operating in the 200 MHz to 2700 MHz frequency range.

The operator shall activate the appropriate devices required by paragraphs (a) (1) and (2) of this Section when weather conditions are less than those prescribed for operation under this subpart, or if a malfunction or any other reason makes the further operation hazardous to other air traffic or to persons and property on the surface.

(b) No person may operate an unmanned free balloon below 60,000 ft standard pressure altitude between sunset and sunrise (as corrected to the altitude of operation) unless the balloon and its

attachments and payload, whether or not they become separated during the operation, are equipped with lights that are visible for at least 5 miles and have a flash frequency of at least 40, and not more than 100, cycles per minute.

- (c) No person may operate an unmanned free balloon that is equipped with a trailing antenna that requires an impact force of more than 50 pounds to break it at any point, unless the antenna has colored pennants or streamers that are attached at not more than 50 foot intervals and that are visible for at least one mile.
- (d) No person may operate between sunrise and sunset an unmanned free balloon that is equipped with a suspension device (other than a highly conspicuously colored open parachute) more than 50 ft along, unless the suspension device is colored in alternate bands of high conspicuity colors or has colored pennants or streamers attached which are visible for at least one mile.

## **ARO1.150 Notice Requirements.**

- (a) Prelaunch Notice: Except as provided in paragraph (b) of this Section, no person may operate an unmanned free balloon unless, within 6 to 24 hrs before beginning the operation, he gives the following information to the ATC facility that is nearest to the place of intended operation:
  - (1) The balloon identification.
  - (2) The estimated date and time of launching, amended as necessary to remain within plus or minus 30 minutes.
  - (3) The location of the launching site.

- (4) The cruising altitude.
- (5) The forecast trajectory and estimated time to cruising altitude or 60,000ft standard pressure altitude, whichever is lower.
- (6) The length and diameter of the balloon, length of the suspension device, weight of the payload, and length of the trailing antenna.
- (7) The duration of flight.
- (8) The forecast time and location of impact with the surface of the earth.
- (b) For solar or cosmic disturbance investigations involving a critical time element, the information in paragraph (a) of this Section shall be given within 30 minutes to 24 hrs before beginning the operation.
- (c) Cancellation notice: If the operation is canceled, the person who intended to conduct the operation shall immediately notify the nearest ATC facility.
- (d) Launch notice: Each person operating an unmanned free balloon shall notify the nearest CARC or military ATC facility of the launch time immediately after the balloon is launched.

#### **ARO1.155 Balloon Position Reports.**

- (a) Each person operating an unmanned free balloon shall:
  - (1) Unless ATC requires otherwise, monitor the course of the balloon and record its position at least every two hrs; and
  - (2) Forward any balloon position reports requested by ATC.
- (b) One hr before beginning descent, each person operating an unmanned free balloon shall forward to the nearest ATC facility the following information regarding the balloon:
  - (1) The current geographical position.
  - (2) The altitude.
  - (3) The forecast time of penetration of 60,000 ft standard pressure altitude (if applicable).

- (4) The forecast trajectory for the balance of the flight.
- (5) The forecast time and location of impact with the surface of the earth.
- (c) If a balloon position report is not recorded for any two-hr period of flight, the person operating an unmanned free balloon shall immediately notify the nearest ATC facility. The notice shall include the last recorded position and any revision of the forecast trajectory. The nearest ATC facility shall be notified immediately when tracking of the balloon is re-established.
- (d) Each person operating an unmanned free balloon shall notify the nearest ATC facility when the operation is ended.

# Section-4 **Manned Ballooning**

#### ARO1.160 Applicability.

- (a) Ballooning operations within Jordan shall be conducted in accordance with the regulations set forth in this Section.
- (b) This Section prescribes rules governing the operation of manned balloons by an organization or operator approved by CARC.
- (c) For the purposes of this Section, a balloon is an aircraft, which is capable of free flight, but may be tethered, that:
  - (1) Is used or intended to be used for manned operation in the air; and
  - (2) Is used or intended to be used for recreation or sport purposes; or
  - (3) Is used or intended to be used on commercial operations under an Air Operator's Certificate.

#### **ARO1.165 Hazardous Operations.**

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

#### **ARO1.170 Daylight Operations.**

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

#### ARO1.175 Operations Near other Aircraft; Right of Way Rules.

- (a) Balloons shall have right of way from other powered aircraft, gliders and airships.
- (b) A balloon shall not be operated in such proximity to other aircraft as to create a collision hazard.
- (c) 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.

#### ARO1.180 Operations over Congested Areas.

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

#### ARO1.185 Operations in Controlled Airspace.

No person may operate a balloon within Controlled Airspace, unless that person has prior authorization 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 License issued by CARC.

## ARO1.190 Operations in Prohibited, Restricted or Danger Areas.

- (a) No person may operate a balloon in a prohibited area at any time.
- (b) 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.

#### ARO1.195 Height Limitations.

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

#### ARO1.200 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 ft above ground level, and a minimum visibility of 3 kilometers.

#### ARO1.205 Operations over Water.

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

#### ARO1.210 Other Requirements.

- (a) Liquor and Drugs. No person may operate as pilot in command of a balloon if that person has consumed alcohol within the preceding 12 hrs, 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.
- (b) Exception to Operating Requirements. A person, who wishes to pilot a balloon otherwise than in accordance with the operating rules set out in this section, or in accordance with the Organization's Operations Manual, shall apply to CARC 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). CARC may approve the application and may specify conditions of the approval. Any such conditions shall be complied with.

#### ARO1.215 Pilot in Command Responsibilities.

- (a) 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.
- (b) 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.
- (c) Before commencing a flight, the pilot in command of a balloon operating under this Section shall take all reasonable steps to ensure that:
  - (1) The balloon has a valid Flight Permit and insurance and is in compliance with the manufacturer's specifications;

- (2) The maintenance log book has been inspected;
- (3) 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;
- (4) All instruments and equipment required for the flight are securely fitted to, or provided in the balloon, are functioning properly, and are adjusted correctly;
- (5) The balloon is carrying enough fuel for the flight, including allowance for any possible alternative course which may be required;
- (6) A load sheet has been prepared;
- (7) Any passenger is given adequate information in regard to any emergency procedures and emergency equipment used in conjunction with the balloon;
- (8) All ground-handling personnel are appropriately trained.
- (9) The launch and landing areas are suitable.

#### ARO1.220 Aerodromes.

- (a) The use of an aerodrome does not confer any rights under Jordanian Civil Aviation Law and the pilot should take all reasonable steps to ensure approval is granted from the owner of the site before operating.
- (b) The pilot in command of a balloon, which is subject to this Section, shall not permit the balloon to take off from, or land at, an aerodrome unless:
  - (1) The site, is suitable for the taking off and/or landing of the balloon; and
  - (2) The balloon can take off and/or land safely, having regard to the prevailing surface and weather conditions, and any other relevant circumstances.
- (c) 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.

#### ARO1.225 Refueling.

- (a) The organization or pilot in command, or any other person refueling 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.
- (b) Any person refueling a balloon shall do so in accordance with established safe practices and requirements for handling of flammable substances.

#### ARO1.230 Damage and Defects.

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

#### ARO1.235 Maintenance Log Books.

- (a) The owner of a balloon shall maintain a current maintenance log book indicating:
  - (1) Balloon type and model;
  - (2) Registration;
  - (3) Identifying marks and colors;
  - (4) Year of manufacture;

- (5) Modifications to basic balloon basket and envelope;
- (6) Flight hrs; and
- (7) Damage, defects and repairs carried out.
- (b) The maintenance log book shall include copies of the:
  - (1) Fight Permit; and
  - (2) Manufacturer's specifications and pilot operating handbook.

#### ARO1.240 Foreign Registered Balloons.

A foreign registered balloon may be approved to operate in Jordan by CARC 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.

#### **ARO1.245 Operations Manual.**

- (a) An operator/organization shall be required to have a CARC approved Operations Manual.
- (b) An operator/organization shall provide CARC 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 CARC may require.
- (c) 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.
- (d) Every person provided with an Operations Manual shall keep it up-to-date with amendments or revisions supplied by the operator.
- (e) Each crew member shall have readily available during flight a copy of those parts of the Operations Manual that relate to his duties.

#### ARO1.250 Penalties and Contraventions.

In the case of any contravention of a provision of these Regulations, CARC 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 Jordanian law.

#### Subpart- E Ultra light & Micro light Operations

#### ARO1.255 Applicability.

- (a) This subpart prescribes rules governing the operation of ultra-light and micro-light aircraft in Jordan by an organization approved by CARC.
- (b) For the purposes of this subpart, an ultra-light aircraft is neither an aircraft which is not tethered nor a balloon, that:
  - (1) Is used or intended to be used for manned operation in the air;
  - (2) Is used or intended to be used for recreation or sport purposes only;
  - (3) If unpowered, weighs less than 70 kg (155 lb); or
  - (4) If powered:
    - (i) Weighs less than 115 kg (254 LB) empty weight, excluding floats and safety devices which are intended for deployment in a potentially catastrophic situation;
    - (ii) Has a fuel capacity not exceeding 19 liters (5 U.S. gallons);
    - (iii) Is not capable of more than 55 knots calibrated airspeed at full

power in level flight; and

- (iv) Has a power off stall speed which does not exceed 24 knots calibrated airspeed.
- (c) For the purposes of this subpart, a micro-light aircraft is neither an aircraft, which is not tethered nor a balloon, that:
  - (1) Is used or intended to be used for manned operation in the air;
  - (2) Is used or intended to be used for recreation or sport purposes only;
  - (3) Has no more than two seats and, unless otherwise authorized by CARC, a maximum take-off weight (MTOW), excluding floats and safety devices which are intended for deployment in a potentially catastrophic situation, of no more than;
    - (i) 300kg (661 LB) for a single seat landplane;
    - (ii) 330kg (727 LB) for a single seat floatplane or amphibian;
    - (iii) 450kg (991 LB) for a two seat landplane;
    - (iv) 495kg(1091 LB) for a two seat floatplane or amphibian, provided that a micro-light aircraft capable of operating as both a floatplane and a landplane weights less than the appropriate MTOW limit;
    - (v) Is not capable of more than 75 knots calibrated airspeed at full power in level flight; and
    - (vi) Has a power off stall speed which does not exceed 35.1 knots calibrated airspeed.

#### **ARO1.260 Operating Rules.**

- (a) No person may operate an ultra-light or micro-light aircraft unless under the direct control of CARC approved organization and in accordance with the Operations Manual of that organization.
- (b) The minimum age to fly as pilot in command is 18 years.

