

CIVIL AVIATION AUTHORITY PAKISTAN

**AIR NAVIGATION ORDER
NO: 90.0010
ISSUE: ONE**

BASIC LICENCES AND CERTIFICATES – AIR CREW

1. AUTHORITY
2. SCOPE
3. EFFECTIVE DATE
4. DEFINITIONS
5. ATTACHMENTS
6. STUDENT PILOT LICENCE (SPL)
7. PRIVATE PILOT LICENCE (PPL)
8. GLIDER PILOT LICENCE (GPL)
9. FREE BALLOON PILOT LICENCE (BPL)
10. MICROLIGHT COMPETENCY CERTIFICATE (MCC)
11. MCC – ULTRALIGHT & SPORTS CATEGORY
12. MCC – HANG GLIDER CATEGORY
13. MCC – PARAGLIDER/PARAMOTOR CATEGORY
14. MCC – POWERED PARACHUTE CATEGORY
15. MCC – PARA JUMP/SKYDIVING CATEGORY
16. MCC – GYROGLIDER/GYROPLANE CATEGORY
17. MCC – PARASAIL CATEGORY
18. MCC – MICROLIGHT ORGANIZATION (MO)
19. AIR SHOWS
20. OPERATING RESTRICTIONS – MOORED BALLOONS
21. OPERATING RESTRICTIONS - MODEL AIRCRAFT
22. OPERATING RESTRICTIONS - KITES
23. CANCELLATION

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1. AUTHORITY

- 1.1. This Air Navigation Order (ANO) is issued by the Director General Civil Aviation Authority (DGCAA) in exercise of powers vested in him under Rule 4, 35, 36, 37, 38, 39, 40,41,42, 43, 44, 58, 124, 126, 140, 145, 354, 357, 360 and 363 of Civil Aviation Rules 1994 (CARs' 94).
- 1.2. Under Rule 363 (1), the Microlights, as defined in this Air Navigation Order, shall be exempted from the provisions of the Rule 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 29(2), 30 and 31 of the Civil Aviation Rules 1994.
- 1.3. Under Rule 363 (1), a Microlight organization, operating uncertified flying machines in different categories, balloons and gliders shall be exempted from the provision of the Rule 52, 53, 175, 177, 178, 186, 187, 188 and 189 of the Civil Aviation Rules 1994.

2. SCOPE

- 2.1. This ANO relates to the grant of Student Pilot Licences (SPL).
- 2.2. This ANO relates to the grant of Private Pilot Licence (PPL).
- 2.3. This ANO relates to the grant of Glider Pilot Licences (GPL).
- 2.4. This ANO relates to the grant of Balloon Pilot Licences (BPL).
- 2.5. This ANO relates to the grant of Microlight Competency Certificate (MCC) in the under mentioned Categories:
 - 2.5.1. Sport aircraft.
 - 2.5.2. Ultralight aircraft.
 - 2.5.3. Hang Glider.
 - 2.5.4. Paraglider
 - 2.5.5. Paramotor.
 - 2.5.6. Powered Parachute.
 - 2.5.7. Para Jump.
 - 2.5.8. Sky Diving.
 - 2.5.9. Gyroglider.
 - 2.5.10. Gyroplane
 - 2.5.11. Parasail.

- 2.6. This ANO relates to the issue of Microlight Organization Certificate.
- 2.7. This ANO relates to the conduct of Air Shows.
- 2.8. This ANO relates to the operating restrictions on Model aircraft and Kites.
- 2.9. Unless contrary intentions appear, this ANO shall also be read in conjunction with ANO 90.0001 (General Licensing Procedures), ANO 90.0002 (CAA Technical Examinations), ANO 90.0003 (Basic Flying Training), ANO 90.0004 (Licences & Ratings – Aircrew), other relevant Air Navigation Orders and Airworthiness Notices, Air Safety Circulars (Licensing) and instructions issued from the CAA from time to time.

3. **EFFECTIVE DATE**

- 3.1. This ANO shall come into force with immediate effect.

4. **DEFINITIONS**

- 4.1. **‘Aerodrome’** means an aerodrome that is promulgated in the current Aeronautical Information Publication issued by the CAA Pakistan.
- 4.2. **‘Approved Person’** means a person approved in writing by the CAA to perform a specific regulatory function.
- 4.3. **‘Authorized Person’** means a person authorized by the Company to perform a specific function.
- 4.4. **‘Balloon’** means a non-power driven lighter-than-air aircraft.
Note: For the purpose of this ANO, this definition applies to free Balloon.
- 4.5. **‘CAA’** means Civil Aviation Authority of Pakistan.
- 4.6. **‘Certificate of Airworthiness (C of A)’** means a Certificate of Airworthiness issued to an aircraft by the Airworthiness Directorate subject to meeting the prescribed Airworthiness requirements.
- 4.7. **‘Controlled Aerodrome’ means** an aerodrome at which air traffic control service is provided to aerodrome traffic.
- 4.8. **‘Control line model aircraft’** means a model aircraft primarily controlled in flight by a single or multiple wire system operated by the person flying the aircraft and restricted to circular flight about a central point.
- 4.9. **‘Free Flight’** means a flight in a free balloon for at least 5 minutes.
- 4.10. **‘Free Flight Time’** means the total time from the moment a balloon becomes airborne in free flight until the balloon envelope is deflated after landing.
- 4.11. **‘Free flight model aircraft’** means a model aircraft, with a flight path that, once launched, is uncontrollable.
- 4.12. **‘Glider’** means an aircraft that requires an assisted take off, has no internal power for a sustained flight; and is capable of gliding down to

earth. Glider includes powered glider with the engine not operating during sustained flight; but does not include hang gliders.

- 4.13. **‘Gyroglider’** means heavier-than-air vehicle that is supported in flight by the dynamic reaction of the air against its rotor, fitted on top, when pulled by a towline of a ground vehicle. After the towline is released, the Gyroglider can be made to land under control of the pilot by the support provided by the lifting surface of the rotor.
- 4.14. **‘Gyroplane’** means an aircraft that gets lift from a freely turning rotary wing (rotor blades), and which derives its thrust from an engine-driven propeller. It may be also called autogyro or the gyrocopter.
- 4.15. **‘Hang Glider’** means heavier-than-air vehicle that is supported in flight by the dynamic reaction of the air against its lifting surfaces and whose free flight does not depend on an engine. The device has a capacity for not more than two occupants.
 - 4.15.1. A Hang Glider may also be towed by a winch/truck.
 - 4.15.2. A powered Hang Glider will be treated as an Ultralight.
- 4.16. **‘Intermediate Landing’** means a landing and subsequent takeoff in a Balloon where the balloon remains inflated.
- 4.17. **‘Kite’** means a pilotless aerodyne, between a gross mass of 500 g-25 kg, without propulsion that is tethered to a fixed point, or is hand held; and is sustained by the wind.
- 4.18. **‘Machine’** means a mechanism, engine, appliance, apparatus, contraption, piece of equipment, device or an instrument.
- 4.19. **‘Microlight’** means an uncertified flying machine below 580 KG.
- 4.20. **‘Microlight Competency Certificate (MCC)’** means a Certificate issued by the Licensing Authority for piloting an uncertified flying machine below 580 KG. *An uncertified machine above 580 KG shall be piloted by the holder of a PPL or a higher Licence.*
- 4.21. **‘Microlight Organization (MO)’** means an Organization, approved by the CAA, that conducts and monitors the activities of the Microlights, including Gliders and Balloons, which are registered with it; and their operating crew.
- 4.22. **‘Microlight Organization Certificate’** means a Certificate issued by the CAA to an organization that meets the CAA prescribed requirements of a Microlight Organization in the specified category of Microlights.
- 4.23. **‘Model aircraft’** means a pilotless aircraft between a gross mass of 500 g-25 Kg which includes:
 - 4.23.1. Control line model aircraft.
 - 4.23.2. Free flight model aircraft.
 - 4.23.3. Radio controlled model aircraft.

- 4.24. **‘Power-Assisted Glider’** means an aircraft meeting glider certification standards, fitted with an auxiliary power unit and incapable of unassisted take-off and capable of only limited duration powered flight.
- 4.25. **‘Powered Parachute’** means a vehicle with a parachute that allows a person to takeoff, restart-in-flight and land the parachute under its own power and has a capacity for not more than two occupants.
- 4.25.1. A powered parachute is a flexible winged, aerial recreational vehicle. It combines an engine with a flexible parachute wing technology similar to that used by sport parachutists. The parachute, unlike the rigid structures of airplanes or Ultralights, is built of Nylon fabric with suspension lines. The forward motion of the vehicle forces air into the multiple ‘cells’ along the wing’s leading edge, pressurizing it and holding its precisely calculated airfoil shape.
- 4.26. **‘Paraglider’** means a non-motorized foot-launched inflatable wing. The Paraglider itself is constructed of rip-stop nylon from which the pilot is suspended by sturdy kevlar lines. The pilot is clipped into a harness and oriented in a sitting position for maximum comfort. With a Paraglider, flying like a bird, soaring upward on currents of air can be carried out. A Paraglider is capable of staying aloft for hours, can gain altitude and can go cross country over vast distances.
- 4.26.1. A Paraglider may also be equipped with a motor and is called a Paramotor or a Powered Paraglider or a motorized Paraglider.
- 4.26.2. A Paraglider may be tow launched (winch/truck) as well.
- 4.27. **‘Parasail’** means heavier-than-air vehicle that is supported in flight by the dynamic reaction of the air against its lifting surfaces when pulled by a towline of a boat. When the towline is released, the Parasail can be made to land under control of the pilot by the support provided by its lifting surface. A Parasail may be reeled out and reeled in into a boat.
- 4.28. **‘Self-Launching Motor Glider (SLMG)’** means an aircraft, meeting glider certification standards, fitted with a power unit; and capable of unassisted take-off and operating in sustained powered flight or as a glider when not under power.
- 4.28.1. For the purpose of this ANO, a Self Launching Motor Glider (SLMG) may be classified as a glider provided the power unit is only used for the purposes of Take Off and Climb to the height required for the gliding exercise.
- 4.28.2. Where there is an intention to use the power unit of an SLMG other than as defined above, the pilot shall hold a Private Pilot or a higher Licence endorsed with the particular type of SLMG.
- 4.29. **‘Solo Flight’** means when the person acting as a pilot is the sole occupant of the Aeroplane, Helicopter, Balloon, Glider or a Microlight.

- 4.30. **‘Sports Aircraft’** means an uncertified flying machine that weighs more than 300 KGs and not more than 580 KGs, and has a single engine.
- 4.31. **‘Tethered Flight’** means a flight in a captive balloon of at least 5 minutes.
- 4.32. **‘Tethered Flight Time’** means the moment a balloon tethered to the surface becomes airborne until the envelope is deflated after landing.
- 4.33. **‘UltraLight Aircraft’** means an uncertified flying machine that weighs not more than 300 Kgs, has a single engine and a fixed landing gear.
- 4.34. **‘Radio controlled model aircraft’** means a model aircraft that is primarily controlled by radio signals from a remote transmitter being operated by a person.
- 4.35. **‘Renewal’** means getting the Licence or Certificate renewed by meeting the Renewal requirements before the expiry of the validity period of Licence or Certificate.
- 4.36. **‘Revalidation’** means getting the Licence or Certificate revalidated, after the Licence or Certificate validity period has expired, by meeting the revalidation requirements.
- 4.37. **‘Shielded operation’** means an operation within a structure.
- 4.38. **‘Medical Assessment’** means a medical assessment issued by the CAA or a person designated by the CAA.
- 4.39. **‘Acting in command under supervision’** means the performing, under the supervision of a Captain, the duties and functions of a pilot-in-command during flight time.
- 4.40. **‘Aeronautical experience’** means flight time gained as a pilot member of the operating crew of an aircraft.
- 4.41. **‘Automatic activation device’** means an automatic altitude and descent-rate sensor designed to self activate a parachute.
- 4.42. **‘Student parachutist’** means a person who is defined as a student in the operating rules of the parachute organization.
- 4.43. **‘Tandem master’** means the person responsible for the direct control of a tandem parachute descent.
- 4.44. **‘Tandem pair’** means a tandem master and tandem rider.
- 4.45. **‘Tandem parachute descent’** means a parachute descent of a tandem pair in a common tandem parachute assembly.
- 4.46. **‘Tandem rider’** means a person participating in a tandem parachute descent, or riding in any other Microlight, using the secondary harness of a tandem harness system.
- 4.47. **‘Warrant of Fitness’** is a Certificate issued by a Microlight Organization stating that the Microlight registered with it has met the prescribed safety requirements of the Manufacturer.

5. **ATTACHMENTS**

- 5.1. ATTACHMENT `A` : Private Pilot Skill Test Guide.
- 5.2. ATTACHMENT `B` : Application Form (Microlights) CAAF- 665.
- 5.3. ATTACHMENT `C` : Microlight Competency Certificate CAAF-627.
- 5.4. ATTACHMENT `D` : Medical Assessment (Microlights) CAAF- 667.
- 5.5. ATTACHMENT `E` : Security Clearance Performa CAAF-621.
- 5.6. ATTACHMENT `F` : Check Report – Microlight Aircraft CAAF-643.
- 5.7. ATTACHMENT `G` : Balloon Pilot Licence CAAF-641.

6. **STUDENT PILOT LICENCE (SPL)**

6.1. **SPL ISSUE REQUIREMENTS**

6.1.1. **ELIGIBILITY**

6.1.2. **AGE:** Applicant shall not be less than 16 years of age.

6.1.3. **MEDICAL:** Applicant for SPL shall have Medical Standard as stated below:

6.1.3.1. Class 2 Medical Certificate or higher (Class 1): OR

6.1.3.2. For Microlight Competency Certificate – CAAF- 667 Medical Assessment or higher (Class 1, Class 2 or Class 3)

6.1.4. **LANGUAGE QUALIFICATION:** An applicant shall be capable of speaking, reading and understanding the English language. The Organization shall take the test and submit the result along with answer sheets to the CAA.

6.1.5. **EDUCATION:** An applicant shall hold an educational qualification of at least Secondary School Certificate or equivalent.

6.1.6. **SECURITY CLEARANCE:** Applicant shall have security clearance from local police, special branch and IB. SPL may be issued on receipt of any one of the clearances. Security Clearance Form CAAF-621 (in quadruplicate) and IB Performa (in duplicate) are to be filled and submitted in advance.

6.1.7. **NO OBJECTION CERTIFICATE (NOC):** Serving personnel from Armed Forces and Government Departments shall provide NOC from their Organization.