(c) No organization shall conduct an ultra-light or micro-light operation without the approval of CARC.

#### **ARO1.265 Hazardous Operations**

- (a) No person may operate any ultra-light or micro-light aircraft in a manner that creates a hazard to other persons or property.
- (b) No person may allow an object to be dropped from an ultra-light or micro-light aircraft if such action creates a hazard to other persons or property.
- (c) No person may conduct aerobatic maneuvers in an ultra-light or micro-light aircraft.
- (d) No person may operate in formation with another aircraft.
- (e) No person shall take off or land over buildings, roads in use and gatherings of persons.

#### ARO1.270 Daylight Operations.

No person may operate an ultra-light or micro-light aircraft except between the hrs of sunrise and sunset.

#### ARO1.275 Operations Near other Aircraft; Right of Way Rules.

- (a) When weather conditions permit, vigilance shall be maintained by each person operating an aircraft so as to see and avoid other aircraft. When a rule of this subpart gives another aircraft the right of way, the pilot shall give way to that aircraft and may not pass over, under, or ahead of it, unless well clear and takes into account the effects of wake turbulence.
  - (1) An aircraft in distress has the right of way over all other air traffic.
  - (2) All aircraft shall give way to parachutists.
  - (3) Powered aircraft shall give way to unpowered aircraft.

#### (b) Airborne Operations:

(1) Converging. When aircraft are converging at approximately the same altitude (except head-on, or nearly so), the aircraft to the other's right has

the right of way.

- (2) Approaching Head-on. When aircraft are approaching each other head-on, or nearly so, each pilot of each aircraft shall alter course to the right.
- (3) Overtaking. An aircraft which is being overtaken by another aircraft shall have the right of way and the overtaking aircraft shall keep well clear of the other aircraft.
- (4) Landing. An aircraft, while on final approach to land, or while landing, have the right of way over other aircraft in flight or operating on the surface. When two or more aircraft are approaching an aerodrome for the purpose of landing, the aircraft at the lower altitude has the right of way, but it shall not take advantage of this rule to cut in front of another which is on final approach to land, or to overtake that aircraft.
- (5) Taking Off. An aircraft taxing on the maneuvering area of an aerodrome shall give way to aircraft taking off or about to take off.

#### (c) Ground Operations:

In case of danger of collision between two aircraft taxiing on the movement area of an aerodrome the following shall apply:

- (1) Converging. When two aircraft are on converging course, the one which has the other on its right shall give way.
- (2) Approaching Head-on. When two aircraft are approaching head-on, or Approximately so, each shall stop or where practicable alter its course to the right so as to keep well clear.
- (3) Overtaking. An aircraft which is being overtaken by another aircraft shall have the right of way and the overtaking aircraft shall keep well clear of the other aircraft.

#### (d) Water Operations:

(1) General. When two aircraft or an aircraft and a vessel are approaching one another and there is a risk of collision, the aircraft shall proceed with careful regard to existing circumstances and conditions including the limitations of the respective craft.

- (2) Converging. An aircraft which has another aircraft or a vessel on its right shall give way so as to keep well clear.
- (3) Approaching Head-on. An aircraft approaching another aircraft or a vessel head-on, or approximately so, shall alter its heading to the right to keep well clear.
- (4) Overtaking. An aircraft or vessel which is being overtaken has the right of way, and the one overtaking shall alter its heading to keep well clear.
- (5) Landing and Taking off. Aircraft landing on or taking off from the water shall, in so far as practicable, keep well clear of all vessels and avoid impeding their navigation.

#### ARO1.280 Operations over Congested Areas.

No person may operate an ultra-light or micro-light aircraft over any congested area of a city, town, or settlement, or over any open air assembly of persons.

#### ARO1.285 Operations in Controlled Airspace.

No person may operate an ultra-light or micro-light aircraft within Controlled Airspace, unless that person has prior authorization from the ATS facility having jurisdiction over that airspace and the aircraft has appropriate two way communications equipment and a Mode C transponder. The pilot shall hold a valid Radio Telephone Operator's License issued by CARC.

#### ARO1.290 Operations in Prohibited, Restricted or Danger Areas.

- (a) No person may operate an ultra-light or micro-light aircraft in prohibited areas at any time.
- (b) No person may operate an ultra-light or micro-light aircraft within a restricted area or danger area unless the controlling agency of the area concerned has authorized that operation.

#### ARO1.295 Height Limitations.

- (a) No person may fly below 500 ft above ground level unless taking off or landing except within the confines of a CARC approved training area.
- (b) No person may fly above 2000 ft above ground level, or above 3000 ft AMSL, whichever is lower.

#### ARO1.300 Visual Reference with the Surface.

No person may operate an ultra-light or micro-light aircraft except by visual reference with the surface.

#### **ARO1.305 Operations over Water.**

No person may operate beyond gliding distance from land unless the aircraft is fitted with flotation equipment and the occupants are wearing life jackets and only then in sight of land.

#### ARO1.310 Flight Visibility and Cloud Clearance Requirements.

No person may operate an ultra-light or micro-light aircraft except clear of clouds, in sight of the surface and the flight visibility is greater than 1500 meters. At authorized aerodromes the flight visibility shall be 5000 meters. If specifically authorized by CARC to operate within controlled airspace, the flight visibility shall be not less than 5000 meters, with a minimum distance from cloud of 1500 meters horizontally and 300 meters vertically.

#### ARO1.315 Liquor and Drugs.

No person may operate as pilot in command of an aircraft if that person has consumed alcohol within the preceding 12 hrs, 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.

# **ARO1.320** Exception to Operating Requirements.

A person who wishes to pilot an aircraft otherwise than in accordance with the operating rules set out in this subpart, or in accordance with the organization's Operations Manual, may apply to CARC 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). CARC may approve the application and may specify conditions of the approval. Any such conditions must be complied with.

# ARO1.325 Pilot in Command Responsibilities.

(a) No person shall operate an aircraft 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 an aircraft is directly responsible for, and is the final authority as to, the operation of that aircraft.

- (b) Safety of Aircraft. If a pilot in command of an aircraft becomes aware of a defect in an aircraft, aviation facility or service that may endanger safety, he or she must report the matter to the organization.
- (c) Planning of Flight. Before commencing a flight, the pilot in command of an aircraft operating under this Section must take all reasonable steps to ensure that:
  - (1) The aircraft has a valid Flight Permit and insurance and is in compliance with the manufacturer's specifications;
  - (2) The maintenance log book has been inspected;
  - (3) The aircraft's flight performance will enable the aircraft to undertake the flight with safety having regard to the prevailing weather conditions, terrain, navigation, the available aerodrome and the aircraft's gross weight and load distribution;
  - (4) All instruments and equipment required for the flight are securely fitted to, or provided in the aircraft, are functioning properly, and are adjusted correctly;
  - (5) The aircraft is carrying enough fuel and engine lubricating oil for the flight, including allowance for any possible alternative course which may be required;
  - (6) If the aircraft has an internal combustion engine, prior to the first flight of each day and after refueling, the fuel system is checked for the presence of undisclosed water and such steps are taken to remove any water detected;
  - (7) All seat belts or safety harnesses are worn during flight;
  - (8) Any passenger is given adequate information in regard to any emergency procedures and emergency equipment used in conjunction with the aircraft; and
  - (9) Where dual controls are fitted, any passenger is given a briefing on the operation of the aircraft's flight controls so that control is not impeded.
- (d) Aerodromes. The use of an aerodrome does not confer any rights under Jordanian Civil Aviation Law and the pilot should take all reasonable steps to ensure approval is granted from the owner of the site before operating. The pilot in command of an aircraft, which is subject to this subpart, must not permit the

aircraft to take off from, or land at, an aerodrome unless:

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

#### (e) Refueling:

- (1) The organization or pilot in command, or any other person refueling an aircraft, must ensure that the correct grade of fuel, as specified by the aircraft or engine manufacturer or in approved documents, is used when replenishing the fuel in an aircraft.
- (2) Any person refueling an aircraft must do so in accordance with established safe practices and requirements for handling of flammable substances.

### ARO1.330 Aircraft Serviceability Requirements.

No person may operate an ultra-light or micro-light aircraft unless he/she:

- (a) Displays approved registration markings;
- (b) Has been inspected and certified fit to fly by a CARC approved and qualified representative of the organization within the previous 12 months;
- (c) Has a valid flight license, issued by CARC;
- (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.

# ARO1.335 Damage and Defects.

- (a) The pilot in command of an ultra-light or micro-light aircraft shall report any damage or defects affecting safety of flight to the organization.
- (b) The pilot in command shall ensure that an entry is made in the maintenance log book describing the damage or defect.
- (c) The owner of an ultra-light or micro-light aircraft shall not permit the aircraft

- to be flown if not airworthy or not in compliance with manufacturer's specifications.
- (d)The organization shall not permit a member to operate an ultra-light or micro-light aircraft if it is not considered airworthy or not in compliance with manufacturer's specifications.
- (e) The organization, once aware of, or advised of any damage or defect, shall ensure an entry is made in the maintenance log book.
- (f) Any damage or defect shall be endorsed in the maintenance log book once repaired and declared serviceable for flight.

### **ARO1.340** Maintenance Log Books.

- (a) The owner of an ultra-light or micro-light aircraft shall maintain a current maintenance log book indicating:
  - (1) Aircraft type and model;
  - (2) Registration;
  - (3) Identifying marks and colors;
  - (4) Year of manufacture;
  - (5) Modifications to basic aircraft;
  - (6) Flight/engine hrs; and
  - (7) Damage, defects and repairs carried out.
- (b) The maintenance log book shall include copies of the:
  - (1) Fight permit; and
  - (2) Manufacturer's specifications and pilot operating handbook.

# ARO1.345 Foreign Registered Aircraft.

A foreign registered ultra-light or micro-light aircraft may be approved to operate in the Jordan by CARC 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.

#### ARO1.350 Penalties and Contraventions.

In the case of any contravention of a provision of these Regulations, CARC shall take the following action:

- (a) Revoke, or suspend for a specified period of time, any approval granted to an ultra-light or micro-light organization.
- (b) Forbid the pilot in command of the ultra-light or micro-light aircraft from flying for a specified period of time or permanently.
- (c) Ground the aircraft for a specified period of time.
- (d) These provisions shall be applied without prejudice to any other Jordanian law.

# **Subpart-F Parachute Operations**

#### ARO1.355 Applicability.

- (a) Except as provided in paragraphs (b) and (c) of this subpart, this subpart prescribes rules governing parachute operations conducted in Jordan.
- (b) This part does not apply to a parachute operation conducted:
  - (1) In response to an in-flight emergency, or
  - (2) To meet an emergency on the surface when it is conducted at the direction or with the approval of an agency of Jordan.
- (c) This subpart does not apply to a parachute operation conducted by a member of Armed Forces:
  - (1) Over or within a restricted area when that area is under the control of an Armed Force.
  - (2) During military operations in uncontrolled airspace.

#### ARO1.360 General.

No person may conduct a parachute operation, and no pilot in command of an aircraft may allow a parachute operation to be conducted from an aircraft, if that operation creates a hazard to air traffic or to persons or property on the surface.

#### ARO1.365 Use of Alcohol and Drugs.

No person may conduct a parachute operation, and no pilot in command of an aircraft may allow a person to conduct a parachute operation from that aircraft, if that person is or appears to be under the influence of:

- (a) Alcohol, or
- (b) Any drug that affects that person's ability in any way contrary to safety.

#### ARO1.370 Inspections.

CARC may inspect any parachute operation to which this part applies (including inspections at the site where the parachute operation is being conducted) to determine compliance with the regulations of this part.

#### **ARO1.375** Radio Equipment and use Requirements.

- (a) Except when otherwise authorized by air traffic control:
  - (1) No person may conduct a parachute operation, and no pilot in command of an aircraft may allow a parachute operation to be conducted from that aircraft, in or into controlled airspace unless, during that flight:
    - (i) The aircraft is equipped with a functioning two-way radio communication system appropriate to the air traffic control facilities being used; and
    - (ii) Radio communications have been established between the aircraft and the air traffic control facility having jurisdiction over the affected airspace of the first intended exit altitude at least 5 minutes before the parachute operation begins. The pilot in command must establish radio communications to receive information regarding air traffic activity in the vicinity of the parachute operation.
  - (2) The pilot in command of an aircraft used for any parachute operation in or into controlled airspace must, during each flight:

- (i) Continuously monitor the appropriate frequency of the aircraft's radio communications system from the time radio communications are first established between the aircraft and air traffic control, until the pilot advises air traffic control that the parachute operation has ended for that flight.
- (ii) Advise air traffic control when the last parachutist or object leaves the aircraft.
- (b) Parachute operations must be aborted if, prior to receipt of a required air traffic control authorization, or during any parachute operation in or into controlled airspace, the required radio communications system is or becomes inoperative.

# ARO1.380 Information required and notice of Cancellation or Postponement of a Parachute Operation.

- (a) Each person requesting an authorization under ARO1.395 (b) and ARO1.405
- (a) (2) of this subpart and each person submitting a notification under ARO1.405
- (a) (3) of this part must provide the following information (on an individual or group basis):
  - (1) The date and time the parachute operation will begin.
  - (2) The radius of the drop zone ARO1und the target expressed in nautical miles.
  - (3) The location of the center of the drop zone in relation to:
    - (i) The nearest VOR facility in terms of the VOR radial on which it is located and its distance in nautical miles from the VOR facility when that facility is 30 nautical miles or less from the drop zone target; or
    - (ii) The nearest airport, town, or city depicted on the appropriate Coast and Geodetic Survey World Aeronautical Chart, when the nearest VOR facility is more than 30 nautical miles from the drop zone target.
  - (4) Each altitude above mean sea level at which the aircraft will be operated when parachutists or objects exit the aircraft.
  - (5) The duration of the intended parachute operation.

- (6) The name, address, and telephone number of the person who requests the authorization or gives notice of the parachute operation.
- (7) The registration number of the aircraft to be used.
- (8) The name of the air traffic control facility with jurisdiction of the airspace at the first intended exit altitude to be used for the parachute operation.
- (b) Each holder of a certificate of authorization issued under ARO1.395 (b) and ARO1.405 (b) of this subpart must present that certificate for inspection upon the request of CARC.
- (c) Each person requesting an authorization under ARO1.395 (b) and ARO1.405
- (a) (2) of this subpart and each person submitting a notice under ARO1.405 (a)
- (3) of this subpart must promptly notify the air traffic control facility having jurisdiction over the affected airspace if the proposed or scheduled parachute operation is canceled or postponed.

# ARO1.385 Flight Visibility and Clearance from Cloud Requirements.

No person may conduct a parachute operation, and no pilot in command of an aircraft may allow a parachute operation to be conducted from that aircraft:

- (a) Into or through a cloud, or
- (b) When the flight visibility or the distance from any cloud is less than that prescribed in the following table:

Altitude	Flight Visibility (KM)	Distance from clouds
1200 ft or less above the surface regardless of the MSL altitude horizontal	5	500 ft below, 1000 ft above, 2000 ft.
More than 1200 ft above the surface but less than 10000 ft MSL.	5	500 ft below, 1000 ft above, 2000 ft horizontal.
More than 1200 ft above the surface and at or above 10000 ft MSL.	8	1000 ft below, 1000 ft above, 1 mile horizontal

#### ARO1.390 Parachute Operations between Sunset and Sunrise.

- (a) No person may conduct a parachute operation, and no pilot in command of an aircraft may allow a person to conduct a parachute operation from an aircraft between sunset and sunrise, unless the person or object descending from the aircraft displays a light that is visible for at least 3 statute miles.
- (b) The light required by paragraph (a) of this Section must be displayed from the time that the person or object is under a properly functioning open parachute until that person or object reaches the surface.

# ARO1.395 Parachute Operations over or into a Congested Area or an Open-Air Assembly of Persons.

- (a) No person may conduct a parachute operation, and no pilot in command of an aircraft may allow a parachute operation to be conducted from that aircraft, over or into a congested area of a city, town, or settlement, or an open-air assembly of persons unless a certificate of authorization for that parachute operation has been issued under this Section. However, a parachutist may drift over a congested area or an open-air assembly of persons with a fully deployed and properly functioning parachute if that parachutist is at a sufficient altitude to avoid creating a hazard to persons or property on the surface.
- (b) An application for a certificate of authorization issued under this Section must:
  - (1) Be made in the form and manner prescribed by CARC, and
  - (2) Contain the information required in ARO1.380 (a) of this subpart.

- (c) Each holder of, and each person named as a participant in a certificate of authorization issued under this Section must comply with all requirements contained in the certificate of authorization.
- (d) Each holder of a certificate of authorization issued under this Section must present that certificate for inspection upon the request of CARC.

#### ARO1.400 Parachute Operations over or onto Airports.

No person may conduct a parachute operation, and no pilot in command of an aircraft may allow a parachute operation to be conducted from that aircraft, over or onto any airport unless:

- (a) For airports with an operating control tower:
  - (1) Prior approval has been obtained from the management of the airport to conduct parachute operations over or on to that airport.
  - (2) Approval has been obtained from the control tower to conduct parachute operations over or onto that airport.
  - (3) Two-way radio communications are maintained between the pilot of the aircraft involved in the parachute operation and the control tower of the airport over or onto which the parachute operation is being conducted.
- (b) For airports without an operating control tower, prior approval has been obtained from the management of the airport to conduct parachute operations over or on to that airport.
- (c) A parachutist may drift over that airport with a fully deployed and properly functioning parachute if the parachutist is at least 2,000 ft (600 meters) above that airport's traffic pattern, and avoids creating a hazard to air traffic or to persons and property on the ground.

# **ARO1.405** Parachute Operations in Designated Airspace.

- (a) No person may conduct a parachute operation, and no pilot in command of an aircraft may allow a parachute operation to be conducted from that aircraft:
  - (1) Over or within a restricted area or prohibited area unless the controlling agency of the area concerned has authorized that parachute operation;

- (2) Within or into a Class A, , C airspace area without, or in violation of the requirements of, an air traffic control authorization issued under this Section;
- (3) Except as provided in paragraph (c) and (d) of this Section, within or into class G airspace area unless the air traffic control facility having jurisdiction over the airspace at the first intended exit altitude is notified of the parachute operation no earlier than 24 hrs before or no later than 1 hr before the parachute operation begins.
- (b) Each request for a parachute operation authorization or notification required under this Section must be submitted to the air traffic control facility having jurisdiction over the airspace at the first intended exit altitude and must include the information prescribed by ARO1.380 (a) of this subpart.
- (c) For the purposes of paragraph (a)(3) of this Section, air traffic control facilities may accept a written notification from an organization that conducts parachute operations and lists the scheduled series of parachute operations to be conducted over a stated period of time not longer than 12 calendar months. The notification must contain the information prescribed by ARO1.380 (a) of this subpart, identify the responsible persons associated with that parachute operation, and be submitted at least 15 days, but not more than 30 days, before the parachute operation begins. The CARC may revoke the acceptance of the notification for any failure of the organization conducting the parachute operations to comply with its requirements.
- (d) Paragraph (a)(3) of this subpart does not apply to a parachute operation conducted by a member of an Armed Forces within a restricted area that extends upward from the surface when that area is under the control of an Armed Forces.

# ARO1.410 Use of Single-harness, Dual-parachute Systems.

No person may conduct a parachute operation using a single-harness, dual-parachute system, and no pilot in command of an aircraft may allow any person to conduct a parachute operation from that aircraft using a single-harness, dual-parachute system, unless that system has at least one main parachute, one approved reserve parachute, and one approved single person harness and container that are packed as follows:

(a) The main parachute must have been packed within 120 days before the date of its use of a certificated parachute rigger, the person making the next jump with that parachute, or a non-certificated person under the direct supervision of a certification parachute rigger.

- (b) The reserve parachute must have been packed by a certificated parachute rigger:
  - (1) Within 120 days before the date of its use, if its canopy, shroud, and harness are composed exclusively of nylon, rayon, or similar synthetic fiber or material that is substantially resistant to damage from mold, mildew, and other fungi, and other rotting agents propagated in a moist environment; or
  - (2) Within 60 days before the date of its use, if it is composed of any amount of silk, pongee, or other natural fiber, or material not specified in paragraph (b)(1) of this subpart.
- (c) If installed, the automatic activation device must be maintained in accordance with manufacturer instructions for that automatic activation device.

## **ARO1.415** Use of Tandem Parachute Systems.

- (a) No person may conduct a parachute operation using a tandem parachute system, and no pilot in command of an aircraft may allow any person to conduct a parachute operation from that aircraft using a tandem parachute system, unless:
  - (1) One of the parachutists using the tandem parachute system is the parachutist in command, and meets the following requirements:
    - (i) Has a minimum of 3 years of experience in parachuting, and must provide documentation that the parachutist:
    - (ii) Has completed a minimum of 500 freefall parachute jumps using a ram-air parachute, and
    - (iii) Holds a master parachute license issued by an organization recognized by the CARC, and
    - (iv) Has successfully completed a tandem instructor course given by the manufacturer of the tandem parachute system used in the parachute operation or a course acceptable to CARC.
    - (v) Has been certified by the appropriate parachute manufacturer or tandem course provider as being properly trained on the use of the specific tandem parachute system to be used.