6.2. **FLYING TRAINING ORGANIZATION (FTO)**

6.2.1. The FTO imparting training for issue of a Licence, Rating, Certificate or a Category shall hold a valid approval from the CAA.

6.3. **FLIGHT RADIO TELEPHONE OPERATOR LICENCE (FRTOL)**

6.3.1. The applicant shall complete the training for Flight Radio Telephone Operator Licence and FRTOL shall be endorsed on the SPL before flying the first Solo.

6.3.2. FRTOL shall be endorsed on the SPL on submission of under mentioned documents:

6.3.2.1. Student Pilot Licence CAAF-647.

6.3.2.2. FRTOL Course completion Certificate along with theory and practical examination results and answer sheets.

6.3.2.3. Fee voucher/Authorization.

- 6.4. **VALIDITY**
- 6.4.1. The Licence shall remain valid for 24 months subject to a valid Medical Certificate unless suspended or revoked by the Director General.
- 6.5. **RENEWAL/REVALIDATION**
- 6.5.1. The Licence may be renewed/revalidated subject to an application and a valid Medical Certificate.
- 6.6. **PRIVILEGES**
- 6.6.1. The privileges of an SPL are to receive flying training for issue, renewal or a revalidation of a higher Licence or a Certificate.
- 6.7. **EXEMPTION**
- 6.7.1. An applicant may fly upto 3 hours of air experience without holding a Student Pilot Licence provided he/she holds a valid Medical Certificate.
- 6.7.2. English language examination will not be required for Graduates.
- 6.8. **LIMITATIONS**
- 6.8.1. The holder of an SPL shall not undertake his first solo flight unless he has passed the pre-solo theory examination in accordance with the requirements of the FTO.
- 6.8.2. The holder of an SPL shall not undertake solo cross-country unless he has passed the pre-solo cross-country theory examination in accordance with the requirements of the concerned FTO.
- 6.8.3. The holder of an SPL shall not fly more than 4 hours, except for X-country not exceeding 6 hours, in a single day.
- 6.8.4. The holder of an SPL shall not carry any person on board other than an Instructor.
- 6.9. **LOGBOOK**
- 6.9.1. Holder of an SPL shall maintain the appropriate logbook for his/her Category of Licence/Certificate as approved by the CAA.
- 6.10. **FEE SCHEDULE**
- 6.10.1. As per the CAA Fee Schedule (Personnel Licensing).
- 6.11. **DOCUMENTS TO BE SUBMITTED**
- 6.11.1. **FOR ISSUE OF SPL**
- 6.11.1.1. Application Form CAAF-600.
- 6.11.1.2. Application Form CAAF-665 (for Microlights only).
- 6.11.1.3. Medical Certificate CAA-43.

- 6.11.1.4. Medical Certificate CAAF-667 (for Microlights only).
 - 6.11.1.5. FRTOL course Certificate from FTO.
 - 6.11.1.6. English Language proficiency result from FTO.
 - 6.11.1.7. Photocopy of Matric Certificate. (For D.O.B/Name)
 - 6.11.1.8. Photocopy of National Identity Card.(For above 18 years. For below 18 years, Form `B')
 - 6.11.1.9. Photocopy of Passport (foreign nationals only)
 - 6.11.1.10. No Objection Certificate (NOC) from concerned Armed Force/Government Department, if applicable.
 - 6.11.1.11. 04 coloured photographs 1 X 1 Inch (Both ears visible, head uncovered & blue background).
 - 6.11.1.12. Photocopies of Certificates of higher education, other Licences, foreign qualifications and courses may be attached.
 - 6.11.1.13. Fee Voucher/Authorization.
 - 6.11.1.14. Security Clearance Performa CAAF-621 along with IB Performa.
- 6.11.2. **FOR RENEWAL/REVALIDATION OF SPL**
- 6.11.2.1. Application Form as applicable.
 - 6.11.2.2. Medical Certificate as applicable.
 - 6.11.2.3. Student Pilot Licence CAAF-647.
 - 6.11.2.4. Fee Voucher/Authorization.

7. **PRIVATE PILOT LICENCE – AEROPLANE & HELICOPTER**

7.1. **ELIGIBILITY**

- 7.1.1. **SPL:** Applicant shall hold a valid Student Pilot Licence.
- 7.1.2. **AGE:** Applicant shall not be less than 17 years of age.
- 7.1.3. **MEDICAL:** Applicant shall hold at least a Class 2 Medical Certificate.
- 7.1.4. **FRTOL:** FRTOL shall have been endorsed on the Student Pilot Licence.

7.2. **FLYING TRAINING ORGANIZATION (FTO)**

- 7.2.1. The Flying Organization conducting training for the issue of a Private Pilot Licence shall hold a valid approval from CAA as a Flying Training Organization (FTO).

7.3. **ICAO GUIDANCE**

- 7.3.1. The ICAO Training Manual (Doc 7192) Part B-5 may be used as additional guidance material for a course of training for the Private Pilot Licence.

7.4. **AERONAUTICAL KNOWLEDGE (AEROPLANE):** The applicant shall have demonstrated a level of knowledge appropriate to the privileges granted to the holder of a private pilot Licence-aeroplane in at least the following subjects:

7.5. **AIR LAW**

- 7.5.1. Rules and regulations relevant to the holder of a Private Pilot Licence – Aeroplane; rules of the air; appropriate air traffic services practices and procedures;

7.5.2. **AIRCRAFT GENERAL KNOWLEDGE**

- 7.5.3. Principles of operation of Aeroplane power plants, systems and instruments;

- 7.5.3.1. Operating limitations of Airplanes and power plants; relevant operational information from the flight manual or other appropriate document;

7.5.4. **FLIGHT PERFORMANCE AND PLANNING**

- 7.5.4.1. Effects of loading and mass distribution on flight characteristics; mass and balance calculations;

- 7.5.4.2. Use and practical application of take-off, landing and other performance data;

- 7.5.4.3. Pre-flight and en-route flight planning appropriate to private operations under VFR; preparation and filing of air traffic services flight plan; appropriate air traffic services procedures; position reporting procedures; altimeter setting procedures; operations in areas of high density traffic;

7.5.5. **HUMAN PERFORMANCE AND LIMITATIONS**

7.5.5.1. Human performance and limitations relevant to the private pilot – Aeroplane;

7.5.6. **METEOROLOGY**

7.5.6.1. Application of elementary aeronautical meteorology; use of, and procedures for obtaining, meteorological information; altimetry;

7.5.7. **NAVIGATION**

7.5.7.1. Practical aspects of air navigation and dead reckoning techniques; use of aeronautical charts.

7.5.8. **OPERATIONAL PROCEDURES**

7.5.8.1. Use of aeronautical documentation such as AIP, NOTAM, aeronautical codes and abbreviations;

7.5.8.2. Appropriate precautionary and emergency procedures, including action to be taken to avoid hazardous weather, wake turbulence and other operating hazards.

7.5.9. **PRINCIPLES OF FLIGHT**

7.5.9.1. Principles of flight relating to Airplanes.

7.5.10. **RADIOTELEPHONY**

7.5.10.1. Radiotelephony procedures and phraseology as applied to VFR operations; action to be taken in case of communication failure.

7.5.11. The detailed breakdown of ground training shall be approved by the CAA.

7.6. **AERONAUTICAL EXPERIENCE (AEROPLANE):** An applicant must satisfactorily complete a course of basic flight training in accordance with the approved syllabus with approved aviation training centre as under:

7.6.1. Aeronautical experience of at least 40 hours of flight time, including skill test as a pilot of an aeroplane which includes:

7.6.1.1. Not less than 10 hours of solo flight time under the supervision of an Authorized Flight Instructor, including 5 hours of solo cross-country with at least one cross-country flight totaling not less than 150 NM in the course of which full-stop landings at two different aerodromes shall be made. The 150 NM cross-country shall be the last exercise of PPL course.

- 7.6.1.2. When the applicant has flight time as a pilot of aircraft in other categories, the Licensing Authority shall determine whether such experience is acceptable and, if so, the extent to which the flight requirements can be reduced accordingly.
 - 7.6.1.3. Subject to approval by the Licensing Authority, the 40 hours flight time set out in above paragraphs may include up to 5 hours in an approved Synthetic Flight Trainer.
 - 7.6.1.4. The detailed breakdown of flying training shall be approved by the CAA.
- 7.7. **FLIGHT INSTRUCTION (AEROPLANE):** An applicant shall have received flight instruction in the under mentioned areas:
- 7.7.1. Pre-flight operations, including mass and balance determination, aeroplane inspection and servicing;
 - 7.7.2. Aerodrome and traffic pattern operations, collision avoidance precautions and procedures;
 - 7.7.3. Control of the aeroplane by external visual reference;
 - 7.7.4. Flight at critically slow airspeeds; recognition of, and recovery from, incipient and full stalls;
 - 7.7.5. Normal and cross-wind take-off and landings;
 - 7.7.6. Maximum performance (short field and obstacle clearance) take-off; short-field landings;
 - 7.7.7. Flight by reference solely to instruments, including the completion of a level 180 degree turn;
 - 7.7.8. Cross-country flying using visual reference, dead-reckoning and, where available, radio navigation aids;
 - 7.7.9. Emergency operation, including simulated aeroplane equipment malfunctions;
- 7.8. An applicant shall hold a recommendation from the Chief Flying Instructor responsible for the applicant's Ground and Flying training that the applicant has reached the standard required for the examination and flight test.
- 7.9. **AERONAUTICAL KNOWLEDGE (HELICOPTER)**
- 7.9.1. The applicant shall have demonstrated a level of knowledge appropriate to the privileges granted to the holder of a Private Pilot Licence - Helicopter in at least the following subjects:
 - 7.9.1.1. **AIR LAW:** Rules and regulations relevant to the holder of a Private Pilot's Licence-Helicopter; rules of the air appropriate air traffic services practices and procedures;

7.9.1.2. **AIRCRAFT GENERAL KNOWLEDGE**

- 7.9.1.2.1. Principles of operation of helicopter power plants, transmission (power-trains), systems and instruments;
- 7.9.1.2.2. Operating limitations of helicopters and power plants; relevant operational information from the flight manual;

7.9.1.3. **FLIGHT PERFORMANCE AND PLANNING**

- 7.9.1.3.1. Effects of loading and mass distribution on flight characteristics mass and balance calculations Human performance and limitations;
- 7.9.1.3.2. Use and practical application of take-off, landing and other performance data;
- 7.9.1.3.3. Pre-flight and en-route flight planning appropriate to Private operations under VFR; preparation and filing of air traffic services flight plans; appropriate air traffic services procedures; position reporting procedures; altimeter setting procedures; operations in areas of high density traffic;

7.9.1.4. **HUMAN PERFORMANCE AND LIMITATIONS:** Human performance and limitations relevant to the Private Pilot's Licence-Helicopter;

7.9.1.5. **METEOROLOGY:** Application of elementary aeronautical meteorology; use of, and procedures for obtaining, meteorological information; altimetry;

7.9.1.6. **NAVIGATION:** Practical aspects of air navigation and dead-reckoning techniques; use of aeronautical charts;

7.9.1.7. **OPERATIONAL PROCEDURES**

- 7.9.1.7.1. Use of aeronautical documentation such as AIP, NOTAM, aeronautical codes and abbreviations;
- 7.9.1.7.2. Appropriate precautionary and emergency procedures, including action to be taken to avoid hazardous weather and wake turbulence; settling with power, ground resonance, roll-over and other operating hazards;

7.9.1.8. **PRINCIPLES OF FLIGHT:** Principles of flight relating to helicopters; and

7.9.1.9. Radiotelephony procedures and phraseology as applied to VFR operations; action to be taken in case of

communication failure.

- 7.9.2. The detailed breakdown of ground training shall be approved by the CAA.

7.10. **AERONAUTICAL EXPERIENCE (HELICOPTER)**

- 7.10.1. An applicant must satisfactorily complete a course of basic flight training in accordance with the approved syllabus with approved aviation training centre.

- 7.10.2. Aeronautical experience of at least 40 hours of flight time, including skill test as a pilot of a Helicopter which includes:

7.10.2.1. Not less than 10 hours of solo flight time under the supervision of an Authorized Flight Instructor, including 5 hours of solo cross-country with at least one cross-country flight totaling not less than 100 NM in the course of which full-stop landings at two points shall be made. The 100 NM cross-country shall be the last exercise of PPL course.

7.10.2.2. When the applicant has flight time as a pilot of aircraft in other categories, the Licensing Authority shall determine whether such experience is acceptable and, if so, the extent to which the flight requirements can be reduced accordingly.

7.10.2.3. Subject to approval by the Licensing Authority, the 40 hours flight time set out in above paragraphs may include up to 5 hours in an approved Synthetic Flight Trainer.

7.10.2.4. The detailed breakdown of flying training shall be approved by the CAA.

7.11. **FLIGHT INSTRUCTION (HELICOPTER)**

- 7.11.1. An applicant shall have received not less than 20 hours of dual instruction time in Helicopters from an authorized Instructor in the under mentioned areas:

7.11.1.1. Pre-flight operations, including mass and balance determination, Helicopter inspection and servicing;

7.11.1.2. Aerodrome and traffic pattern operations, collision avoidance precautions and procedures;

7.11.1.3. Control of the helicopter by external visual reference;

7.11.1.4. Recovery at the incipient stage from settling with power; recovery techniques from low-rotor RPM within the normal range of engine RPM;

- 7.11.1.5. Ground maneuvering and run-ups; hovering; take-off and landings – normal, out of wind and sloping ground;
- 7.11.1.6. Take-off and landings with minimum necessary power; maximum performance take-off and landing techniques; restricted site operations; quick stops;
- 7.11.1.7. Cross-country flying using visual reference, dead reckoning and, where available, radio navigation aids, including a flight of at least one hour;
- 7.11.1.8. Emergency operations, including simulated helicopter equipment malfunctions; authoritative approach and landing; and
- 7.11.1.9. Operations to, from and transiting controlled aerodromes, compliance with air traffic services procedures, radiotelephony and phraseology.
- 7.11.1.10. An applicant shall hold a recommendation from the Chief Flying Instructor responsible for his Ground and Flying training that the applicant has reached the standard required for the examination and flight test.