- (2) The person acting as parachutist in command:
  - (i) Has briefed the passenger parachutist before boarding the aircraft. The briefing must include the procedures to be used in case of an emergency with the aircraft or after exiting the aircraft, while preparing to exit and exiting the aircraft, freefall, operating the parachute after freefall, landing approach, and landing.
  - (ii) Uses the harness position prescribed by the manufacturer of the tandem parachute equipment.
- (b) No person may make a parachute jump with a tandem parachute system unless:
  - (1) The main parachute has been packed by a certificated parachute rigger, the parachutist in command making the next jump with that parachute, or a person under the direct supervision of a certificated parachute rigger.
  - (2) The reserve parachute has been packed by a certificated parachute rigger in accordance with ARO1.410 (b) of this subpart.
  - (3) The tandem parachute system contains an operational automatic activation device for the reserve parachute, approved by the manufacturer of that tandem parachute system. The device must:
    - (i) Have been maintained in accordance with manufacturer instructions, and
    - (ii) Be armed during each tandem parachute operation.
  - (4) The passenger parachutist is provided with a manual main parachute activation device and instructed on the use of that device, if required by the owner/operator.
  - (5) The main parachute is equipped with a single-point release system.
  - (6)The reserve parachute meets approved Technical Standard specifications.

#### ARO1.420 Use of Static Lines.

(a) Except as provided in paragraph (c) of this subpart, no person may conduct a parachute operation using a static line attached to the aircraft and the main parachute unless an assist device, described and attached as follows, is used to

aid the pilot chute in performing its function, or, if no pilot chute is used, to aid in the direct deployment of the main parachute canopy. The assist device must:

- (1) Be long enough to allow the main parachute container to open before a load is placed on the device.
- (2) Have static load strength of:
  - (i) At least 28 pounds (12.7 kg) but not more than 160 pounds (73 kg) if it is used to aid the pilot chute in performing its function; or
  - (ii) At least 56 pounds (25.5 kg) but not more than 320 pounds (145 kg) if it is used to aid in the direct deployment of the main parachute canopy; and;

#### (3) Be attached as follows:

- (i) At one end, to the static line above the static-line pins or, if static-line pins are not used, above the static-line ties to the parachute cone.
- (ii) At the other end, to the pilot chute apex, bridle cord, or bridle loop, or, if no pilot chute is used, to the main parachute canopy.
- (b) No person may attach an assist device required by paragraph (a) of this subpart to any main parachute unless that person is a certificated parachute rigger or that person makes the next parachute jump with that parachute.
- (c) An assist device is not required for parachute operations using direct-deployed, ram-air parachutes.

# ARO1.425 Foreign Parachutists and Equipment.

- (a) No person may conduct a parachute operation, and no pilot in command of an aircraft may allow a parachute operation to be conducted from that aircraft with an unapproved foreign parachute system unless:
  - (1) The parachute system is worn by a foreign parachutist who is the owner of that system.
  - (2) The parachute system is of a single-harness dual parachute type.

- (3) The parachute system meets the civil aviation authority requirements of the foreign parachutist's country.
- (4) All foreign non-approved parachutes deployed by a foreign parachutist during a parachute operation conducted under this Section shall be packed as follows:
  - (i) The main parachute must be packed by the foreign parachutist making the next parachute jump with that parachute, a certificated parachute rigger, or any other person acceptable to CARC.
  - (ii) The reserve parachute must be packed in accordance with the foreign parachutist's civil aviation authority requirements, by a certificated parachute rigger, or any other person acceptable to CARC.

# Subpart- G Gliders Operating Rules

#### ARO1.430 Applicability.

- (a) This Subpart prescribes rules for the operation of gliders.
- (b) This Subpart does not apply to hang gliders.

# ARO1.435 Towing Gliders.

- (a) No person shall tow a glider or gliders in flight unless that person holds a glider tow rating issued by a gliding organization.
- (b) The holder of a current private pilot license may act, but not for remuneration, as pilot in command or as a co-pilot of an A/C that is operated for hire or reward to tow a glider in flight, but only if the operation is under the direct control of a gliding organization
- (c) No person shall tow a glider or gliders in flight unless:
  - (1) The A/C used for towing is operated at airspeeds below the maximum airspeed specified for aero-tow in the glider flight manual; and
  - (2) The towing load does not exceed the maximum load specified in the A/C flight manual; and

- (3) That person has checked the operation of the tow hook of the A/C to be used prior to flight; and
- (4) that person uses the take-off, glider release, airspeed, and emergency signals established by a gliding organization; and
- (5) The take-off distance to clear a 50 ft obstacle with the glider, or gliders in tow does not exceed 85% of the take-off run available; and
- (6) The A/C is capable of maintaining a rate of climb of at least 200 ft per minute at 1000 ft above the aerodrome with the glider, or gliders in tow.
- (d) No person shall operate an A/C to tow a glider, or gliders in flight, unless:
  - (1) The A/C to be used is equipped with:
    - (i) A tow hook and attachment assembly; and
    - (ii) A pilot-activated quick-release capable of releasing the tow rope with loads of up to 450 kg in any direction on the tow hook; and
  - (2) The tow line to be used meets the requirements of Appendix 2 to ARO1.435; and
  - (3) If more than one glider is being towed, the tow lines to be used are:
    - (i) One for each glider; and
    - (ii) Of a length that provides a distance of not less than 50 m between any glider and the towing A/C; and
    - (iii) Of a length that provides a trailing separation of not less than 30 m between each glider; and
    - (iv) Attached to a single tow ring to the A/C, and capable of separation on release from the A/C.

#### ARO1.440 Pilot Requirements.

- (a) A pilot of a glider must:
  - (1) Hold a current private pilot license (glider) issued in accordance with (b); and
  - (2) Comply with the privileges and limitations of the pilot license and any applicable rating; and
  - (3) Comply with the operational standards and procedures of a gliding organization.
- (b) A person is eligible for the issue of a private pilot license (Glider) if the person:
  - (1) Is at least 17 years of age; and
  - (2) Holds a flight radiotelephony examination credit; and
  - (3) Holds at least a current class 2 medical certificate.

### **ARO1.445 Ground Signal.**

If a ground signal is used to indicate that gliding operations are taking place, that signal shall consist of a large white arrow pointing in the direction of take-off and landing.

# ARO1.450 Right of Way Rules.

- (a) The pilot of a glider soaring on a ridge, where the ridge is to the right of the glider, is not required to turn right when approaching another glider head on.
- (b) The pilot of a glider overtaking another glider soaring on a ridge shall pass on the ridge side of the glider being overtaken.
- (c) Where two gliders are on final landing approach, the pilot of the higher performance glider shall give way to the lower performance glider.

#### **ARO1.455 Clearance Below Clouds.**

The pilot of a glider, above an altitude of 3000 ft, but below an altitude of 11 000 ft, shall fly no closer than 500 ft below cloud within Class E or G airspace.

#### ARO1.460 Minimum Height.

The pilot of a glider may operate the glider below a height of 500 ft above the surface:

- (a) For ridge soaring, if the flight does not create a hazard to a person or property on the ground; or
- (b) If a gliding instructor is conducting launch failure training.

#### ARO1.465 Glider Equipments.

A person may not operate a glider unless the following equipment and operative instruments are installed:

- (a) An airspeed indicator; and
- (b) A pressure sensitive altimeter adjustable for bARO1metric pressure; and
- (c) A magnetic compass; and
- (d) A safety harness for each seat; and
- (e) A first aid kit; and
- (f) For powered gliders:
  - (1) A quantity gauge for each main fuel tank; and
  - (2) An oil pressure gauge or warning device for each engine other than a two-stroke engine; and
  - (3) A tachometer, RPM indicator, or engine governor light for each engine; and
  - (4) A radio communications transceiver that meets the applicable requirements, and is capable of communication with the appropriate ATS unit.

# **ARO1.470** General Maintenance Requirements.

An operator of a glider must ensure that:

(a) The glider is maintained in an airworthy condition; and

- (b) Every applicable airworthiness directive is complied with in accordance with the requirements; and
- (c) The glider is inspected in accordance with this Subpart; and the applicable requirements prescribed in JCAR's Part 21.

# Approval, Amendment and Renewal of Certificate (Application Form)

#### CIVIL AVIATION REGULATORY COMMISSION AVIATION RECREATION ORGANIZATION APPROVAL, AMENDMENT & RENEWAL



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CARC FORM No. ARO1-001

Effective Date; Oct. 2012

# Appendix -2 to ARO1.435 Glider Tow Lines.

#### A Glider tow line must:

- (a) Except as provided in paragraph (b), have a breaking strength of not less than 80% or more than 200% of the MCTOW of the glider to be towed; and
- (b) If the tow line used has a breaking strength of more than 200% of the MCTOW of the glider to be towed, have a safety link installed at the point of attachment to:
  - (1) The glider with a breaking strength of not less than 80% of the glider's MCTOW but not more than twice the glider's MCTOW; and
  - (2) The A/C with a breaking strength of at least 100% of the glider's MCTOW but not more than twice the glider's MCTOW.

# ARO2 Subpart -A Light Aircraft Pilot License ( LAPL) Section -1

#### **Common Requirements for the Light Airplane Pilot License (LAPL)**

#### ARO2.000 LAPL Minimum Age.

Applicants for the LAPL shall be in the case of aeroplanes, sailplanes, balloon and helicopters, at least 17 years of age.

#### **ARO2.005 LAPL Privileges and Conditions.**

- (a) The privileges of the holder of a LAPL to act without remuneration as pilot in command in noncommercial operations within the appropriate aircraft category.
- (b) Applicants for the LAPL shall have fulfilled the requirements for the relevant aircraft category and, when applicable, for the class or type of aircraft used in the skill test.

#### ARO2.010 LAPL Crediting for the Same Aircraft Category.

- (a) Applicants for a LAPL who have held another license in the same category of aircraft shall be fully credited towards the requirements of the LAPL in that category of aircraft.
- (b) Without prejudice to the paragraph above, he/she shall have to pass a skill test.

# **ARO2.015 LAPL Training Course.**

Applicants for a LAPL shall complete a training course within an approved training organization. The course shall include theoretical knowledge and flight instruction appropriate to the privileges given.

## ARO2.020 LAPL Theoretical Knowledge Examination.

- (a) Applicants for a LAPL shall have a level of theoretical knowledge appropriate to the privileges granted, through examinations on the following:
  - (1) Common subjects:

Air law

Human performance

Meteorology; and

Communications

(2) Specific subjects concerning the different aircraft categories:

Principles of flight;

Operational procedures;

Flight performance and planning;

Aircraft general knowledge; and

Navigation.

#### ARO2.025 LAPL Skill Test.

- (a) Applicants for an LAPL shall demonstrate through the completion of a skill test the ability to perform, as pilot in command of the appropriate aircraft category, the relevant procedures and maneuvers with competency appropriate to the privileges granted.
- (b) Applicants for the skill test shall have received instruction on the same class, type or group of aircraft to be used for the skill test. The privileges will be restricted to the class or type used for the skill test until further extensions are endorsed on the license, in accordance with this Subpart.
- (c) The skill test shall be divided into different Sections, representing all the different phases of flight appropriate to the category of aircraft flown.
- (d) Failure in any item of a Section will cause the applicant to fail the entire Section. If the applicant fails only 1 Section, he/she shall repeat only that Section. Failure in more than 1 Section will cause the applicant to fail the entire test.
- (e) When the test needs to be repeated in accordance with (d), failure in any Section, including those that have been passed on a previous attempt will cause the applicant to fail the entire test.
- (f) Failure to achieve a pass in all Sections of the test in 2 attempts will require further practical training.

# Section -2 Specific Requirements for the Basic LAPL – Airplane

## ARO2.030 Privileges and Conditions.

The privileges of the holder of a basic LAPL for airplanes are to fly act as pilot-in-command on single-engine piston airplanes-land or touring motor gliders (TMG) with a maximum certificated take-off mass of 2000 kg or less, in local flights within no more than 50 km from the aerodrome of departure. The privileges of the Basic LAPL do not include the carriage of passengers.

#### **ARO2.035** Experience Requirements and Crediting.

- (a) Applicants for the basic LAPL for airplanes shall have completed at least 20 hrs flight instruction in the class in which the skill test will be taken, including at least:
  - (1)Ten (10) hrs of dual instruction;
  - (2) Four (4) hrs of supervised solo flight time,
  - (3) Three(3)hrs of navigation training.
- (b) Applicants with prior flight experience may be credited towards the requirements in (a).

The amount of credit shall be decided by the training organization where the pilot undergoes the training course, on the basis of a pre-entry flight test, but shall in any case not exceed 10% of the hrs required in (a).

# ARO2.040 Recency Requirements.

Holders of a Basic LAPL shall only exercise the privileges of their license when they comply with the recency requirements established in JCAR's.

# Section- 3 Specific Requirements for the LAPL for Airplanes- LAPL (A)

#### ARO2.045 Privileges.

The privileges of the holder of an LAPL for airplanes are to act as pilot-incommand on single-engine piston airplanes-land or TMG with a maximum certificated take-off mass of 2000 kg or less, carrying a maximum of 3 passengers, such that there are never more than 4 persons on board of the aircraft.

### ARO2.050 Experience Requirements and Crediting.

- (a) Applicants for an LAPL (A) shall have completed at least 30 hrs of flight time instruction on airplanes or TMG, including at least:
  - (1) Fifteen (15) hrs of dual instruction in the class in which the skill test will be taken;
  - (2) Six(6) hrs of supervised solo flight time, including at least 3 hrs of solo cross country flight time with at least 1 cross-country flight of at least 150 km, during which 1 full stop landing at an aerodrome different from the aerodrome of departure shall be made.
- (b) Applicants for an LAPL (A) holding a Basic LAPL for airplanes shall have completed 10 hrs of flight instruction, including at least:
  - (1) Fifteen (15) hrs of dual instruction;
  - (2)Six(6) hrs of supervised solo flight time, including 3 hrs solo cross-country flight time with at least 1 cross-country flight of at least 150 km, during which 1 full stop landing at an aerodrome different from the aerodrome of departure shall be made.
- (c) Applicants for an LAPL (A) holding an LAPL(S) with TMG extension shall have completed at least (21) hrs of flight time on TMGs,
- (d) Applicants with prior flight experience may be credited towards the requirements in (a).

The amount of credit shall be decided by the training organization where the pilot undergoes the training course, on the basis of a pre-entry flight test, but shall in any case not exceed 50% of the hrs required in (a).

#### ARO2. 055 Recency Requirements.

- (a) Holders of an LAPL (A) shall only exercise the privileges of their license when they have completed, in the last 24 months, as pilots of airplanes or TMG at least:
  - (1) Twelve (12) hrs of flight time as pilot-in-command, including 12 take-offs and landings; and
  - (2) One (1) training flight of at least 1 hour of total flight time with an instructor.
- (b) Holders of an LAPL (A) that who do not comply with the requirements in (a) shall:
  - (1) Undertake a proficiency check with an examiner before they can resume the exercise of the privileges of their license; or
  - (2) Complete the requirements in (a) flying under the supervision of an instructor.

# Section- 4 Specific requirements for the LAPL for sailplanes – LAPL(S)

# ARO2.060 Privileges and Conditions.

- (a) The privileges of the holder of an LAPL for sailplanes are to act as pilot-in-command on sailplanes and powered sailplanes. In order to exercise its privileges on a TMG, the holder shall comply with the requirements in ARO.175.
- (b) Holders of an LAPL(S) shall only carry passengers after they have completed, after the issuance of the license, 10 hrs of flight time or 30 launches as pilot-in-command of sailplanes or powered sailplanes.

# ARO2.065 Experience Requirements and Crediting.

- (a) Applicants for an LAPL(S) shall have completed at least 15 hrs of flight instruction in sailplanes or powered sailplanes, including at least:
  - (1) Ten (10) hrs of dual instruction;
  - (2)Two(2) hrs of supervised solo flight time;
  - (3) Forty Five(45) launches and landings.

- (4) One (1) cross-country flight of at least 100 km under the supervision of an instructor.
- (b) Of the 15 hrs required in (a), a maximum of 7 hrs may be completed in a TMG
- (c) Applicants with prior flight experience may be credited towards the requirements in (a). The amount of credit shall be decided by the FTO where the pilot undergoes the training course, on the basis of a pre-entry flight test, but shall in any case not exceed 50% of the hrs required in (a).

#### ARO2.070 Launch Methods.

- (a) The privileges of the LAPL(S) shall be limited to the launch method included in the skill test. This limitation may be removed when the pilot has completed:
  - (1) In the case of winch launch, or car launch a minimum of 10 launches in dual instruction, and 5 solo launches under supervision
  - (2) For aero-tow and self launch, a minimum of 5 launches in dual instruction, and 5 solo launches under supervision. In the case of self launch, dual instruction may be done in a TMG;
  - (3) In the case of bungee launch, a minimum of 3 launches performed in dual instruction or solo under supervision.
- (b) The completion of the additional training launches shall be entered in the logbook and signed by the instructor.
- (c) In order to maintain their privileges in each launch method, pilots shall complete a minimum of 5 launches during the last 24 months, except for bungee launch, in which case pilots shall have completed only 2 launches.
- (d) When the pilot does not comply with the requirement in (c) he/she shall complete the missing number of launches with or under the supervision of an instructor in order to renew the privileges.

# ARO2.075 Extension of Privileges to TMG.

- (a) The privileges of an LAPL(S) shall be extended to TMG when the pilot has completed in an approved training organization at least:
  - (1)Six (6) hrs of flight instruction, including:

- (2) Four (4) hrs of dual instruction;
- (3) One (1) solo cross-country flight of at least 150 km, during which 1 full stop landing at an aerodrome different from the aerodrome of departure shall be performed.
- (b) A skill test to demonstrate an adequate level of practical skill in a TMG. During this skill test, the applicant shall also demonstrate to the examiner an adequate level of theoretical knowledge for the TMG in the following subjects:
  - (1) Principles of flight
  - (2) Operational procedures;
  - (3) Flight performance and planning;
  - (4) Aircraft general knowledge; and
  - (5) Navigation.

#### ARO2.080 Recency Requirements.

- (a) Holders of a LAPL(S) shall only exercise the privileges of their license on sailplanes when they have completed on sailplanes or powered sailplanes, excluding TMGs, in the last 24 months, at least:
  - (1) Five(5) hrs of flight time as pilot in command, including 10 launches or
  - (2) Two(2) training flights with an instructor;
- (b) Holders of an LAPL(S) shall only exercise the privileges of their license on TMGs when they have:
  - (1) Completed on touring motor gliders, in the last 24 months, at least:
    - (i) 12 hrs of flight time as pilot in command including 12 take-offs and landings, and
    - (ii) Training flight of at least 1hour flight time with an instructor;
  - (2) When the holder of the LAPL(S) also has the privileges to fly airplanes, the requirements in (1) may be completed on airplanes.

- (c) Holders of a LAPL(S) who do not comply with the requirements in (a) or (b) shall before they can resume the exercise of their privileges:
  - (1) Pass proficiency check with an examiner in a sailplane or a TMG, as appropriate or
  - (2) Complete the requirements in (a) or (b) flying under the supervision of an instructor.

# Section- 5 Specific Requirements for the LAPL for Balloons – LAPL (B)

#### ARO2.085 Privileges.

The privileges of the holder of a LAPL for balloons are to act as pilot-in -command of hot air balloons or hot air airships with a maximum of 3400 m<sup>3</sup> envelope capacity or gas balloons with a maximum of 1200 m<sup>3</sup> envelope capacity, carrying a maximum of 3 passengers, such that there are never more than 4 persons on board of the aircraft.

### **ARO2.090** Experience Requirements.

- (a) Applicants for a LAPL (B) shall have completed on balloons of the same class at least 16 hrs of instruction, including at least:
  - (1) Twelve (12) hrs of dual flight instruction,
  - (2) Ten (10) inflations and 20 takeoffs and landings; and
  - (3) One (1) supervised solo flight with a minimum flight time of at least 30 minutes.
- (b) Applicants with prior flight experience may be credited towards the requirements in (a). The amount of credit shall be decided by the training organization where the pilot undergoes the training course, on the basis of a preentry flight test, but shall in any case not exceed 50% of the hrs required in (a).

# ARO2.095 Extension of Privileges to Tethered Flights.

(a) The privileges of the LAPL (B) shall be limited to non-tethered flights. This limitation may be removed when the pilot has completed at least 3 tethered instruction flights.

- (b) The completion of the additional training shall be entered in the logbook and signed by the instructor.
- (c) In order to maintain this privilege, pilots shall complete a minimum of 3 tethered flights during the last 24 months.
- (d) When the pilot does not comply with the requirement in (c), he/she shall complete the missing number of tethered flights under the supervision of an instructor in order to renew the privilege.