7.12. **SKILL TEST – PRIVATE PILOT LICENCE**

- 7.12.1. The applicant shall have demonstrated to an authorized person, his ability to carry out as pilot-in-command of aircraft, the procedures and maneuvers described hereunder with degree of competency appropriate to the privileges of the holder of a private pilot Licence;
- 7.12.2. Operate the aircraft within its limitations;
- 7.12.3. Complete all maneuvers with smoothness and accuracy;
- 7.12.4. Exercise good judgment and airmanship;
- 7.12.5. Apply aeronautical knowledge; and
- 7.12.6. Maintain control of the aircraft at all times in a manner such that the successful outcome of a procedure or maneuver is never seriously in doubt.

7.13. **ERROR MARGINS**

Height

Normal flight ± 150 feet

With simulated engine failure ± 200 feet

Heading/Tracking of radio aid

Normal flight ± 10°

With simulated engine failure $\pm 15^0$

Speed

Take-off & approach +15/-5 Knots

Normal Flight ± 10 Knots

With simulated engine failure ± 15 Knots

7.14. **EXEMPTION**

7.14.1. An applicant for a modular course for Private Pilot Licence may carryout private ground studies but he/she shall have to appear in an Oral examination in addition to the prescribed requirements.

7.15. **EXAMINATION AND TESTS**

7.15.1. Pass PPL-1 for Aeroplane; or

7.15.2. Pass PPL-1 and PPL-H for Helicopter.

7.15.3. Pass Type Technical TT-1.

7.15.4. Skill test by the CAA Inspector/Designated Examiner.

7.16. **PRIVILEGES OF PRIVATE PILOT LICENCE**

7.16.1. The holder of a PPL may act, but not for remuneration, as pilot-in-command or Co-Pilot of any aircraft engaged in non-revenue flights for which his Licence is endorsed.

7.16.2. Before exercising the privileges at night, the Licence holder shall a Night Rating.

7.16.3. Before carrying passenger, the Licence holder shall have a Passenger Rating.

7.17. **VALIDITY**

7.17.1. A PPL shall be valid for 24 months.

7.18. **CURRENCY**

7.18.1. The holder of a PPL shall remain current subject to 3 take-off and 3 landings in preceding 90 days.

7.18.2. The night currency shall remain current subject to 3 take-off and 3 landings by night in preceding 90 days.

7.18.3. Currency on a type of aircraft with similar performance and handling characteristics is acceptable provided an endorsement is also held for that type of aircraft.

7.19. **RENEWAL**

7.19.1. PPL shall be renewed subject to a flight check after 24 months or maintaining a higher license.

7.20. **REVALIDATION**

7.20.1. Within 06 months of expiry of PPL, pass an Oral examination.

7.20.2. Between 06 to 60 months from the date of expiry of PPL, pass PPL-R, TT-1 and meet the renewal requirements.

7.20.3. After 60 months of expiry of PPL, meet the initial issue requirements.

7.21. **NIGHT RATING**

7.21.1. Private Pilot Licence may be endorsed with a Night Rating subject to a total experience of 50:00Hrs provided the applicant has:

7.21.1.1. 25:00 Hrs as PIC.

7.21.1.2. 05: Hrs as Night with:

7.21.1.2.1. 03:00 Hrs as P-3 with:

7.21.1.2.1.1. 5 take-Off and Landings.

7.21.1.3. 05:00 Hrs Instrument Training.

7.21.1.4. Flight Check with CFI/DCP with Log Book Endorsement.

7.22. **PASSENGER RATING**

7.22.1. Private Pilot Licence may be endorsed with a Passenger Rating subject to a total experience of 100: 00 Hrs including:

7.22.1.1. 30:00 Hrs Solo.

7.22.1.2. Flight Check with CFI/DCP with Log Book Endorsement.

7.23. **LIMITATIONS**

7.23.1. The holder of a PPL may act as pilot-in-command of an aircraft carrying passengers, but not for remuneration, provided he/she has a Passenger Rating endorsed on Licence.

7.23.2. The holder of a PPL not endorsed with an Instrument Rating shall not pilot an aircraft under instrument flight conditions.

7.23.3. The holder of a PPL shall not act as pilot-in-command of an aircraft by night unless he has a Night Rating on his Licence.

- 7.23.4. The holder of a PPL not endorsed with an Instrument Rating but having a Night Rating may fly at night only in Visual Meteorological Conditions.
- 7.23.5. The holder of a PPL shall not act as pilot-in-command of an aircraft engaged in spinning practice unless he/she has been certified in the log book by a duly qualified Flight Instructor as being competent to recover from fully developed spins.
- 7.23.6. The holder of a PPL shall not act as pilot-in-command of an aircraft engaged in aerobatic flight unless he/she has been certified in the log book by a qualified Flight Instructor or an approved person as being competent in the maneuvers to be performed.
- 7.23.7. The holder of a PPL shall not act as pilot-in-command of an aircraft engaged in formation flight unless he/she has been certified in log book as competent by a qualified Flight Instructor or an approved person as being competent to carry out formation flight.

7.24. **AIRWORTHINESS**

- 7.24.1. The aircraft used for training shall have a valid C of A.

7.25. **LOGBOOK**

- 7.25.1. A holder of a Private Pilot Licence shall be maintain a logbook in accordance with the CAA prescribed Regulations.

7.26. **FEE SCHEDULE FOR PPL**

- 7.26.1. As per the CAA Fee Schedule (Personnel Licensing).

7.27. **DOCUMENTS TO BE SUBMITTED**

7.27.1. **FOR ISSUE OF PPL**

- 7.27.1.1. Application Form CAAF-600.
- 7.27.1.2. Medical Certificate CAA-43.
- 7.27.1.3. Security Clearance, if not already available with CAA.
- 7.27.1.4. 04 coloured photographs 1" X 1" (both ears visible, head uncovered & blue background).
- 7.27.1.5. PPL Examination Result.
- 7.27.1.6. Photocopy of First and Last page of Logbook.
- 7.27.1.7. PPL Course Completion Certificate.
- 7.27.1.8. X-country Certificate.
- 7.27.1.9. Type Technical Result (TT-1) along with answer sheet.
- 7.27.1.10. Copy of Skill Test Authorization by CAA.

7.27.1.11. Skill Test Report CAAF-602.

7.27.1.12. Fee Voucher/Authorization.

7.27.2. FOR RENEWAL OF PPL

7.27.2.1. Application Form CAAF-601.

7.27.2.2. PPL CAAF-648 or CAAF – 649, as applicable.

7.27.2.3. Skill Test CAAF-602.

7.27.2.4. Medical Certificate CAA-43.

7.27.2.5. Fee voucher/Authorization.

7.27.3. FOR REVALIDATION OF PPL

7.27.3.1. Application Form CAAF-601.

7.27.3.2. Oral Test Report, if applicable.

7.27.3.3. Type Technical TT-1 result, if applicable.

7.27.3.4. PPL CAAF-648 or CAAF – 649, as applicable.

7.27.3.5. Skill Test CAAF-602.

7.27.3.6. Medical Certificate CAA-43.

7.27.3.7. PPL-R, PPL-1, PPL-H Exam result, as applicable.

7.27.3.8. Fee voucher/Authorization.

8. **GLIDER PILOT LICENCE (GPL)**

8.1. **ELIGIBILITY**

- 8.1.1. **SPL:** Applicant shall hold a valid Student Pilot Licence.
- 8.1.2. **AGE:** Applicant shall not be less than 16 years of age.
- 8.1.3. **MEDICAL:** Applicant shall hold at least Class 2 Medical Certificate.

8.2. **FLIGHT RADIO TELEPHONE OPERATOR LICENCE (FRTOL)**

- 8.2.1. FRTOL shall be endorsed on the Glider Pilot Licence.

8.3. **AIRWORTHINESS**

- 8.3.1. Each person operating a Glider shall ensure that the Glider has been issued with a Certificate of Airworthiness (C of A) by the CAA.

8.4. **GLIDER FLYING TRAINING**

- 8.4.1. A Microlight Organization – Glider may be authorized to conduct training for Glider Pilot Licence provided it meets the CAA prescribed requirements of a Flying Training Organization (FTO).

8.5. **AERONAUTICAL KNOWLEDGE**

- 8.5.1. The applicant shall have demonstrated a level of knowledge appropriate to the privileges granted to the holder of a glider pilot Licence in at least the following subjects:

- 8.5.1.1. **AIR LAW:** Rules and regulations relevant to the holder of a glider pilot Licence; rules of the air; appropriate air traffic services practices and procedures;

- 8.5.1.2. **AIRCRAFT GENERAL KNOWLEDGE:** Principles of operation of glider systems and instruments;

- 8.5.1.2.1. Operating limitations of gliders; relevant operational information from the flight manual or other appropriate document;

- 8.5.1.3. **FLIGHT PERFORMANCE AND PLANNING:** Effects of loading and mass distribution on flight characteristics; mass and balance considerations;

- 8.5.1.3.1. Use and practical application of launching, landing and other performance data;

- 8.5.1.3.2. Pre-flight and en-route flight planning appropriate to operations under VFR; appropriate air traffic services procedures; altimeter setting procedures; operations in areas of high-density traffic;

- 8.5.1.4. **HUMAN PERFORMANCE AND LIMITATIONS:** Human performance and limitations relevant to the glider pilot;

- 8.5.1.5. **METEOROLOGY:** Application of elementary aeronautical meteorology; use of, and procedures for obtaining, meteorological information; altimetry;

8.5.1.6. **NAVIGATION:** Practical aspects of air navigation and dead-reckoning techniques; use of aeronautical charts;

8.5.1.7. **OPERATIONAL PROCEDURES:** Use of aeronautical documentation such as AIP, NOTAM, aeronautical codes and abbreviations;

8.5.1.7.1. Different launch methods and associated procedures;

8.5.1.7.2. Appropriate precautionary and emergency procedures, including action to be taken to avoid hazardous weather and wake turbulence and other operating hazards.

8.5.1.8. **PRINCIPLES OF FLIGHT:** Principles of flight relating to gliders.

8.6. **AERONAUTICAL EXPERIENCE**

8.6.1. The applicant shall have gained, under appropriate supervision, operational experience in gliders in at least the following areas:

8.6.1.1. Pre-flight operations, including glider assembly and inspection;

8.6.1.2. Techniques and procedures for the launching method used, including appropriate airspeed limitations, emergency procedures and signals used;

8.6.1.3. Traffic pattern operations, collision avoidance precautions and procedures;

8.6.1.4. Control of the glider by external visual reference;

8.6.1.5. Flight throughout the flight envelope;

8.6.1.6. Recognition of, and recovery from, incipient and full stalls and spiral dives;

8.6.1.7. Normal and cross-wind launches, approaches and landings;

8.6.1.8. Cross-country flying using visual reference and dead-reckoning;

8.6.1.9. Emergency procedures. ; and

8.6.1.10. In the case of power-assisted Gliders (SLMG):

8.6.1.10.1. Engine handling

8.6.1.10.2. Fuel system;

8.6.1.10.3. Engine failure.

8.6.2. A person shall not take the GPL skill test unless he/she has:

8.6.2.1. Passed the GPL theory examinations;

8.6.2.2. Completed not less than 10 hours of flight time as a pilot of glider, including;

- 8.6.2.2.1. Not less than 2 hours solo flight time;
- 8.6.2.2.2. Not less than 20 launches and 20 landings.

8.7. **SKILL TEST**

- 8.7.1. The applicant shall have demonstrated the ability to perform as pilot-in-command of a glider, the procedures and maneuvers to a degree of competency appropriate to the privileges granted to the holder of a glider pilot Licence, and to:
 - 8.7.1.1. Operate the glider within its limitations;
 - 8.7.1.2. Complete all maneuvers with smoothness and accuracy;
 - 8.7.1.3. Exercise good judgment and airmanship;
 - 8.7.1.4. Apply aeronautical knowledge; and
 - 8.7.1.5. Maintain control of the glider at all times in a manner such that the successful outcome of a procedure or maneuver is never seriously in doubt.

8.8. **EXAMINATIONS AND TESTS**

- 8.8.1. Pass Type Technical TT-1.
- 8.8.2. Pass GPL –1 examination.
- 8.8.3. ‘Satisfactory’ check by a CAA Inspector/Designated Examiner.

8.9. **PRIVILEGES OF GLIDER PILOT LICENCE**

- 8.9.1. The holder of a Glider Pilot Licence may pilot any type of glider for which his Licence is endorsed.
- 8.9.2. The holder of a Glider Pilot Licence may carry out aerial work operation subject to approval and limitations imposed by the CAA.

8.10. **OPERATING LIMITATIONS - GLIDERS**

- 8.10.1. The holder of a GPL shall not act as pilot-in-command of a glider carrying passengers unless he has:
 - 8.10.1.1. Completed not less than 20 hours of flight time as a pilot-in-command of gliders;
 - 8.10.1.2. Recommendation by the Approved person with a log book endorsement; and
 - 8.10.1.3. Holds a Passenger Rating on GPL.
- 8.10.2. The holder of a GPL shall only pilot gliders by day in Visual Meteorological Conditions.

8.11. **MICROLIGHT ORGANIZATION MEMBERSHIP**

- 8.11.1. A person shall not operate a Glider unless the person is a bona fide member of a Microlight Organization – Glider in accordance with the prescribed procedures of the Organization; and has been allotted a membership number.

8.12. **VALIDITY**

8.12.1. The Glider Pilot Licence shall be valid for 24 months.

8.13. **CURRENCY**

8.13.1. Holder of a GPL shall have currency if he/she has within the preceding 90 days carried out at least 3 launches and 3 landings as PIC or PIC under supervision.

8.13.2. Currency on a type of a glider with similar performance and handling characteristics is acceptable provided an endorsement is also held for that type of glider.

8.14. **RENEWAL**

8.14.1. The applicant has undergone a Skill Test; and

8.14.2. Holds Class 2 Medical Certificate.

8.15. **REVALIDATION**

8.15.1. An Oral test by the approved person.

8.15.2. Meeting the renewal requirements.

8.16. **ADDITIONAL GLIDER RATINGS**

8.16.1.1. Additional Glider Ratings may be endorsed on a GPL provided under mentioned requirements are met:

8.16.1.1.1. At least 2 hours of dual flight instructions; and

8.16.1.1.2. Not less than 15 launches and 15 landings including at least solo 1 launch and 1 landing.

8.16.1.1.3. Pass Type Technical (TT-1).

8.16.1.1.4. Skill Test by CAA Inspector/Designated Examiner.

8.17. **GLIDER INSTRUCTOR RATING (GIR)**

8.17.1. A Glider Instructor Rating shall be endorsed on the GPL provided the applicant:

8.17.1.1. Holds a valid GPL.

8.17.1.2. Has 50 hours flight time as a pilot of gliders, which shall include at least 20 hours as pilot-in-command and not less than 75 launches and 75 landings.