#### ARO2.100 Extension of Privileges to Another Balloon Class.

The privileges of an LAPL (B) shall be limited to the class of balloon in which the skill test was taken. This limitation may be removed when the pilot has completed in the other class: at an approved training organization, at least:

- (a) Five(5) instruction flights; or
- (b) In the case of a LAPL (B) for hot-air balloons wishing to extend their privileges to hot air airships, 5 hrs of dual instruction time; and
- (c) A skill test, during which they shall demonstrate to the examiner an adequate level of theoretical knowledge for the other class in the following subjects: Principles of flight Operational procedures; Flight performance and planning; and Aircraft general knowledge

# ARO2.105 Recency Requirements.

- (a) Holders of an LAPL (B) shall only exercise the privileges of their license when they have: Completed in one class of balloons in the last 24 months, at least:
  - (1)Six( 6) hrs of flight time as pilot in command, including 10 takeoffs and landings; and
  - (2) Training flight with an instructor;
  - (3) In addition f the pilot is qualified to fly more than one class of balloons, in order to exercise their privileges in the other class, they shall have completed at least 4 hrs of flight time on that class within the last 24 months including 4 take-offs and landings

- (b) Holders of an LAPL (B) that who do not comply with the requirements in (a) and (b) shall, before they can resume the exercise of their privileges:
  - (1) Pass a proficiency check with an examiner in the appropriate class or
  - (2) Complete the requirements in (a) flying under the supervision of an instructor.

# Subpart-B Private Pilot License (PPL) ,Sailplane Pilot License (SPL) , and Balloon Pilot License (BPL)

# **Section -1 Common Requirements**

# ARO2.110 Minimum Age.

An applicant for a PPL, BPL and SPL shall be at least 17 years of age.

#### ARO2.115 Conditions.

Applicants for the issue of a PPL shall, have fulfilled the requirements for the class or type rating for the aircraft used in the skill test.

# **ARO2.120 Training Course.**

Applicants for a BPL, SPL or PPL shall complete a training course at an approved training organization. The course shall include theoretical knowledge and flight instruction appropriate to the privileges given.

# **ARO2.125 Theoretical Knowledge Examination.**

Applicants for a BPL, SPL or PPL shall demonstrate a level of theoretical knowledge appropriate to the privileges granted through examinations in the following subjects:

(a) Common subjects:Air law,Human performance,Meteorology, andCommunications;

(b) Specific subjects concerning the different aircraft categories:

Principles of flight, Operational procedures, Flight performance and planning, Aircraft general knowledge, and Navigation.

#### ARO2.130 Skill Test.

- (a) Applicants for a BPL, SPL or PPL shall demonstrate through the completion of a skill test the ability to perform, as pilot in command of the appropriate aircraft category, the relevant procedures and maneuvers with competency appropriate to the privileges granted.
- (b) An applicant for the skill test shall have received instruction on the same class or group of aircraft to be used for the skill test.

#### (c) Skill Test.

- (1) The skill test shall be divided into different Sections, representing all the different phases of flight appropriate to the category of aircraft flown.
- (2) Failure in any item of a Section will cause the applicant to fail the entire Section. Failure in more than 1 Section will cause the applicant to fail the entire test. If the applicant fails only 1 Section, he/she shall repeat only that Section.
- (3) When the test needs to be repeated in accordance with (2), failure in any Section, including those that have been passed on a previous attempt, will cause the applicant to fail the entire test.
- (4) Failure to achieve a pass in all Sections of the test in 2 attempts will require further training

# Section- 2 Specific Requirements for the PPL Airships – PPL (As)

#### ARO2.135 Minimum Age.

An applicant for a BPL or an SPL shall be at least 17 years of age.

#### ARO2.140 Privileges.

- (a) The privileges of the holder of a PPL (As) are to act without remuneration as pilot in command or copilot of airships engaged in noncommercial operations.
- (b) Notwithstanding the paragraph above, the holder of a PPL (As) with instructor or examiner privileges may receive remuneration for the provision of flight instruction or for the conduct of skill tests and proficiency checks for the PPL (As).

### ARO2.145 Experience Requirements and Crediting.

- (a) Applicants for a PPL (As) shall have completed at least 35 hrs of flight instruction in airships, 5 of which may have been completed in a FSTD, including at least:
  - (1) Twenty Five (25) hrs of dual instruction, including:
    - (i) Three (3) hrs of cross-country flight training, including 1 cross-country flight of at least 65 km (35 NM);
    - (ii) Three (3) hrs of instrument instruction;
  - (2) Eight (8) takeoffs and 8 landings at an aerodrome, Including masting and unmasting procedures.
  - (3) Eight (8) hrs of supervised solo flight time.
- (b) Applicants holding a BPL and qualified to fly hot air airships shall be credited with 10 % of their total flight time as pilot in command in such airships up to a maximum of 5 hrs.

# Section -3 Specific Requirements for the Sailplane Pilot License (SPL)

#### ARO2.150 Minimum Age.

An applicant for a BPL or an SPL shall be at least 17 years of age.

#### **ARO2.155 Privileges and Conditions.**

- (a) The privileges of the holder of an SPL are to act as pilot-in-command of sailplanes and powered sailplanes. In order to exercise its privileges on a TMG, the holder shall have to comply with the requirements in ARO.160.
- (b) Holders of an SPL shall:
  - (1) Not carry passengers only on having completed at least after the issuance of the license, at least 10 hrs of flight time or 30 launches as pilot of sailplane or powered sail plane
  - (2) Be restricted to act without remuneration in non-commercial operations until they have:
    - (i) Attained the age of 17 years
    - (ii) Completed after the issuance of the license, 75 hrs of light time or 200 launches as pilot-in-command of sailplanes or, powered sailplanes.
    - (iii) Passed a proficiency check with an examiner
- (c) Notwithstanding paragraphs (b) (2) the holder of an SPL with instructor or examiner privileges may receive remuneration for the provision of flight instruction or for the conduct of skill tests and proficiency checks for the LAPL(S) or the SPL.

# **ARO2.160** Experience Requirements and Crediting.

- (a) Applicants for an SPL shall have completed at least 10 hrs of flight time as a pilot of sailplanes, powered sailplanes or TMG, including at least the requirements specified in ARO.065.
- (b) Applicants for an SPL holding an LAPL(S) shall be fully credited towards the requirements for the issue of an SPL. Applicants for an SPL who held an

- LAPL(S) within the period of 2 years before the application shall be fully credited towards the requirements of theoretical knowledge and flight instruction
- (c) Applicants holding a pilot license for another category of aircraft, with the exception of balloons, shall be credited with 10 % of their total flight time as pilot-in-command in such aircraft up to a maximum of 67 hrs. The amount of credit given shall in any case not include the requirements in of ARO.065.

#### ARO2.165 Launch Methods.

The privileges of the SPL shall be limited to the launch method included in the skill test. This limitation may be removed and the new privileges exercised when the pilot complies with the requirements ARO.170.

## ARO2.170 Recency Requirements.

Holders of an SPL shall only exercise the privileges of their license when complying with the recency requirements in ARO.080.

# Section- 4 Specific Requirements for the Balloon Pilot License (BPL)

# ARO2.175 Privileges and Conditions.

- (a) The privileges of the holder of a BPL are to act as PIC on balloons and hot-air airships.
- (b) Holders of a BPL shall be restricted to act without remuneration in non-commercial operations until they have:
  - (1) Attained the age of 18 years;
  - (2) Completed 50 hours of flight time and 50 take-offs and landings as PIC on balloons;
  - (3) Passed a proficiency check with an examiner on a balloon in the specific class.
- (c) Notwithstanding paragraph (b), the holder of a BPL with instructor or examiner privileges may receive remuneration for:
  - (1) The provision of flight instruction for the LAPL(B) or the BPL;
  - (2) The conduct of skill tests and proficiency checks for these licences;

(3) The ratings and certificates attached to these licences.

#### ARO2.180 Experience Requirements and Crediting.

- (a) Applicants for a BPL shall have completed on balloons of the same class and group at least 16 hrs of flight instruction, including at least:
  - (1)Twelve (12) hrs of dual flight instruction;
  - (2) Including 10 inflations and, 20 take-offs and landings; and
  - (3) One (1) supervised solo flight with a minimum flight time of at least 30 minutes.
- (b) Applicants for a BPL holding an LAPL (B) with at least 16 hrs of flight time on balloons shall be fully credited towards the requirements for the issue of a BPL.

Applicants for a BPL who held an LAPL (B) with at least 16 hrs of flight time on balloons within the period of 2 years before the application shall be fully credited towards the requirements of theoretical knowledge and flight instruction.

#### ARO2.185 Extension of Privileges to Tethered Flights.

The privileges of the BPL shall be limited to non-tethered flights. This limitation may be removed when the pilot complies with the requirements in ARO.195.

# ARO2.190 Extension of Privileges to Another Balloon Class or Group.

The privileges of the BPL shall be limited to the class and group of balloons in which the skill test was taken. This limitation may be withdrawn when the pilot has:

- (a) In the case of an extension to another class within the same group, complied with the requirements in ARO.195.
- (b) In the case of an extension to another group within the same class of balloons, completed at least:
  - (1) Two (2) instruction flights on a balloon of the relevant group; and
  - (2) The following hrs of flight experience on balloons:

- (i) For balloons with an envelope capacity between 4001 m3 and  $7000 \text{ m}^3$ , 100 hrs;
- (ii) For balloons with an envelope capacity between 7001 m<sup>3</sup> and 10100 m<sup>3</sup>, 200 hrs;
- (iii) For balloons with an envelope capacity of more than 10100m<sup>3</sup>, 300 hrs;
- (iv) For gas balloons with an envelope capacity of more than 1260m<sup>3</sup>,10 hrs.

#### **ARO2.195 Recency Requirements.**

- (a) Holders of a BPL shall only exercise the privileges of their license they have completed in one class of balloons in the last 24 months at least:
  - (1) Six(6) hrs of flight time as pilot-in-command, including 10 take-offs and landings; and
  - (2) One(1)training flight with an instructor in a balloon within the appropriate class of the maximum envelope capacity that they have privileges for;
  - (3) In addition, in the case of pilots qualified to fly more than one class of balloons, in order to exercise their privileges in the other class, they shall have completed at least 3 hrs of flight time on that class within the last 24 months, including 3 take-offs and landings.
- (b) Holders of a BPL who do not comply with the requirements in (a) shall, before they can resume the exercise of their privileges:
  - (1) Pass a proficiency check with an examiner in a balloon within the appropriate class of the maximum envelope capacity that they have privileges for; or
  - (2) Complete the requirements in (a) flying under the supervision of an instructor.