8.17.1.3. Has passed the FI Exam.

8.17.1.4. 'Satisfactory' check by a CAA Inspector/Designated Examiner.

8.17.1.5. **PRIVILEGES OF GLIDER INSTRUCTOR**

8.17.1.5.1. Impart flight instruction for issue of GPL.

8.17.1.5.2. Clear and send students solo.

8.17.1.5.3. Train for type endorsement on gliders.

8.17.1.5.4. May carry passengers.

8.17.1.6. **CURRENCY**

8.17.1.6.1. Privileges of a Glider Instructor Rating may be exercised provided the pilot has, within the preceding 6 months, at least 3 glider flight instructional hours or 6 launches and 6 landings; or a Flight Check.

8.17.1.7. **LIMITATIONS**

8.17.1.7.1. The holder of a Glider Instructor Rating may give instruction only:

8.17.1.7.1.1. In dual control glider types including Self Launching Motor Gliders (SLMG) if he/she has the Type Rating;

8.17.1.7.1.2. If he/she has flown at least 5 hours on Type as pilot-in-command including not less than 6 launches and 6 landings.

8.18. **EXEMPTIONS**

8.18.1. An applicant holding PPL or a higher Licence shall undergo a minimum training of 4 hours including 20 launches and 20 landings including 2 solo launches and 2 solo landings.

8.18.2. An holder of a Flight Instructor Rating may be endorsed with a Glider Instructor Rating on his GPL provided he/she has 10 hours of glider experience as pilot-in-command including 30 solo launches and 30 solo landings, as a Glider Pilot.

8.19. **LOGBOOK**

8.19.1. Holder of a GPL shall maintain a glider pilot logbook as approved by the CAA.

8.20. **FEE SCHEDULE FOR GPL**

8.20.1. As per CAA Fee Schedule (Personnel Licensing).

8.21. **DOCUMENTS TO BE SUBMITTED**

8.21.1. **FOR ISSUE OF GPL**

8.21.1.1. Application Form CAAF-600.

8.21.1.2. Medical Certificate CAA-43.

8.21.1.3. Security Clearance, if not already available with CAA.

8.21.1.4. 04 coloured photographs 1" X 1" (both ears visible, head uncovered & blue background).

8.21.1.5. GPL Examination Result.

- 8.21.1.6. Type Technical TT-1.
- 8.21.1.7. Photocopy of First and Last page of Logbook.
- 8.21.1.8. GPL Course completion Certificate by FTO.
- 8.21.1.9. Skill test Authorization by CAA.
- 8.21.1.10. Skill Test Report CAAF-602.
- 8.21.1.11. Fee Voucher/Authorization.
- 8.21.2. **FOR RENEWAL OF GPL**
 - 8.21.2.1. Application Form CAAF-601.
 - 8.21.2.2. Glider Pilot Licence CAAF-654.
 - 8.21.2.3. Skill Test CAAF-602.
 - 8.21.2.4. Medical Certificate CAA-43.
 - 8.21.2.5. Fee voucher/Authorization.
- 8.21.3. **FOR REVALIDATION OF GPL**
 - 8.21.3.1. Application Form CAAF-601.
 - 8.21.3.2. Glider Pilot Licence CAAF-654.
 - 8.21.3.3. Type Technical TT-1.
 - 8.21.3.4. Exam report – Oral/GPL-R/GPL-1, as applicable.
 - 8.21.3.5. Skill Test CAAF-602.
 - 8.21.3.6. Medical Certificate CAA-43.
 - 8.21.3.7. Fee voucher/Authorization.
- 8.21.4. **FOR GLIDER INSTRUCTOR RATING**
 - 8.21.4.1. Application Form CAAF-600.
 - 8.21.4.2. Glider Pilot Licence CAAF-654.
 - 8.21.4.3. FI Exam Result.
 - 8.21.4.4. Skill Test Authorization by CAA.
 - 8.21.4.5. Skill Test CAAF-602.
 - 8.21.4.6. First & Last Page of Logbook.
 - 8.21.4.7. Fee voucher/Authorization.

9. **FREE BALLOON PILOT LICENCE (BPL)**

9.1. **ELIGIBILITY**

- 9.1.1. **SPL:** Applicant shall hold a valid Student Pilot Licence.
- 9.1.2. **AGE:** Applicant shall not be less than 16 years of age.
- 9.1.3. **MEDICAL:** Applicant shall hold a Class 2 Medical Certificate.

9.2. **FLIGHT RADIO TELEPHONE OPERATOR LICENCE (FRTOL)**

- 9.2.1. FRTOL privileges shall be endorsed on the Balloon Pilot Licence.

9.3. **AIRWORTHINESS**

- 9.3.1. Each person operating a Balloon shall ensure that the Balloon has been issued with a Certificate of Airworthiness (C of A) by the CAA.

9.4. **BALLOON FLYING TRAINING**

- 9.4.1. A Microlight Organization – Balloon may be authorized to conduct training for Balloon Pilot Licence provided it meets the CAA prescribed requirements of a Flying Training Organization (FTO).

9.5. **AERONAUTICAL KNOWLEDGE**

- 9.5.1. **KNOWLEDGE:** The applicant shall have demonstrated a level of knowledge appropriate to the privileges granted to the holder of a free balloon pilot Licence, in at least the following subjects:
 - 9.5.1.1. **AIR LAW:** Rules and regulations relevant to the holder of a free balloon pilot Licence; rules of the air; appropriate air traffic services practices and procedures;
 - 9.5.1.2. **AIRCRAFT GENERAL KNOWLEDGE:** principles of operation of free balloon systems and instruments;
 - 9.5.1.3. Operating limitations of free balloons; relevant operational information from the flight manual or other appropriate document;
 - 9.5.1.4. Physical properties and practical application of gases used in free balloons;
 - 9.5.1.5. **FLIGHT PERFORMANCE AND PLANNING:** effects of loading on flight characteristics; mass calculations;
 - 9.5.1.6. Use and practical application of launching, landing and other performance data, including the effect of temperature;
 - 9.5.1.7. Pre-flight and en-route flight planning appropriate to operations under VFR; appropriate air traffic services procedures; altimeter setting procedures; operations in areas of high-density traffic;
 - 9.5.1.8. **HUMAN PERFORMANCE AND LIMITATIONS:** human performance and limitations relevant to the free balloon pilot;

- 9.5.1.9. **METEOROLOGY:** application of elementary aeronautical meteorology; use of, and procedures for obtaining, meteorological information; altimetry;
- 9.5.1.10. **NAVIGATION:** practical aspects of air navigation and dead-reckoning techniques; use of aeronautical charts;
- 9.5.1.11. **OPERATIONAL PROCEDURES:** use of aeronautical documentation such as AIP, NOTAM, aeronautical codes and abbreviations;
- 9.5.1.12. Appropriate precautionary and emergency procedures, including action to be taken to avoid hazardous weather, wake turbulence and other operating hazards;
- 9.5.1.13. **PRINCIPLES OF FLIGHT:** principles of flight relating to free balloons.

9.6. **AERONAUTICAL EXPERIENCE**

- 9.6.1. The applicant shall have completed not less than 16 hours of flight time as a pilot of free balloons including at least eight launches and ascents of which one must be solo.
- 9.6.2. The applicant shall have gained, under appropriate supervision, operational experience in free balloons in at least the following areas:
 - 9.6.2.1. Pre-flight operations, including balloon assembly, rigging, inflation, mooring and inspection.
 - 9.6.2.2. Techniques and procedures for the launching and ascent, including appropriate limitations, emergency procedures and signals used.
 - 9.6.2.3. Collision avoidance precautions.
 - 9.6.2.4. Control of a free balloon by external visual reference.
 - 9.6.2.5. Recognition of, and recovery from, rapid descents.
 - 9.6.2.6. Cross-country flying using visual reference and dead reckoning.
 - 9.6.2.7. Approaches and landings, including ground handling.
 - 9.6.2.8. Emergency procedures.
 - 9.6.2.9. If the privileges of the Licence are to be exercised at night, the applicant shall have gained, under appropriate supervision, operational experience in free balloons in night flying and holds a Night Rating.

9.7. **SKILL TEST**

- 9.7.1. An applicant shall demonstrate his ability to perform as pilot-in-command in any one class of a free balloon in at least the following exercises:
 - 9.7.1.1. Operation of balloon within its limitations.

- 9.7.1.2. Complete all maneuvers with smoothness and accuracy.
- 9.7.1.3. Display good judgment and airmanship.
- 9.7.1.4. Application of aeronautical knowledge.
- 9.7.1.5. Maintain control of the balloon at all times in such a manner that the successful outcome of procedures or maneuvers is never seriously in doubt.

9.8. **CLASSES OF FREE BALLOONS:** Description of Balloon

- 9.8.1. Class 1 Hot air balloons with a volume that is not more than 100,000 cubic feet.
- 9.8.2. Class 2 Hot air balloons with a volume that is more than 100,000 cubic feet but not more than 200,000 cubic feet.
- 9.8.3. Class 3 Hot air balloons with a volume that is more than 200,000 cubic feet.
- 9.8.4. Class 4 Special shape balloons.
- 9.8.5. Class 5 Gas balloons.
- 9.8.6. Class 6 Blimps/Airship (hot air/gases)

9.9. **ADDITIONAL FREE BALLOON RATINGS**

- 9.9.1.1. Pass Type Technical TT-1.
- 9.9.1.2. 03:00 Hrs as P-3 including 5 ascents and 5 landings; and
- 9.9.1.3. 01 supervised solo ascent with 01 supervised landing..

9.10. **NIGHT RATING – FREE BALLOON PILOT LICENCE**

- 9.10.1.1. Free Balloon Pilot Licence may be endorsed with a Night Rating subject to a total experience of 30:00 Hrs provided the applicant has:
 - 9.10.1.1.1. 20:00 Hrs as PIC.
 - 9.10.1.1.2. 05: Hrs as Night with:
 - 9.10.1.1.2.1. 03:00 Hrs as P-3 including 5 ascents and 5 Landings.
 - 9.10.1.1.3. Flight Check with CFI/DCP with Log Book Endorsement.

9.11. **OPERATING RESTRICTIONS - FREE BALLOON**

- 9.11.1. **GENERAL:** Unless specifically authorized, a person shall not operate a free balloon in a manner that will cause it to fly:
 - 9.11.1.1. Below 1000 feet over a congested area of a city, town, or settlement.

- 9.11.1.2. Over an open-air assembly of persons.
- 9.11.2. **METEOROLOGICAL LIMITATIONS:** Except where authorized by the appropriate ATS, a person shall not operate a free balloon under following conditions:
 - 9.11.2.1. There are clouds or obscuring phenomena of more than four-eighths coverage.
 - 9.11.2.2. The horizontal visibility is less than 8 km.
- 9.11.3. **TERMINATION:** Each person operating a free balloon shall activate the respective termination devices to terminate the flight where:
 - 9.11.3.1. Meteorological conditions are less than those prescribed above.
 - 9.11.3.2. Further operation is hazardous to other air traffic or to persons and property on the surface.
 - 9.11.3.3. Unauthorized entry into airspace of another State's territory is imminent.
- 9.11.4. **NIGHT OPERATIONS:** A person shall not operate a free balloon below 60000 feet pressure altitude at night unless the balloon and its attachments and payload, whether or not they become separated during the operation, are each equipped with lights that:
 - 9.11.4.1. Are visible at a distance of at least 5 NM.
 - 9.11.4.2. Have a flash frequency of between 40 and 100 cycles per minute.
 - 9.11.4.3. Each has their own power supply.
- 9.11.5. **SUSPENSION DEVICE:** A person shall not operate a free balloon that is equipped with a suspension device more than 15 m long, other than a highly coloured open parachute, by day below 60000 feet pressure-altitude unless the suspension device:
 - 9.11.5.1. Is coloured in alternate bands of high visibility colors.
 - 9.11.5.2. Or has coloured pennants or streamers attached which are visible for at least 1 nm.
- 9.11.6. **PRE-LAUNCH NOTICE**
 - 9.11.6.1. A person shall not launch a free balloon unless he/she provides the following information to the ATS NOTAM office at least 24 hours prior to the estimated launch time:
 - 9.11.6.1.1. Their name and telephone number.
 - 9.11.6.1.2. The balloon identification.
 - 9.11.6.1.3. The balloon classification and description including:
 - 9.11.6.1.3.1. The length and diameter of the balloon.

- 9.11.6.1.3.2. The length of the suspension device, if applicable.
 - 9.11.6.1.3.3. The weight of the payload.
 - 9.11.6.1.3.4. The SSR code, if applicable.
 - 9.11.6.1.3.5. The location of the launch site.
 - 9.11.6.1.3.6. The estimated time of launch or time of commencement and completion of multiple launches.
 - 9.11.6.1.3.7. The number of balloons to be launched or, for multiple launches, the scheduled interval between launches.
 - 9.11.6.1.3.8. The expected direction of ascent.
 - 9.11.6.1.3.9. The estimated time to reach cruising level.
 - 9.11.6.1.3.10. The planned cruising levels (pressure-altitude)
 - 9.11.6.1.3.11. The planned duration of the flight.
 - 9.11.6.1.3.12. The estimated time and location of impact with the surface of the earth.
 - 9.11.6.1.3.13. Where there are changes to the information supplied, the operator shall forward the changes to the ATS NOTAM office at least 6 hours prior to the projected launch time.
- 9.11.7. **LAUNCH NOTICE:** Each person operating a free balloon shall notify the nearest ATS unit of the following information immediately after the balloon is launched giving:
- 9.11.7.1. The balloon flight identification.
 - 9.11.7.2. The launch site.
 - 9.11.7.3. The actual time of launch.
 - 9.11.7.4. The estimated time at which the cruising level will be reached.
 - 9.11.7.5. Any changes to the information provided earlier.
- 9.11.8. **CANCELLATION NOTICE:** Each person who has provided a pre-launch notice who subsequently cancels the operation shall immediately notify the ATS unit of the cancellation.
- 9.11.9. **BALLOON POSITION REPORTS:** Each person operating a free balloon shall:
- 9.11.9.1. Unless otherwise required by the ATS unit, monitor the course of the balloon and record its position at least every 2 hours;

and

9.11.9.2. Forward any balloon position reports requested by the ATS.

9.11.10. **PRE-DESCENT POSITION REPORT:** Each person operating a free balloon shall provide the following information to the nearest ATS unit prior to the planned descent:

9.11.10.1. The current geographical position.

9.11.10.2. The current altitude.

9.11.10.3. The forecast descent trajectory.

9.11.10.4. The forecast time and location of the impact with the surface of the earth.

9.11.11. **COMPLETION OF OPERATION:** Each person operating a free balloon shall notify the nearest ATS unit when the operation has ended.

9.12. **EXAMINATIONS AND TESTS**

9.12.1. Pass Balloon Pilot Examination BPL-1.

9.12.2. Pass Type Technical TT-1.

9.12.3. 'Satisfactory' Skill test with CAA Inspector/Designated Examiner.

9.13. **PRIVILEGES**

9.13.1. The privileges of the holder of a free balloon pilot Licence shall be to act as pilot-in-command of free balloon in private, aerial work and charter operations provided the Licence holder has the appropriate Balloon Class endorsement.

9.13.2. For exercising the privileges of the variants within the same Class of Balloon, the person shall have a Log Book endorsement, made by the Approved Person, subject to meeting the prescribed requirements of the Microlight Organization.

9.13.3. If the privileges of the Licence are to be exercised at night, the holder shall have the Night Rating Endorsement.

9.13.4. The holder of a Balloon Pilot Licence may carry out aerial work operation subject to approval and limitations imposed by the CAA.

9.13.5. **PASSENGERS:** A holder of a BPL shall not carry passenger/s unless he/she has completed at least 10 hours as pilot-in-command of balloon in free flight; and has a Log Book Endorsement by the Approved Person subject to meeting the prescribed requirements of the Microlight Organization.

9.14. **MICROLIGHT ORGANIZATION MEMBERSHIP**

9.14.1. A person shall not operate a Balloon unless the person is a bona fide member of a Microlight Organization – Balloon in accordance with the prescribed procedures of the Organization; and has been allotted a membership number.

- 9.15. **VALIDITY**
- 9.15.1. The Balloon Pilot Licence shall remain valid for 24 months.
- 9.16. **CURRENCY**
- 9.16.1. Within the preceding 6 months carried out at least one free flight which includes at least;
- 9.16.1.1. One inflation of the balloon envelope; 30 minutes of free flight time; including three ascents and landings; and One deflation of the balloon envelope.
- 9.16.1.2. Or Skill Test by an Approved Person.
- 9.17. **RENEWAL**
- 9.17.1. A Balloon Pilot Licence shall be renewed subject to meeting the currency requirements.
- 9.18. **REVALIDATION**
- 9.18.1. An Oral test by a Balloon Instructor Pilot.
- 9.18.2. 01 supervised Balloon Flight.
- 9.18.3. Meeting the renewal requirements.
- 9.19. **ADDITIONAL BALLOON CLASS RATINGS**
- 9.19.1. Additional Balloon Class Ratings may be endorsed subject to undergoing 2 hours of training with at least 4 launches one of which must be solo followed by a 'Satisfactory' Skill Test by a CAA Inspector/Designated Examiner.
- 9.20. **BALLOON INSTRUCTOR PILOT (BIP)**
- 9.20.1. A Balloon Instructor Pilot Rating may be endorsed on a BPL provided the applicant meets the following requirements:
- 9.20.1.1. Holds a valid BPL;
- 9.20.1.2. Have at least 100 hours aeronautical experience as pilot of balloons of which at least:
- 9.20.1.2.1. 75 hours as pilot-in-command of balloons in free flight;
- 9.20.1.2.2. 5 hours of tethered flights; and
- 9.20.1.2.3. Pass AP-1 examination.
- 9.20.1.2.4. 'Satisfactory' check by a CAA Inspector/Designated Examiner.
- 9.21. **LOGBOOK**
- 9.21.1. Holder of a Balloon Pilot Licence shall maintain a logbook as approved by the CAA.
- 9.22. **FEE SCHEDULE**

9.22.1. As per CAA Fee Schedule (Personnel Licensing).

9.23. **DOCUMENTS TO BE SUBMITTED**

9.23.1. **FOR ISSUE OF BPL**

- 9.23.1.1. Application Form CAAF-600.
- 9.23.1.2. Medical Certificate CAA-43.
- 9.23.1.3. Security Clearance, if not already available with CAA.
- 9.23.1.4. 04 coloured photographs 1” X 1” (both ears visible, head uncovered & blue background).
- 9.23.1.5. BPL Examination Result.
- 9.23.1.6. Type Technical (TT-1) result.
- 9.23.1.7. Photocopy of First and Last page of Logbook.
- 9.23.1.8. BPL Course completion Certificate by FTO.
- 9.23.1.9. Skill Test Report CAAF-602.
- 9.23.1.10. Fee Voucher/Authorization.

9.23.2. **FOR RENEWAL OF BPL**

- 9.23.2.1. Application Form CAAF-601.
- 9.23.2.2. Balloon Pilot Licence CAAF-641.
- 9.23.2.3. Photocopy of First and Last page of Logbook.
- 9.23.2.4. Medical Certificate CAA-43.
- 9.23.2.5. Fee voucher/Authorization.

9.23.3. **FOR REVALIDATION OF BPL**

- 9.23.3.1. Application Form CAAF-601.
- 9.23.3.2. Balloon Pilot Licence CAAF-641.
- 9.23.3.3. Oral test report by the BIP.
- 9.23.3.4. Photocopy of First and Last page of Logbook.
- 9.23.3.5. Medical Certificate CAA-43.
- 9.23.3.6. Fee voucher/Authorization.

9.23.4. **FOR BALLOON INSTRUCTOR PILOT RATING**

- 9.23.4.1. Application Form CAAF-600.
- 9.23.4.2. Balloon Pilot Licence CAAF-641.
- 9.23.4.3. Skill Test CAAF-602.
- 9.23.4.4. AP-1 Examination result.
- 9.23.4.5. First & Last page of Logbook.
- 9.23.4.6. Fee voucher/Authorization.

10. **MICROLIGHT COMPETENCY CERTIFICATE (MCC)**

10.1. **ELIGIBILITY**

- 10.1.1. **SPL:** The applicant for a Microlight Competency Certificate shall hold a valid Student Pilot Licence.
- 10.1.2. **AGE:** Applicant shall not be less than 16 years of age.
- 10.1.3. **EDUCATION:** Applicant shall hold a Matric or equivalent qualification or have passed an English Language test conducted by the FTO.
- 10.1.4. **MEDICAL:** Applicant shall hold a valid MCC Medical fitness Certificate or Class 1, Class 2 or Class 3 Medical Certificate.

10.2. **FLIGHT RADIO TELEPHONE OPERATOR LICENCE (FRTOL)**

- 10.2.1. FRTOL privileges shall be endorsed on the MCC.

10.3. **MICROLIGHT ORGANIZATION MEMBERSHIP**

- 10.3.1. A person shall not operate a Microlight unless the person is a bona fide member of a Microlight Organization in the specific Category in accordance with the prescribed procedures of Organization and has been allotted a membership number.

10.4. **MICROLIGHT FLYING TRAINING**

- 10.4.1. A Microlight Organization may be authorized to conduct training for a Microlight Competency Certificate (MCC) in the specific Category provided it meets the prescribed requirements of a Flying Training Organization (FTO).

10.5. **AIRWORTHINESS**

- 10.5.1. Each person operating a Microlight, other than Glider and Balloon, shall ensure that the Microlight has a current warrant of fitness, and an equipment identification number, issued by a Microlight Organization in accordance with the prescribed procedures of the organization.

10.6. **AERONAUTICAL KNOWLEDGE**

- 10.6.1. A Microlight Organization may lay down more stringent requirements than provided for in this Air Navigation Order.

- 10.6.2. Refer to the specific Category as under:

CATEGORY	PARA NO
Ultralight and Sports Category	11
Hang Glider Category	12
Paraglider/Paramotor Category	13
Powered Parachute Category	14
Para Jump & Skydiving Category	15
Gyroglider/Gyroplane Category	16
Parasail Category	84

10.7. **AERONAUTICAL EXPERIENCE**

- 10.7.1. Refer to the page of specific Category indicated above.
- 10.7.2. A Microlight Organization may lay down more stringent requirements than provided for in this Air Navigation Order.

10.8. **EXAMINATIONS AND TESTS**

- 10.8.1. Refer to the page of specific Category indicated above.

10.9. **INSTRUCTOR – SPECIFIC CATEGORY**

- 10.9.1. Refer to the page of specific Category indicated above.

10.10. **OPERATING LIMITATIONS - MICROLIGHTS**

- 10.10.1. CAA may at any time suspend or ban the Microlight Flying Activity if deems appropriate.
- 10.10.2. All Microlight operations are to be conducted in uncontrolled airspace unless the Microlight has two-way radio communication.
- 10.10.3. No person may allow an object to be dropped from a Microlight without prior approval from the CAA.
- 10.10.4. Powered Microlights shall yield the right-of-way to un-powered Microlights.
- 10.10.5. No person shall operate a Microlight in prohibited or restricted areas unless that person has permission from the user or controlling agency.
- 10.10.6. No person shall operate a Microlight unless clear of clouds and in sight of the surface.
- 10.10.7. **HEIGHT:**
- 10.10.8. A pilot of a Microlight in Ultralight and Sport Category shall not operate below 500 feet AGL except for the purpose of take off and landing.
- 10.10.9. Subject to clearance by the ATS, a pilot of a Microlight in Ultralight and Sport Category may operate below 500 feet AGL and not below 200 feet AGL unless;
 - 10.10.9.1. Conducted with the approval of the Microlight Organization.
 - 10.10.9.2. Carried out in accordance with any conditions imposed by the Microlight Organization.
- 10.10.10. **FLIGHT:** A pilot shall only operate a Microlight:
 - 10.10.10.1. By day; and
 - 10.10.10.2. In VMC.
 - 10.10.10.3. A pilot of a Microlight shall not operate in controlled airspace or within 3 nautical miles (5.5 km) of an aerodrome unless permission is obtained from ATS.

- 10.10.11. **PILOT:** Each person acting as the pilot of a Microlight shall:

10.10.11.1. Hold an appropriate current Microlight Competency Certificate with appropriate Category; or holds a Student Pilot Licence under the direct supervision of the holder of a Microlight Instructor Endorsement.

10.10.11.2. Each pilot shall comply with the privileges and limitations of the Licence or Certificate and any applicable ratings.

10.10.12. **AREA**

10.10.12.1. No person shall operate a Microlight aircraft, hang glider, Paraglider/Paramotor, powered parachute, parachute, moored balloon, kite, free balloon, model aircraft, gyroglider/gyroplane, or parasail within a restricted area designated unless that person has the approval of the controlling authority specified for the area.

10.10.12.2. **LOW FLYING AREAS:** Unless authorized by the ATS, a Microlight shall not operate within a designated low flying area.

10.10.12.3. **CONTROLLED AIRSPACE:** Unless authorized by the ATS, a Microlight shall not operate in a controlled airspace.

10.10.12.4. **TAKE OFF AREAS:** A Microlight pilot shall take off from an area specified for the Category and being regulated/declared safe by the respective Microlight Organization.

10.10.12.5. **LANDING AREAS:** A Microlight Pilot shall land in a landing ground specified for the Category and is being regulated/declared safe by the respective Microlight Organization.

10.11. **CURRENCY OF MCC**

10.11.1. A Microlight Organization may lay down more stringent requirements than provided for in this Air Navigation Order.

10.11.2. Refer to the page of specific Category as indicated below:

CATEGORY	PARA NO
Ultralight and Sports Category	11
Hang Glider Category	12
Paraglider/Paramotor Category	13
Powered Parachute Category	14
Para Jump & Skydiving Category	15
Gyroglider/Gyroplane Category	16
Parasail Category	17

10.12. **REGAINING CURRENCY OF MCC**

10.12.1. A Microlight Organization may lay down more stringent requirements than provided for in this Air Navigation Order.

10.12.2. Refer to the page of specific Category indicated above.

10.13. **PRIVILEGES OF MCC**

10.13.1. Refer to the page of specific of Category indicated above

10.14. **VALIDITY OF MCC**

10.14.1. The Microlight Competency Certificate (MCC) shall be valid for 24 months.

10.14.2. The Privileges of Microlight Competency Certificate shall be exercised subject to a valid Medical Certificate.

10.15. **RENEWAL OF MCC**

10.15.1. Microlight Competency Certificate shall be renewed subject to meeting the currency requirements of an endorsed Category on the MCC.

10.16. **REVALIDATION OF MCC**

10.16.1. The Microlight Competency Certificate (MCC) may be revalidated subject to meeting the requirements of regaining the currency on any one of the Categories endorsed on the MCC.

10.17. **LOGBOOK**

10.17.1. An MCC holder shall maintain a Logbook of specific Category as prescribed/approved by the CAA.

10.18. **FEE SCHEDULE OF MCC**

10.18.1. As per CAA Fee Schedule (Personnel Licensing).

10.19. **DOCUMENTS TO BE SUBMITTED**

10.19.1. **FOR ISSUE OF MCC**

10.19.1.1. Application Form CAAF-665.

10.19.1.2. Medical Certificate CAAF-667.

10.19.1.3. Security Clearance, if not already available with CAA.

10.19.1.4. 04 coloured photographs 1" X 1" (both ears visible, head uncovered & blue background).

10.19.1.5. Photograph of flying Machine with following details written on the back:

10.19.1.5.1. Empty weight.

10.19.1.5.2. Maximum speed.

10.19.1.5.3. Maximum ceiling.

10.19.1.6. Theory Examination results in the specific Category.

10.19.1.7. Type Technical results (TT-1), where applicable.

- 10.19.1.8. Photocopy of page/pages of Logbook reflecting the required experience.
- 10.19.1.9. MCC Course Certificate (in specific Category).
- 10.19.1.10. Skill Test Report CAAF-643/665 (as appropriate).
- 10.19.1.11. Fee Voucher/Authorization.

10.19.2. **FOR RENEWAL OR REVALIDATION OF MCC**

- 10.19.2.1. Application Form CAAF-665.
- 10.19.2.2. Oral test, if applicable.
- 10.19.2.3. Skill Test CAAF-643/665 (as appropriate).
- 10.19.2.4. Microlight Competency Certificate CAAF-627.
- 10.19.2.5. Medical Certificate CAAF-667.

10.19.3. **FOR INSTRUCTOR ENDORSEMENT**

- 10.19.3.1. Application Form CAAF-665.
- 10.19.3.2. Skill Test CAAF-643/665 if applicable.
- 10.19.3.3. Foreign Rating, where applicable.
- 10.19.3.4. Microlight Competency Certificate CAAF-627.
- 10.19.3.5. Photocopy of First & Last page of Logbook.
- 10.19.3.6. FI-1/AP-1 Examination result, as applicable.
- 10.19.3.7. Instructor Course Certificate (as appropriate)
- 10.19.3.8. Fee voucher/Authorization.