### Section -5 Additional Ratings

#### **ARO2.200** Aerobatics Rating.

- (a) Holders of a pilot license for airplanes, TMG or sailplanes shall only undertake aerobatic flights when they hold the appropriate rating.
- (b) Applicants for an aerobatic rating shall have completed:
  - (1) At least 40 hrs of flight time or, in the case of sailplanes, 120 launches as pilot-in-command in the appropriate aircraft category, completed after the issue of the license;
  - (2) A training course at an approved training organization, including:
    - (i) Theoretical knowledge instruction appropriate for the rating;
    - (ii) At least 5 hrs or 20 flights of dual aerobatic instruction time in the appropriate aircraft category.
- (c) The privileges of the aerobatic rating shall be limited to the aircraft category in which the flight instruction was completed. The privileges extended to another category of aircraft if the pilot holds a valid license for that aircraft category and has successfully completed at least 3 dual training flights covering the full aerobatic training syllabus in that category of aircraft.

# ARO2.205 Sailplane Towing and Banner Towing Ratings.

- (a) Holders of a pilot license with privileges to fly airplanes or touring motor gliders shall only two sailplanes or banners when they hold the appropriate sailplane towing or banner towing rating.
- (b) Applicants for a sailplane towing rating shall have completed:
  - (1) At least 30 hrs of flight time as pilot-in-command and 60 take-offs and landings in airplanes, if the activity is to be carried out in airplanes, or in touring motor gliders, if the activity is to be carried out in touring motor gliders, completed after the issue of the license;
  - (2) A training course at an approved training organization including:

- (i) Theoretical knowledge instruction on towing operations and procedures;
- (ii) At least 10 instruction flights, including at least 5 dual instruction flights, towing a sailplane;
- (iii) Except for holders of an LAPL(S) or an SPL, 5 familiarization flights in a sailplane which is launched by an aircraft.
- (c) Applicants for a banner towing rating shall have completed:
  - (1) At least 100 hrs of flight time and 200 take-offs and landings as pilot-in-command on airplanes and/or TMG, after the issue of the license. At least30 of these hrs shall be in airplanes, if the activity is to be carried out in airplanes, or in TMG, if the activity is to be carried out in touring motor gliders;
  - (2) A training course at an approved training organization including:
    - (i) Theoretical knowledge instruction on towing operations and procedures;
    - (ii) At least 10 instruction flights towing a banner, including at least 5 dual flights.
- (d) The privileges of the sailplane and banner towing ratings shall be limited to airplanes or TMG, depending on which aircraft the flight instruction was completed. The privileges will be extended if the pilot holds a valid license for airplanes or TMG and has successfully completed at least 3 dual training flights covering the full towing training syllabus in either aircraft, as relevant.
- (e) In order to exercise the privileges of the banner or sailplane towing ratings, the holder shall have completed a minimum of 1 tow during the last 24 months.
- (f) When the pilot does not comply with the requirement in (e), before resuming the exercise of his/her privileges the pilot shall complete the missing tows with or under the supervision of an instructor.

#### ARO2.210 Night Rating.

- (a) Airplanes, touring motor gliders, airships.
  - (1) If the privileges of an LAPL or a PPL for airplanes, touring motor gliders or airships are to be exercised in VFR conditions at night, applicants shall have completed a training course at an approved training organization. The course shall comprise:
    - (i) Theoretical knowledge instruction;
    - (ii) At least 5 hrs of flight time in the appropriate aircraft category at night, including at least 3 hrs of dual instruction, including at least 1 hour of cross-country navigation with at least one dual cross country flight of at least 50 km and 5 solo take-offs and 5 solo full-stop landings.
  - (2) Before completing the training at night, LAPL holders shall have completed the basic instrument flight training required for the issue of the PPL.
  - (3) When applicants hold both a single-engine piston airplane-land class rating and a touring motor glider rating, they may complete the requirements in (1) above in either class or both classes.

#### Section- 6 Instructors

#### **ARO2.215 Instructor Certificates.**

A person shall only carry out flight instruction in aircraft when he/she holds:

- (a) A pilot license issued or accepted in accordance with JCAR Part FCL1.
- (b) An instructor certificate appropriate to the instruction given, issued in accordance with this Subpart.

#### **ARO2.220** General Prerequisites and Requirements for Instructors.

- (a) An applicant for an instructor certificate shall be at least 20 years of age.
- (b) An applicant for or the holder of an instructor certificate with privileges to conduct flight instruction in an aircraft shall:
  - (1) Hold at least the license and, where relevant, the rating for which instruction is to be given;

#### (2)Have:

- (i) completed at least 15 hrs of flight as a pilot on the class or type of aircraft on which instruction is to be given, of which a maximum of 7 hrs may be in an FSTD representing the class or type of aircraft, if applicable; or
- (ii) Passed an assessment of competence skill test or proficiency check for the relevant category of instructor on that class or type of aircraft;
- (3) Be entitled to act as pilot-in-command of the aircraft during such instruction.
- (c) Credit towards further ratings and for the purpose of revalidation:
  - (1) Applicants for further instructor certificates may be credited with the teaching and learning skills already demonstrated for the instructor certificate held.
  - (2) Hrs flown as an examiner during skill tests or proficiency checks shall be credited in full towards revalidation requirements for all instructor certificates held.

# ARO2.225 Instructor Competencies and Assessment.

All instructors shall be trained to achieve the following competences:

Prepare resources;

Create a climate conducive to learning;

Present knowledge;

Integrate Threat and Error Management (TEM) and crew resource management;

Manage time to achieve training objectives;

Facilitate learning;

Assess trainee performance;

Monitor and review progress;

Evaluate training sessions;

Report outcome.

# **ARO2.230** Training Course.

Applicants for an instructor certificate shall have completed a course of theoretical knowledge and flight instruction at an approved training organization.

#### ARO2.235 Assessment of Competence.

- (a) An applicant for an instructor certificate shall pass an assessment of competence in the appropriate aircraft category to demonstrate to an examiner the ability to instruct a student pilot to the level required for the issue of the relevant license, rating or certificate.
- (b) This assessment shall include:
  - (1) The demonstration of the competencies described in FCL 5.260, during preflight, post-flight and theoretical knowledge instruction;
  - (2) Oral theoretical examinations on the ground, pre-flight and post-flight briefings and in-flight demonstrations during skill tests in the appropriate aircraft class, type or FSTD;
  - (3) Exercises adequate to evaluate the instructor's competencies.
- (c) The assessment shall be performed on the same type or class of aircraft or FSTD used for the instruction.
- (d) When an assessment of competence is required for revalidation of an instructor certificate, an applicant who fails to achieve a pass in the assessment before the expiry date of an instructor certificate shall not exercise the privileges of that certificate until the assessment has successfully been completed.

# ARO2.240 Validity of Instructor Certificates.

Instructor certificates shall be valid for a period of 3 years.

# Section -7 Specific Requirements for the Light Aircraft Flight Instructor LAFI

### ARO2.245 Privileges and Conditions.

The privileges of a light aircraft flight instructor (LAFI) are to conduct flight instruction for the issue, revalidation or renewal of:

- (a) A basic LAPL, in the case of airplanes
- (b) AN LAPL, in the appropriate aircraft category;
- (c) Class or, type or group extensions to be endorsed on an LAPL, in the appropriate aircraft category;
- (d) The night, aerobatic and towing ratings in the appropriate aircraft category, provided that the instructor holds the appropriate rating or qualification and has demonstrated the ability to instruct for that rating to an instructor qualified in accordance with (e);
- (e) An LAFI certificate provided that the instructor:
  - (1) Has demonstrated to an instructor examiner the ability to instruct for the LAFI certificate; and
  - (2) In the case of an LAFI for sailplanes or balloons, has completed at least 10 hrs or150 launches of instruction in the appropriate aircraft category sailplanes;
  - (3) In the case of an LAFI for balloons, has completed 10 hrs or 10 takeoffs of instruction in balloons;
  - (4) For all other aircraft categories, has completed at least 150 hrs o instruction in the appropriate aircraft category.

# ARO2.250 Restricted Privileges.

(a) An LAFI shall have his/her privileges limited to not acting as an instructor for first solo flights and first solo navigation flights and to only conducting flight instruction for the issue of a LAPL under the supervision of a LAFI or FI for the same category of aircraft nominated by the training organization for this purpose.

- (b) The limitations in (a) shall be removed from the certificate when the LAFI has completed:
  - (1) In the case of a LAFI for airplanes, at least 50 hrs of flight instruction in a single engine piston airplane or TMG and has supervised at least 25 student solo flights.
  - (2) In the case of a LAFI for helicopters, at least 50 hrs of flight instruction in helicopters and supervised at least 25 student solo flight air exercises.
  - (3) In the case of a LAFI for sailplanes, at least 15 hrs or 50 launches of flight instruction covering the full flight training syllabus for the issuance of the LAPL for sailplanes;
  - (4) in the case of a LAFI for balloons, at least 15 hrs or 50 takeoffs of flight instruction covering the full flight training syllabus for the issuance of a LAPL for balloons.

#### ARO2.255 Prerequisites.

An applicant for an LAFI certificate shall have:

- (a) In the case of an LAFI for airplanes:
  - (1) Completed at least 20 hrs of cross-country flight time in a single engine piston airplane or TMG as pilot in command;
  - (2) Completed at least 200 hrs of flight time of including 150 hrs as pilot in command; -on airplanes or TMG;
  - (3) Completed at least 30 hrs of flight time as pilot-in-command on a single-engine piston airplane when the applicant wants to give instruction on single-engine piston airplanes;
- (b) In the case of an LAFI for sailplanes, completed at least 100 hrs of flight time as pilot-in-command and 200 launches as pilot-in-command on sailplanes and powered sailplanes, excluding TMGs. Additionally, in case when the applicant wants to give instruction on touring motor gliders, he/she shall complete at least 30 hrs of flight time as pilot-in-command on TMG.
- (c) In the case of an LAFI for balloons, completed at least 75 hrs of balloon flight time as pilot- in-command, of which at least 15 hrs have to be in the class and group for on which instruction is to be given.

#### **ARO2.260 Training Course.**

(a) Applicants for a LAFI certificate shall have passed a pre-entry flight test to assess their abilities to undertake the training course.