11. **MCC – ULTRALIGHT/SPORTS CATEGORY**

11.1. **AERONAUTICAL KNOWLEDGE**

- 11.1.1. The Aeronautical knowledge shall be in accordance with the approved syllabus and shall include, but not limited, to the under mentioned:
- 11.1.2. Air Law – Basic Concepts.
- 11.1.3. Applicable CARs, ANOs, Directives, Safety Circulars.
- 11.1.4. Aircraft General Knowledge.
- 11.1.5. Flight performance and planning.
- 11.1.6. Human performance and limitations.
- 11.1.7. Meteorology.
- 11.1.8. Navigation.
- 11.1.9. Operational procedures.
- 11.1.10. Radiotelephony. Accident reporting requirements of CAA.
- 11.1.11. Use of the applicable portions of the AIP.
- 11.1.12. If applicable, the use of aeronautical charts, magnetic compass and GPS;
- 11.1.13. Recognition of critical weather situations from the ground and in flight, wind shear avoidance, the applicable procurement and use of aeronautical weather reports/ forecasts;
- 11.1.14. The safe and efficient operation of Microlight vehicles including collision avoidance, recognition and avoidance of wake turbulence;
- 11.1.15. The effects of density altitude on takeoff and climb performance;
- 11.1.16. Weight and balance computations;
- 11.1.17. Principles of applicable aerodynamics, power plants and aircraft systems;
- 11.1.18. Aeronautical decision making and judgment;
- 11.1.19. Pre-flight action as applicable to the rating sought;
- 11.1.20. Radio communication skills
- 11.1.21. Contents of USUA Pilots Manual.

11.2. **AERONAUTICAL EXPERIENCE**

- 11.2.1. The applicant shall demonstrate his ability to carry out as pilot-in-command of an aircraft procedures and maneuvers described hereunder with degree of competency appropriate to the privileges of the holder of a Microlight Competency Certificate.

- 11.2.1.1. Pre-flight operations, including mass and balance determination, aeroplane inspection and servicing;
 - 11.2.1.2. Aerodrome and traffic pattern operations, collision avoidance precautions and procedures;
 - 11.2.1.3. Control of the aeroplane by external visual reference;
 - 11.2.1.4. Flight at critically slow airspeeds; recognition of, and recovery from, incipient and full stalls;
 - 11.2.1.5. Normal and cross-wind take-off and landings;
 - 11.2.1.6. Maximum performance (short field and obstacle clearance) take-off; short-field landings;
 - 11.2.1.7. Flight by reference solely to instruments, including the completion of a level 180 degree turn;
 - 11.2.1.8. Cross-country flying using visual reference, dead-reckoning and, where available, radio navigation aids;
 - 11.2.1.9. Emergency operation, including simulated aeroplane equipment malfunctions;
- 11.2.2. The Aeronautical Experience shall be in accordance with the approved syllabus and shall include, but not limited, to the under mentioned:
- 11.2.2.1. Pre-Flight Inspection.
 - 11.2.2.2. Engine Starting.
 - 11.2.2.3. Taxi Technique.
 - 11.2.2.4. Pre-Take Off Checklist.
 - 11.2.2.5. Straight & Level Flight.
 - 11.2.2.6. Air Speed Control.
 - 11.2.2.7. Altitude Control.
 - 11.2.2.8. Normal take Off.
 - 11.2.2.9. Climbing Turns.
 - 11.2.2.10. Coordinated Turns.
 - 11.2.2.11. Collision Avoidance.
 - 11.2.2.12. Min. Controllable Speed.
 - 11.2.2.13. Power-on Stall.
 - 11.2.2.14. Power-off Stall.
 - 11.2.2.15. Descending Turns.
 - 11.2.2.16. Emergency Descent (Gliders)
 - 11.2.2.17. Crabbing.

- 11.2.2.18. Traffic Pattern Procedures.
- 11.2.2.19. Go-Around Procedures.
- 11.2.2.20. Landing Glide Path Control.
- 11.2.2.21. Normal Approach.
- 11.2.2.22. Normal Landing.
- 11.2.2.23. Landing soft/short field.
- 11.2.2.24. Wake Turbulence Avoidance.
- 11.2.2.25. Cross Wind Technique.
- 11.2.2.26. Forced Landings.
- 11.2.2.27. Airmanship.
- 11.2.2.28. Radio Procedures.

11.3. **FLYING HOURS**

- 11.3.1. The flying course shall comprise a total of 16 hours.
- 11.3.2. Including not less than 5 hours of solo flight time under the supervision of a Microlight Instructor;
 - 11.3.2.1. Including 2 hours of solo cross-country of which one cross-country flight totaling not less than 50 NM.
 - 11.3.2.2. At least 2 hours of simulated instrument flight time in dual flying; and

11.4. **SKILL TEST**

- 11.4.1.1. Operate the aircraft within its limitations;
- 11.4.1.2. Complete all manoeuvres with smoothness and accuracy;
- 11.4.1.3. Exercise good judgment and airmanship;
- 11.4.1.4. Apply aeronautical knowledge; and
- 11.4.1.5. Maintain control of the aeroplane at all times in a manner such that the successful outcome of a procedure or maneuver is never seriously in doubt.

11.5. **MCC ISSUE FOR HIGHER LICENCE HOLDERS**

- 11.5.1. Training: Not less than 2 hours of dual training.

11.6. **EXAMINATION AND TEST**

- 11.6.1. Pass theory Examination in Ultralight & Sports Category by FTO.
- 11.6.2. Pass Type Technical (TT-1).
- 11.6.3. 'Satisfactory' Skill test by a CAA Inspector/Designated Examiner

11.7. **PRIVILEGES OF ULTRALIGHT/SPORTS CATEGORY**

11.7.1. The holder of a Microlight Competency Certificate may operate the Ultralight and/or Sports Category endorsed on his/her Certificate provided he/she has the endorsement of the specific Type on the Logbook.

11.7.2. May carry out aerial work operation subject to the approval and limitations imposed by the CAA.

11.7.3. May carry a passenger provided he/she has total of 100 sorties/40 hours, on the type, whichever is earlier, with a logbook endorsement by the approved person.

11.8. **CURRENCY OF ULTRALIGHT/SPORTS CATEGORY**

11.8.1. The holder of a MCC shall remain current provided he/she has carried out 3 Take Off and 3 Landings in the preceding 90 days in the specified category.

11.9. **REGAINING CURRENCY OF ULTRALIGHT/SPORTS CATEGORY**

11.9.1. Oral test.

11.9.2. A flight in the specified Category with an MTI/MI/MCC holder authorized by the Supervisor.

11.10. **ADDITIONAL ULTRALIGHT/SPORTS CATEGORY - MCC**

11.10.1. **WITHIN SAME CATEGORY OF MICROLIGHT AIRCRAFT**

11.10.1.1. Training: Not less than 2 Hours of Training.

11.10.1.2. Type Technical TT-1.

11.10.1.3. Flight Check by the DCP/DE with Logbook Endorsement.

11.10.2. **ULTRA LIGHT TO SPORTS**

11.10.2.1. Training: Not less than 5 hours.

11.10.2.2. Type Technical TT-1.

11.10.2.3. Flight Check by the CAA Inspector/DE.

11.10.3. **SPORTS TO ULTRALIGHT**

11.10.3.1. Training: Not less than 1 hours.

11.10.3.2. Type Technical TT-1.

11.10.3.3. Flight Check by the CAA Inspector/DE.

11.10.4. **FOR PERSONS HOLDING MCC WITH PPL OR HIGHER LICENCE**

11.10.4.1. Training: Not less than 1 Hours for either Sports or Ultralight category.

11.10.4.2. Type Technical TT-1.

11.10.4.3. Flight Check by the DE.

11.11. **MICROLIGHT TYPE INSTRUCTOR - MTI (ULTRALIGHT & SPORTS)**

11.11.1. **REQUIREMENTS**

- 11.11.1.1. Have at least 75 hours aeronautical experience as pilot of the Microlight Aircraft of which at least 60 hours are as pilot-in-command including 20 hours on the type.
- 11.11.1.2. Holder of CPL or ATPL shall require 20 hours on Sport/Ultralight aircraft to qualify for the MTI training.
- 11.11.1.3. Complete an approved Type Instructor course.
 - 11.11.1.3.1. Minimum of 04 hours of Class room instruction.
 - 11.11.1.3.2. Minimum of 02 Hours of MTI flying training.
 - 11.11.1.3.3. Flight check with an Oral test on 'Instructional Technique' with a CAA Inspector/DE with a Logbook Endorsement and intimation to the CAA.

11.11.2. **PRIVILEGES**

- 11.11.3. The privileges of a Microlight Type Instructor are to conduct Type Training on a Microlight (Sport/Ultralight aircraft) provided he/she has 03 hours on the type as Pilot-in –Command.
- 11.11.4. MTI may carry passenger/s.

11.12. **MICROLIGHT INSTRUCTOR (MI) (ULTRALIGHT & SPORTS)**

- 11.12.1. No person shall exercise the privileges of a Microlight Instructor unless that person holds a Microlight Competency Certificate with a Microlight Instructor Rating.
- 11.12.2. A CPL or ATPL holder endorsed with a Flight Instructor Rating shall be endorsed with an MI Rating on MCC provided he/she has at least 03 hours on the type as Pilot-in-Command.

11.13. **MICROLIGHT INSTRUCTOR COURSE (MIC)**

11.13.1. **ELIGIBILITY**

- 11.13.2. A person shall be eligible for the Microlight Instructor Course (MIC) provided he/she holds a valid MCC with 75 hours experience on Sport/Ultralight Aircraft.
- 11.13.3. A CPL or ATPL holder (without FI Rating) may undertake Microlight Instructor course if he/she has a valid MCC and has completed a minimum of 10 hours as Pilot-in-Command on Microlights (Sport/Ultralight).
- 11.13.4. GPL holder (with Instructor Rating) may undertake Microlight Instructor course if he/she has a valid MCC and has flown a minimum 20 hours as Pilot-in-Command on Microlights (Sport/Ultralight).

11.14. **MICROLIGHT INSTRUCTOR COURSE (MIC)**

- 11.14.1. The Instructor/s to be used for MI Course shall be approved by the CAA.

11.14.2. **GROUND TRAINING:** The ground training shall include:

- 11.14.2.1. Techniques of applied instruction;
- 11.14.2.2. Assessment of student performance in those subjects in which ground instruction is given;
- 11.14.2.3. The learning process;
- 11.14.2.4. Elements of effective teaching;
- 11.14.2.5. Students evaluation and testing, training philosophies;
- 11.14.2.6. Training program development;
- 11.14.2.7. Lesson planning;
- 11.14.2.8. Classroom instructional techniques;
- 11.14.2.9. Use of training aids;
- 11.14.2.10. Analysis and correction of student error;
- 11.14.2.11. Human performance and limitations relevant to flight instructions and
- 11.14.2.12. Hazards involved in simulating system failures and malfunctions in the aircraft

11.14.3. **FLYING TRAINING:** The flying training shall include:

- 11.14.3.1. The flight instruction shall comprise at least 15 hours of flight training of which 13 hours shall be dual flight instruction. The remaining 2 hours may be mutual flying (that is, two applicants flying together to practice flight demonstrations).
- 11.14.3.2. An applicant for a MI Rating shall be able to instruct a student pilot to the level required for the issue of a MCC including pre-flight, post-flight and theoretical knowledge instruction.

11.14.4. **MI SKILL REQUIREMENTS**

- 11.14.4.1. The applicant for a MI Rating shall have demonstrated the ability to instruct in the areas of flight and ground instruction in Microlight Aircraft.
- 11.14.4.2. The skill test for a MI Rating comprises oral theoretical examinations on the ground, pre-flight and post flight briefings and in-flight MI demonstrations during skill test in an aircraft.
- 11.14.4.3. The oral theoretical knowledge examination part of the skill test is sub-divided into two parts:
 - 11.14.4.3.1. The applicant is required to give a lecture under test conditions to other 'student(s)', one of who will be the examiner. The amount of time for preparation of the test lecture shall be agreed

beforehand with the examiner. The applicant may use appropriate literature. The test lecture should not exceed 45 minutes.

11.14.4.3.2. The applicant is tested orally by an examiner for knowledge of 'teaching and learning' content given in the MCC course.

11.14.4.4. The flying skill test shall comprise exercises, to demonstrate the ability to be an MI (i.e. instructor demonstration exercises), chosen by the examiner from the flight syllabus of the MI training courses. The applicant will be required to demonstrate MI abilities, including briefing, flight instruction and de-briefing.

11.14.4.5. During the skill test, the applicant shall occupy the seat normally occupied by the MI. The examiner 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 maneuver including typical mistakes of inexperienced students. The applicant is expected to correct mistakes orally and/or, if necessary, by intervening.

11.14.4.6. The examiner may terminate the test at any stage if it is considered that the applicant's demonstration of flying or instructional skills require a re-test.

11.14.4.7. The Skill test shall be conducted by a CAA Inspector/DE.

11.14.5. **PRIVILEGES OF MI**

11.14.5.1. May conduct training of abnatio students for the issue of Microlight Competency Certificate (Sport/Ultralight).

11.14.5.2. May conduct Type Training on the Microlight Aircraft.

11.14.5.3. May carry passenger/s.

11.15. **TOW RATING (SPORT/ULTRALIGHT)**

11.15.1. Each pilot of a Microlight aircraft towing an object shall hold a MCC with a Tow Rating.

11.15.2. The holder of a Microlight Competency Certificate may be endorsed with a Tow Rating if the pilot:

11.15.2.1. Has at least 100 hours flight time experience including:

11.15.2.1.1. At least 80 hours as pilot-in-command of a Microlight; and

11.15.2.1.2. At least 20 hours as the pilot of the type of Microlight aircraft being used; and

11.15.2.2. Has been briefed on Microlight towing emergencies and procedures by the holder of a Microlight Instructor.

11.15.2.3. Check/Recommendation by a CAA Inspector/DE.

- 11.15.3. A pilot of a Microlight aircraft shall not tow in flight unless:
 - 11.15.3.1. The towing aircraft is of a type that is capable of controlled flight at speeds below the maximum permissible aero-tow speed prescribed for the tow object; and
 - 11.15.3.2. The towing aircraft complies with the equipment requirements; and
 - 11.15.3.3. Release mechanisms on aircraft has been checked for serviceability prior to the flight.