The pre-entry flight test shall be taken with an LAFI with who shall have:

- (1) Completed at least:
  - (i) In the case of an FI (S) or FI (B), at least 50 hrs or 150 launches of instruction on sailplanes
  - (ii) In the case of an FI (B), at least 50 hrs or 50 take-offs of flight instruction on balloons;
  - (iii) In the case of an FI (A) instructing for the LAFI (A) 150 hrs of flight instruction in the appropriate aircraft category;
  - (iv) In all other cases, 500 hrs of flight instruction in the appropriate aircraft category;
- (2) Passed an assessment of competence in accordance with ARO.255 and ARO.260 in the appropriate aircraft category.
- (b) The training course for the LAFI shall include, at least:
  - (1) For the LAFI for airplanes, TMGs:
    - (i) 25 hrs of teaching and learning;
    - (ii) 50 hrs of theoretical knowledge instruction, including progress tests;
    - (iii) For the LAFI for airplanes or TMGs: at least 12 hrs of dual flight instruction, including 1 hr of flight instruction by reference solely to instruments.
    - (iv) Pilots holding an LAFI (A) or (As) certificate of any category of aircraft shall be credited with 30 hrs towards the 50 hrs in (b)(1)(ii).;
    - (v) Pilots holding an LAFI(S) or (B) or an FI(S) or (B) certificate shall be credited with 18 hrs towards the 50 hrs in (b)(1)(ii).
    - (vi) Pilots holding an LAFI or FI certificate for sailplanes with TMG extension shall be credited with 6 hrs towards the requirement in (b)(1)(iii);

- (2) For the LAFI for sailplanes or balloons:
  - (i) 25hrs of teaching and learning;
  - (ii) 30hrs of theoretical knowledge instruction and instructional techniques, including progress tests;
  - (iii)
    - (A) for the LAFI for sailplanes, 6 hrs of dual flight instruction or at least 20 take-offs;
    - (B) For the LAFI for sailplanes providing training on TMGs, at least 6 hrs of dual flight instruction on TMGs;
    - (C) For the LAFI for balloons 3 hrs of dual flight instruction, including at least 3 take-offs;
    - (D) Pilots holding an LAFI or an FI certificate on any category of aircraft shall be credited with 18 hrs towards the requirement in (b) (2)(ii);
- (c) Pilots having held an FI certificate in the same category of aircraft shall be credited in full towards the requirements in (a) and (b) above.

#### ARO2.265 Revalidation and Renewal.

- (a) For revalidation of an LAFI certificate the holder shall fulfill 2 of the following 3 requirements:
  - (1) Complete at least:
    - (i) In the case of an LAFI for airplanes, 45 hrs or 120 takeoffs of flight instruction in the appropriate aircraft category as LAFI, FI, TRI, CRI, IRI, MI or as an examiner during the period of validity of the certificate,
    - (ii) In the case of an LAFI for sailplanes, 30 hrs or 60 take-offs of flight instruction in sailplanes, powered sailplanes or TMG as LAFI, FI or as examiner during the period of validity of the certificate,
    - (iii) In the case of an LAFI for balloons, 6 hrs of flight instruction in balloons as LAFI, FI or as examiner during the period of validity of the certificate

- (2) Attend an instructor refresher seminar within the validity period of the certificate;
- (3) Pass an assessment of competence in accordance with ARO.255 within the 12 months preceding the expiry date of the LAFI certificate.
- (b) Renewal. If the certificate has lapsed, the applicant shall, within a period of 12 months before the renewal:
  - (1) Attend an instructor refresher seminar;
  - (2) Pass an assessment of competence in accordance with ARO.260.

# Section- 8 Flight Examiners (AS, Sailplanes and Balloons)

#### ARO2.270 Privileges and Conditions.

Skill tests and proficiency checks for the LAPL (A), provided that the examiner has completed at least 500 hrs of flight time as a pilot of airplanes or touring motor gliders, including at least 100 hrs of flight instruction;

- (a) The privileges of an FE for airships are to conduct skill tests for the issue of the PPL (As) and CPL (As) and skill tests and proficiency checks for the associated airship type ratings, provided that the examiner has completed 500 hrs of flight time as a pilot of airships, including 100 hrs of flight instruction.
- (b) The privileges of an FE for sailplanes are to conduct:
  - (1) Skill tests and proficiency checks for SPL and LAPL(S), provided that the examiner has completed 300 hrs of flight time as a pilot of sailplanes or powered sailplanes, including 150 hrs or 300 launches of flight instruction;
  - (2) Proficiency checks for the extension of the SPL privileges to commercial operations, provided that the examiner has completed 300 hrs of flight time as a pilot of sailplanes or, powered sailplanes or touring motor gliders, including 90 hrs of flight instruction;
  - (3) Skill tests for the extension of the SPL or LAPL(S) privileges to TMG, provided that the examiner has completed 300 hrs of flight time as a pilot of sailplanes or, powered sailplanes or touring motor gliders, including 50 hrs of flight instruction on TMG.

- (d) The privileges of an FE for balloons are to conduct:
  - (1) Skill tests for the issue of the BPL and the LAPL(B) and skill tests and proficiency checks for the extension of the privileges to another balloon class or group, provided that the examiner has completed 250 hrs of flight time as a pilot of balloons, including 50 hrs of flight instruction
  - (2) Proficiency checks for the extension of the BPL privileges to commercial operations, provided that the examiner has completed 300 hrs of flight time as a pilot of balloons, of which 50 hrs in the same group of balloons for which the extension is sought. The 300 hrs of flight time shall include 50 hrs of flight instruction.

#### ARO2.275 Pre-requisites.

Before attending the examiner standardisation course, an applicant for an FE certificate shall, in the case of sailplanes and balloons, hold a SPL or BPL in the appropriate aircraft category.

# Section -9 Flight Instructor Examiners (AS, Sailplanes and balloons)

# ARO2.280 Privileges and Conditions.

The privileges of an FIE for sailplanes, powered sailplanes, balloons and airships are to conduct assessments of competence for the issue, revalidation or renewal of instructor certificates in the appropriate applicable aircraft category, provided that the relevant instructor certificate is held.

# ARO2.285 Pre-requisites.

- (a) FIE (As). Applicants for an FIE certificate for airships shall:
  - (1) Have completed 500 hrs of flight time as a pilot of airships;
  - (2) Have at least 20 hrs of flight time instructing applicants for an FI (AS) certificate;
  - (3) The relevant instructor certificate.
- (b) FIE(S). Applicants for an FIE certificate for sailplanes shall:
  - (1) Hold the relevant instructor certificate;

- (2) Have completed 500 hrs of flight time as a pilot of sailplanes or powered sailplanes;
- (3) Have completed:
  - (i) For applicants wishing to conduct assessments of competence on touring motor gliders, 10 hrs or 30 take-offs instructing applicants for an instructor certificate in touring motor gliders;
  - (ii) In all other cases, 10 hrs or 30 launches instructing applicants for an instructor certificate
- (c) FIE (B). Applicants for an FIE certificate for balloons shall:
  - (1) Hold the relevant instructor certificate;
  - (2) Have completed 350 hrs of flight time as a pilot of balloons;
  - (3) Have completed 10 hrs instructing applicants for an instructor certificate.

# Appendix- 1 Skill Test, Proficiency Check and Verbal Theoretical Knowledge Examination for the Instructor Rating.

#### General.

- (a) The format and application form for the skill test shall be determined by the Commission.
- (b) The instructor skill test shall comprise oral theoretical examinations on the ground, pre flight and post flight briefings and in flight demonstrations during skill tests in the appropriate aircraft category.
- (c) An applicant for the skill test shall have received instruction on the same type or class as of the aircraft used for the test.
- (d) Before taking the skill test an applicant shall have completed the required training. The approved training organisation shall produce the applicant's training records when required by the examiner.

- (e) The examiner shall be the pilot in command, except in circumstances agreed upon by the examiner when another instructor is designated as pilot in command for the flight.
- (f) During the skill test the applicant shall occupy the seat normally occupied by the instructor, except in the case of balloons. The examiner or another instructor shall function as the 'student'. The applicant shall be required to explain the relevant exercises and to demonstrate their conduct to the 'student', where appropriate. Thereafter, the 'student' shall execute the same manoeuvres including typical mistakes of inexperienced students. The applicant is expected to correct mistakes orally or, if necessary, by intervening.

#### **Content**

- (a) The content of the skill test shall include the followings:
  - (1) Section 1, the oral theoretical knowledge examination part of the skill test, is for all instructor certificates and shall be subdivided into two parts:
    - (i) The applicant is required to give a test lecture selected from items a-i of Section 1. The amount of time for preparation of the test lecture shall be agreed upon beforehand with the examiner. Appropriate literature may be used by the applicant. The test lecture should not exceed 45 minutes.
    - (ii) The applicant is tested orally by an examiner for knowledge of items a—i of Section 1 and the 'core instructor competencies teaching and learning' content given in the instructor courses.
  - (2) Section 2, and 3. These Sections comprise exercises to demonstrate the ability to be an FI (i.e. Instructor demonstration exercises) chosen by the examiner from the flight syllabus of the FI training courses. The applicant will be required to demonstrate FI abilities, including briefing, flight instruction and de-briefing.
- (b) The skill test shall also include additional demonstration exercises, as decided by the examiner and agreed upon with the applicant before the skill test.

(c) All relevant Sections shall be completed within a period of 6 months. However, all Sections should, where possible, be completed on the same day. Failure in any exercise requires a retest covering all exercises, with the exception of those in Section 1 which, if failed, may be retaken separately. The examiner shall terminate the test at any stage if they consider that a retest is required.

#### **Proficiency Check**

An applicant who fails to achieve a pass in all Sections of a proficiency check before the expiry date of an instructor certificate shall not exercise the privileges of that certificate until the proficiency check has successfully been completed.

Section 1 -Theoretical Knowledge Oral		
b	Aircraft General Knowledge	
С	Flight Performance and Planning	
d	Human Performance and Limitations	
e	Meteorology	
f	Navigation	
g	Operational Procedures	
h	Principles of Flight	
i	Training Administration	
Section 2-Preflight briefing		
a	Visual Presentation	
b	Technical Accuracy	
С	Clarity of Explanation	
d	Clarity of Speech	
e	Instructional Technique	
f	Use of Models and Aids	
g	Student Participation	
Section 3-Flight		
a	Arrangement of Demo	
b	Synchronisation of Speech with Demo	
С	Correction of Faults	
d	Aircraft Handling	
e	Instructional Technique	
f	General Airmanship/Safety	
g	Positioning, use of Airspace	

Section 4-Postflight and Debriefing		
a	Visual Presentation	
b	Technical Accuracy	
c	Clarity of Explanation	
d	Clarity of Speech	
e	Instructional Technique	
f	Use of Models and Aids	
g	Student Participation	