12. **MCC – HANG GLIDER CATEGORY**

12.1. **AERONAUTICAL KNOWLEDGE**

- 12.1.1. The Aeronautical knowledge shall be in accordance with the approved syllabus and shall include, but not limited, to the under mentioned:
- 12.1.2. The ground training shall be conducted in accordance with the approved syllabus including:
 - 12.1.2.1. Principles of flight including drag, airflow over the wing, angle of attack, wing loading, glide angle & sink speed.
 - 12.1.2.2. Air speed - wind speed - ground speed.
 - 12.1.2.3. Emergency and safety procedures.
 - 12.1.2.4. Dangers - powerlines, trees, water.
 - 12.1.2.5. Turbulence and its consequences.
 - 12.1.2.6. Flying with others, anticipation.
 - 12.1.2.7. Right of Way, Rules of the air.
 - 12.1.2.8. The emergency parachute.
 - 12.1.2.9. Choice of safe field including ground conditions, obstructions and overshoot areas.
 - 12.1.2.10. Assessment of conditions for flight.
 - 12.1.2.11. Safe areas for onlookers.
 - 12.1.2.12. Emergency stopping and take-off abort.
 - 12.1.2.13. Emergency and safety procedures.
 - 12.1.2.14. Collision avoidance.
 - 12.1.2.15. Landing rules.
 - 12.1.2.16. Night (definition of).
 - 12.1.2.17. Congested areas.
 - 12.1.2.18. Minimum heights.
 - 12.1.2.19. Visual flight rules (VFR).
 - 12.1.2.20. Visual Met Conditions (VMC).
 - 12.1.2.21. Airways.
 - 12.1.2.22. Air Space.
 - 12.1.2.23. Notams.
 - 12.1.2.24. Incident reports.
 - 12.1.2.25. Air Charts.

12.1.2.26. Thermalling rules.

12.1.2.27. Restrictions and hazards.

12.1.3. **THE WING**

12.1.4. Daily checks and pre-flight checks. The student will demonstrate daily and pre-flight checks and demonstrate his knowledge of the materials and methods used in the construction of the wing.

12.1.5. **MAINTENANCE**

12.1.6. The student will demonstrate his knowledge of the need for regular inspections and maintenance of the wing, the harness and the emergency parachute, including required schedule for emergency parachute re-packing.

12.1.7. **CLOTHING**

12.1.7.1. The student will demonstrate a knowledge of the need for appropriate clothing including boots, helmet, gloves, flying suit etc. No scarves, jacket drawstrings, long hair.

12.2. **AERONAUTICAL EXPERIENCE**

12.2.1. The Aeronautical Experience shall be in accordance with the approved syllabus and shall include, but not limited, to the under mentioned:

12.2.2. Instruments.

12.2.2.1. The student will demonstrate the use of an altimeter (including the understanding and use of QNH settings) and a compass and will be able to demonstrate his knowledge of the circumstances in which these should be used.

12.2.2.2. Applications, concepts and usage of GPS will be understood.

12.2.3. Weather

12.2.3.1. The pilot under training shall demonstrate a general understanding of weather patterns and associated wind direction and strength.

12.2.3.2. The pilot under training shall demonstrate an understanding of how weather systems affect flying conditions. An understanding of the following shall be demonstrated.

12.2.3.2.1. Forecasts.

12.2.3.2.2. Cloud recognition.

12.2.3.2.3. High and low pressure systems and fronts.

12.2.3.2.4. Unstable weather, turbulence & gust fronts.

12.2.3.2.5. Stable weather, effect on visibility and inversions.

12.2.3.2.6. Stable/unstable conditions.

12.2.3.2.7. The student will demonstrate an understanding of how the following affect flying conditions.

12.2.3.2.7.1. Airflow on and around hills. Katabatic flow.

12.2.3.2.7.2. Wind gradient.

12.2.3.2.7.3. Turbulence, venturi effect and gusts.

12.2.3.2.7.4. Sea breezes.

12.2.3.2.7.5. Thermals and cumulus cloud development.

12.2.3.2.7.6. Standing waves and their effect.

12.3. **SAFETY EQUIPMENT**

12.3.1. Each person operating a hang glider shall be equipped:

12.3.1.1. With an altimeter that shows height above the ground to an accuracy of 100 feet.

12.3.1.2. A serviceable rigid protective helmet conforming to the standards of a hang gliding organization; and

12.3.1.3. A harness of a type conforming to the standards of a hang gliding organization.

12.4. **OPERATIONS & LIMITATIONS**

12.4.1. All Hang Glider operations shall be conducted under the supervision of the Microlight Organization.

12.4.2. The site selected for Hang Gliding shall be by agreement with the city or under whose jurisdiction the site falls.

12.4.2.1. Hang Gliding Training to novices shall be restricted to:

12.4.2.1.1. Winds of 12 knots or less with gust differential of 5 knots or less.

12.4.2.1.2. Altitudes of less than 100 feet AGL.

12.4.3. Instructors shall limit themselves to smooth winds of 18 knots or less and gusty winds of 11 knots or less.

12.4.4. Pilots learning to make 360 degree turns do so with a ground clearance of not less than 500 feet.

12.4.5. Pre planned landings shall not be attempted in an area less than 40 feet wide by 100 feet long.

12.4.6. All takeoffs shall be preceded by a static harness check.

12.4.7. Cliff launches in winds over 15 knots shall be assisted by at least one wireman. Each pilot of a hang glider shall only launch the hang glider from a launch site authorized by the hang gliding organization.

12.4.8. A person shall not fly a hang glider at night.

- 12.4.9. A person shall fly a hang glider no closer than 500 feet below cloud up to a maximum altitude of 11000 feet AMSL.
- 12.4.10. A pilot of a hang glider soaring on a ridge, where the ridge is to the right of the hang glider is not required to turn right when approaching another hang glider head on.
- 12.4.11. A pilot of a hang glider overtaking another hang glider soaring on a ridge shall pass on the ridge side of the hang glider being overtaken.
- 12.4.12. Each person operating a hang glider shall be equipped with an altimeter that shows height above the ground to an accuracy of 100 feet.
- 12.4.13. A person may fly a hang glider below a height of 500 feet for ridge soaring if such flight does not endanger persons or property on the ground.
- 12.4.14. Each pilot of a hang glider shall use their pilot identification number for all two-way radio communications.

12.5. **PREFLIGHT PROCEDURES**

- 12.5.1. It is recommended that prior to flight the pilot:
 - 12.5.1.1. Determine the appropriate altitude and surface winds.
 - 12.5.1.2. Plan the proposed flight, including landing and alternate landing areas.
 - 12.5.1.3. Pre-flight the glider, giving it a meticulous walk around inspection.
 - 12.5.1.4. Inspect the landing area for obstructions.
 - 12.5.1.5. Secure the property owner's permission when using private property.

12.6. **TRAFFIC AND RIGHT OF WAY RECOMMENDATIONS**

- 12.6.1. Takeoffs and landings should be made into any significant wind.
- 12.6.2. When ridge soaring, reversing turns should be made away from the ridge and into the wind.
- 12.6.3. Two Gliders approaching head on should each turn to its right and give way to the other.
- 12.6.4. Pilots should avoid flying directly above or below another glider in close proximity.
- 12.6.5. Pilots entering a thermal should circle in the direction established by the first glider to begin circling in the thermal without regard to the relative altitude of the gliders in the thermal.

12.7. **TWO PLACE FLIGHTS**

- 12.7.1. Hang glider flights conducted under this Order are restricted to single place operations except where specific authorization has been granted to the Microlight Organization for two-place flights by CAA.

12.8. **HANG GLIDER INSTRUCTOR (HGI)**

12.8.1. A Hang Glider Instructor Rating shall be endorsed on the Micro light Competency Certificate based on the qualification, experience and suitability of the person.

12.8.2. A Hang Glider Instructor may operate a two-place flight provided appropriate equipment is used.

12.9. **TOWING HANG GLIDER BY WINCH/TRUCK**

12.9.1. A Hang Glider may be towed by a winch or a truck.

12.9.2. The Winch/Truck operator shall be appropriately trained and issued an Authorization by the Microlight Organization

12.10. **EXAMINATIONS AND TESTS**

12.10.1. Pass Hang Gliding examination by the FTO.

12.10.2. Pass Type Technical (TT-1) by FTO.

12.10.3. Pass Skill test with HGI.

12.11. **PRIVILEGES OF HANG GLIDER CATEGORY**

12.11.1. A holder of a Microlight Competency Certificate with Hang Glider Category may operate the Hang Glider provided he/she has the endorsement of the specific Type on the Logbook.

12.12. **CURRENCY OF HANG GLIDER CATEGORY**

12.12.1. The currency requirement shall be having carried out one launch in the preceding 90 days.

12.13. **REGAINING CURRENCY OF HANG GLIDER CATEGORY**

12.13.1. Oral test.

12.13.2. 02 supervised Launches.

13. **MCC – PARAGLIDER/PARAMOTOR CATEGORY**

13.1. **AERONAUTICAL KNOWLEDGE**

13.1.1. The Aeronautical knowledge shall be in accordance with the approved syllabus and shall include, but not limited, to the under mentioned:

13.1.2. **THEORY OF FLIGHT – GENERAL**

- 13.1.2.1. Principles of flight including drag, airflow over the wing, angle of attack, wing loading, glide angle & sink speed.
- 13.1.2.2. Effect of brakes on angle of attack and speed, also trim and speedbar. The effects of flying too slowly (the stall).
- 13.1.2.3. Air speed - wind speed - ground speed.
- 13.1.2.4. Emergency and safety procedures.
- 13.1.2.5. Ground handling, foot launching (forward and reverse).
- 13.1.2.6. Selection of take off sites, landing sites, flight route and identification of dangerous areas.
- 13.1.2.7. Theory of towing.

13.1.3. **THEORY OF FLIGHT, POWERED PARAGLIDER/PARAMOTOR**

- 13.1.3.1. Lift, Thrust, weight, drag and the effect of power on angles of attack.
- 13.1.3.2. Forces in turns and the effect on stall speed.
- 13.1.3.3. Climbing and diving turns.
- 13.1.3.4. Reduction drives.
- 13.1.3.5. Propeller theory.
- 13.1.3.6. Torque effects and how these can be controlled.
- 13.1.3.7. Gyroscopic forces and their effects.
- 13.1.3.8. Asymmetric thrust: Causes and their associated effects.
- 13.1.3.9. Understanding the trim of the motor and adjusting the thrust line for a particular weight of pilot and glider.
- 13.1.3.10. Hang points - the effect of altering.
- 13.1.3.11. The effect of speed systems on a powered Paraglider/Paramotor under power on and off situations.
- 13.1.3.12. The effects of weight on flying speed, stall speed/flare and the need for weight checks.
- 13.1.3.13. Understand the concept that power equals climb and Brake/Trim/Speed-bar position equals air speed.
- 13.1.3.14. The effect of flying too slowly.

13.1.3.15. Emergency and safety procedures.

13.1.4. **AIRMANSHIP**

13.1.5. The pilot under training will demonstrate a knowledge of:

13.1.5.1. Dangers - powerlines, trees, water.

13.1.5.2. Turbulence and its consequences.

13.1.5.3. Flying with others, anticipation.

13.1.5.4. Right of Way, Rules of the air.

13.1.5.5. The emergency parachute.

13.1.5.6. Choice of safe field including climb-out clearance, ground conditions, turbulence generators, obstructions and overshoot areas including outlanding behaviour.

13.1.5.7. Assessment of conditions for flight.

13.1.5.8. Safe areas for onlookers.

13.1.5.9. Noise nuisance and congested areas.

13.1.5.10. Emergency stopping and take-off abort.

13.1.5.11. Techniques for avoiding and recovering from where appropriate; tucks, stalls and spins and sudden power loss.

13.1.5.12. Methods of navigation. Planning a 30 km (total) flight either as an out and return flight with a pre-declared turn point or as a flight to a predeclared goal.

13.1.5.13. Emergency and safety procedures.

13.1.6. **AIR LAW**

13.1.7. The pilot under training will demonstrate a thorough knowledge of air law and regulations applicable to powered foot launched aircraft with specific reference to the Air Navigation Rules as appropriate.

13.1.7.1. Collision avoidance.

13.1.7.2. Landing rules.

13.1.7.3. Night (definition of).

13.1.7.4. Congested areas.

13.1.7.5. Minimum heights.

13.1.7.6. Visual flight rules (VFR).

13.1.7.7. Visual Met Conditions (VMC).

13.1.7.8. Airways.

13.1.7.9. Air Space.

13.1.7.10. Notams.

- 13.1.7.11. Incident reports.
- 13.1.7.12. Air Charts.
- 13.1.7.13. Thermalling rules.
- 13.1.7.14. Restrictions and hazards.
- 13.1.7.15. Aerodrome rules, signals and symbols.

13.1.8. **WEATHER**

13.1.9. The pilot under training will demonstrate a general understanding of weather patterns and associated wind direction and strength.

13.1.10. The pilot under training will demonstrate an understanding of how weather systems affect flying conditions. An understanding of the following will be demonstrated.

- 13.1.10.1. Forecasts.
- 13.1.10.2. Cloud recognition.
- 13.1.10.3. High and low pressure systems and fronts.
- 13.1.10.4. Unstable weather, turbulence & gust fronts.
- 13.1.10.5. Stable weather, effect on visibility and inversions.
- 13.1.10.6. Stable/unstable conditions.
- 13.1.10.7. The student will demonstrate an understanding of how the following affect flying conditions.
 - 13.1.10.7.1. Airflow on and around hills. Katabatic flow.
 - 13.1.10.7.2. Wind gradient.
 - 13.1.10.7.3. Turbulence, venturi effect and gusts.
 - 13.1.10.7.4. Sea breezes.
 - 13.1.10.7.5. Thermals and cumulus cloud development.
 - 13.1.10.7.6. Standing waves and their effect.

13.2. **THE CANOPY**

13.2.1. Daily checks and pre-flight checks. The student will demonstrate daily and pre-flight checks and demonstrate his knowledge of the materials and methods used in the construction of the canopy.

13.3. **MAINTENANCE**

13.3.1. The student will demonstrate his knowledge of the need for regular inspections and maintenance of his canopy, the harness and the emergency parachute, including required schedule for emergency parachute re-packing.

13.4. **CLOTHING**

13.4.1. The student will demonstrate knowledge of the need for appropriate clothing including boots, helmet, gloves, flying suit etc. No scarves, jacket drawstrings, long hair!

13.5. **INSTRUMENTS**

13.5.1. The student will demonstrate the use of an altimeter (including the understanding and use of QNH settings) and a compass and will be able to demonstrate his knowledge of the circumstances in which these should be used.

13.5.2. Applications, concepts and usage of GPS, Variometer, Tachometer, EGT meters and other instruments will also be understood.

13.6. **POWER UNIT**

13.6.1. The pilot under training will demonstrate an understanding of all the component parts of the motor unit and their inter-relationships. Particular emphasis will relate to:

13.6.1.1. Care, balancing and tracking of propellers.

13.6.1.2. Safety cages and the importance of maintaining them in good condition;

13.6.1.3. Fuel taps; ignition switches emergency engine stopping.

13.6.1.4. Spark plug and lead;

13.6.1.5. The risk of damage to the motor unit and in particular the throttle cable during transit. Correctly rigging the motor to the glider in accordance with the manufacturers recommendations.

13.6.1.6. Vibrations, their effects and methods of preventing its consequences.

13.6.1.7. Mixing Fuel

13.6.1.7.1. The pilot under training will demonstrate an understanding of :

13.6.1.7.1.1. Mixing fuel.

13.6.1.7.1.2. Different mixtures for running in and subsequent periods and the need to keep an engine time log book;

13.6.1.7.1.3. The difference between synthetic and other oils;

13.6.1.7.1.4. Reasons why petrochemicals and Paraglider/Paramotors don't mix.

13.7. **SAFETY**

13.8. The pilot under training will gain an understanding of:

13.8.1. The need to operate safely and what can go wrong.

- 13.8.2. Ways of protecting himself and others during running in periods; an appreciation of the power generated by the propeller at full engine speed is essential;
- 13.8.3. Safety procedures associated with helpers starting the motor unit.
- 13.8.4. Procedures in the event of fire.
- 13.8.5. General fitness, eyesight, the effect of drugs, alcohol etc.

13.9. **AERONAUTICAL EXPERIENCE**

- 13.9.1. The Aeronautical knowledge shall be in accordance with the approved syllabus and training details; and shall include, but not limited, to the under mentioned:
- 13.9.2. The pilot under training will gain an understanding of starting procedures, including:
 - 13.9.2.1. Clearing the area and clear prop.
 - 13.9.2.2. Checking the motor unit to ensure that everything is in its proper place, e.g. plug lead.
 - 13.9.2.3. Checking the fuel tank contents.
 - 13.9.2.3.1. Fuel tap.
 - 13.9.2.3.2. Choke (where fitted).
 - 13.9.2.3.3. Pull handle etc.
 - 13.9.2.3.4. Demonstrate an understanding of the warm-up of the motor for correct running.
- 13.9.3. The student will demonstrate an awareness that powered Paraglider/Paramotors can fly in locations and maintain height where gliders are not able to do so. The need to maintain an awareness of overall wind direction and its effect in valley situations will be discussed and wind gradient in different topographical situations considered.

13.10. **PRE-MOTORIZED FLIGHTS**

- 13.11. Prior to flying with a motor unit, the trainee will carry out the following tasks on a Paraglider/Paramotor under supervision:
 - 13.11.1. Demonstrate an effective PLF (not wearing back pack).
 - 13.11.2. Correctly carry out pre and post flight routines.
 - 13.11.3. Demonstrate the ability to plan a flight and execute the plan.
 - 13.11.4. Demonstrate safe airspeed control.
 - 13.11.5. Complete four appropriate controlled landings in a designated area.
 - 13.11.6. Consistently demonstrate clean take offs, good flares and accurate landing into wind.

- 13.11.7. Demonstrate an 'S' turns approach as well as standard aircraft approach to safe landing.
- 13.11.8. Demonstrate safe and effective turn control of the aircraft.
- 13.11.9. Demonstrate emergency collapses (Paraglider/Paramotor on the ground).
- 13.11.10. Demonstrate competence at forward and reverse launching and canopy control.
- 13.11.11. Demonstrate forward launches in zero wind.
- 13.11.12. Demonstrate Reverse pull-up and launch in high winds.
- 13.11.13. Demonstrate safety and emergency procedures.
- 13.11.14. Motor Unit - Ground Work.
- 13.11.15. Demonstrate pre-take off control of aircraft.
- 13.11.16. Demonstrate simulated post landing control of aircraft.
- 13.11.17. Demonstrate competence at ground-running motor safely.
- 13.11.18. Demonstrate knowledge of the following:
 - 13.11.18.1. Clearing the fuel supply of bubbles.
 - 13.11.18.2. Clear prop.
 - 13.11.18.3. Kill switch and emergency engine stopping.
 - 13.11.18.4. Correctly carry out pre-and post flight routines.
 - 13.11.18.5. Demonstrate launch abort.
 - 13.11.18.6. Demonstrate safety and emergency procedures,

13.12. **POWERED FLIGHT**

- 13.12.1. A PGI must directly supervise these flights.
- 13.12.2. The flights must not be undertaken until the Pre-Motorized Flights and Motor Ground Work have been completed.
- 13.12.3. Demonstrate consistently good launch technique with Forward and reverse pull-ups.
- 13.12.4. Three consecutive powered flights from a flat site with at least 100 ft. ground clearance, with unassisted take-off runs, smooth 90 deg. left and right turns including good airspeed and throttle control and finish with stand-up power off landings including full deflation of the canopy between flights.
- 13.12.5. Complete 3 landings within 20m of a defined spot in winds of less than 5 knots. Complete 3 landings within 20m of a defined spot in winds of more than 10 knots.
- 13.12.6. Minimum of 10 flights logged (including full deflation and inflation of canopy between flights).

- 13.12.7. Carry out an accurate power-off landing to the satisfaction of the Instructor from at least 500ft.
 - 13.12.8. Demonstrate an ability to fly coordinated 360 deg. turns in both directions.
 - 13.12.9. Complete a 30 km (total) flight with a pre-declared turn point or as a flight to a declared goal or a triangle.
 - 13.12.10. Display the ability to fly safety with others, maintaining a good Look Out, complying with the Rules of the Air and exhibiting good Airmanship and demonstrate an ability to manoeuvre Powered Paragliders safely, considerately and in accordance with air traffic rules.
 - 13.12.11. Must have successfully flown paramotors or Paragliders or hang gliders as pilot in command on at least 8 separate days within the previous 9 months.
 - 13.12.12. Must have a minimum of 5 hours logged airtime as pilot in command on Paraglider/Paramotors, powered Paragliders or hang gliders of which at least 3 hours must be on powered Paragliders.
- 13.13. **PARAGLIDING INSTRUCTOR (PGI)**
- 13.13.1. A Paragliding Instructor Rating shall be endorsed on the Microlight Competency Certificate – Paraglider/Paramotor based on the qualification, experience and suitability of the person.
- 13.14. **TOWING PARAGLIDER BY WINCH/TRUCK**
- 13.14.1. A Paraglider may be towed by a winch or a truck.
 - 13.14.2. The Winch/Truck operator shall be appropriately trained and issued an Authorization by the Microlight Organization.
- 13.15. **EXAMINATIONS AND TESTS**
- 13.15.1. Pass Para Gliding Examination by FTO.
 - 13.15.2. Pass Type Technical (TT-1) by FTO.
 - 13.15.3. Pass Skill test by the PGI.
- 13.16. **PRIVILEGES OF PARAGLIDER/PARAMOTOR CATEGORY**
- 13.16.1. A holder of a Microlight Competency Certificate with Paraglider/Paramotor Category may operate the Paraglider/Paramotor provided he/she has the endorsement of the specific Type on the Logbook.
- 13.17. **CURRENCY OF PARAGLIDER/PARAMOTOR CATEGORY**
- 13.17.1. The currency requirement shall be having carried out one launch in the preceding 90 days.
- 13.18. **REGAINING CURRENCY OF PARAGLIDER/PARAMOTOR CATEGORY**
- 13.18.1. Oral test.
 - 13.18.2. 02 supervised Launches.

14. **MCC - POWERED PARACHUTE CATEGORY**

14.1. **AERONAUTICAL KNOWLEDGE**

14.1.1. The Aeronautical knowledge shall be in accordance with the approved syllabus and shall include, but not limited, to the under mentioned:

14.1.2. Aerodynamics.

14.1.3. How a Powered Parachute Works.

14.1.4. Operation of a Powered Parachute.

14.1.5. Weather.

14.1.6. CAA Regulations.

14.1.7. Operation of a Powered Parachute.

14.1.7.1. How to pre-flight a powered parachute.

14.1.7.2. Powered Parachute operation.

14.1.7.3. Flight operations (take off, flying, landing).

14.1.7.4. Emergency procedures (engine failure, etc).

14.1.7.5. Basic High-Altitude training.

14.1.8. Preflight.

14.1.9. Radio Communications.

14.1.10. Safety.

14.1.11. First Flight Briefing

14.2. **AERONAUTICAL EXPERIENCE**

14.2.1. The Aeronautical Experience shall be in accordance with the approved syllabus and training details; and shall include, but not limited, to the under mentioned:

14.2.2. Aeronautical experience shall be gained under direct supervision of an instructor (via two-way radio), and constant surveillance; and shall comprise:

14.2.2.1. Pre-flight of the powered parachute.

14.2.2.2. Take-off.

14.2.2.3. Basic Flying of the craft (standard turns, level flight).

14.2.2.4. Landing.

14.2.2.5. A minimum of 5 hours of training.

14.2.3. **ADVANCED TRAINING**

14.2.4. Advanced training shall comprise:

14.2.4.1. Engine maintenance.

- 14.2.4.2. Elliptical parachute flying.
- 14.2.4.3. Biomedical and Human factors with high-altitude.
- 14.2.4.4. Sharp glide paths for landing.
- 14.2.4.5. Using flare/brake/trimming.
- 14.2.4.6. Flying with an other powered parachutes in airspace.
- 14.2.5. **HIGH-ALTITUDE**
- 14.2.6. High-Altitude Certification shall cover:
 - 14.2.6.1. Pressure Altitude, True altitude, Density-Altitude.
 - 14.2.6.2. The effect of altitude, temperature and humidity on landing, flying, and taking off.
 - 14.2.6.3. Rectangular and Elliptical parawing dynamics.
 - 14.2.6.4. Rectangular, and Elliptical parawing dynamics at High Altitude.
 - 14.2.6.5. In-depth weather analysis (Virga, ACSL's, etc.).
 - 14.2.6.6. Prop pitch adjustments.
- 14.3. **POWERED PARACHUTE INSTRUCTOR (PPI)**
 - 14.3.1. A Powered Parachute Instructor Rating shall be endorsed on the Microlight Competency Certificate – Powered Parachute based on the qualification, experience and suitability of the person.
 - 14.3.2. A PPI may carry a tandem rider provided appropriate equipment is used.
- 14.4. **EXAMINATIONS AND TESTS**
 - 14.4.1. Pass Powered Parachute theory Examination by FTO.
 - 14.4.2. Pass Type Technical (TT-1) by FTO.
 - 14.4.3. Pass Skill test by PPI.
- 14.5. **PRIVILEGES OF POWERED PARACHUTE CATEGORY**
 - 14.5.1. A holder of a Microlight Competency Certificate with Powered Parachute Category endorsed may operate the Powered Parachute provided he/she has the endorsement of the specific Type on the Logbook.
- 14.6. **CURRENCY OF POWERED PARACHUTE CATEGORY**
 - 14.6.1. The currency requirement shall be having carried out one launch in the preceding 90 days.
- 14.7. **REGAINING CURRENCY OF POWERED PARACHUTE CATEGORY**
 - 14.7.1. Oral test.
 - 14.7.2. 02 supervised Launches.

15. **MCC – PARA JUMP & SKYDIVING CATEGORY**

15.1. **AERONAUTICAL KNOWLEDGE**

15.1.1. The Aeronautical knowledge shall be in accordance with the approved syllabus and shall include, but not limited, to the under mentioned:

15.1.2. First-Aid course Training (8 hours)

15.1.3. Training 30 hours theory in:

15.1.3.1. Air Rules.

15.1.3.2. Meteorology

15.1.3.3. Freefall Technique.

15.1.3.4. Parachute technique.

15.1.3.5. Emergency conditions.

15.2. **AERONAUTICAL EXPERIENCE**

15.2.1. The Aeronautical Experience shall be in accordance with the approved syllabus and training details; and shall include, but not limited, to the under mentioned:

15.2.2. **PARACHUTE MAINTENANCE**

15.2.3. A Parachute technician shall hold a parachute rigger, senior/master Certificate issued by the CAA on recommendation of Microlight Organization.

15.2.4. **MODIFICATION AND REPAIR**

15.2.4.1. A person shall not use a parachute, or harness and container system that has been modified or repaired in a manner that may affect the Airworthiness of the parachute assembly unless it is re-inspected and re-assessed by a master parachute rigger in accordance with the technical standards of a parachute organization/manufacturing firm.

15.2.5. **PARACHUTE ASSEMBLY CHECK**

15.2.5.1. A person shall not make a parachute descent unless he/she has checked the state of serviceability of the parachute assembly by:

15.2.5.1.1. Reference to the assembly packing record for the parachute assembly; and

15.2.5.1.2. A comprehensive external check; and

15.2.5.1.3. Checking that all equipment is properly set to operate; and

15.2.5.1.4. Ensuring that no item being carried will interfere with the proper functioning of the parachute assembly.

15.2.5.1.5. Must use Automatic Activation Device (AAD) on reserve parachute.

15.2.5.2. For student parachutists, the Parajump Instructor shall directly supervise the descent of the student and shall inspect the equipment being worn by the student.

15.2.5.3. For tandem riders, the tandem master shall inspect the equipment being worn by the tandem rider.

15.3. **PARACHUTE DROP AIRCRAFT**

15.3.1. Each pilot performing a parachute-drop operation shall hold a parachute-drop Rating issued by the CAA.

15.3.2. Each pilot performing a parachute-drop operation shall ensure that the aircraft performing the operation has a valid standard category Airworthiness Certificate; and the configuration of the aircraft is appropriate for the parachute drop operation.

15.3.3. The aircraft has adequate interior room and satisfactory egress for the parachutists to be carried.

15.3.4. The aircraft cabin has no handles or fittings which could cause the inadvertent opening of a parachute in the aircraft or during egress by any parachutist.

15.3.5. The aircraft has suitable points for the attachment of static lines.

15.3.6. The aircraft flight manual authorizes flight with a door removed, or open, in flight;

15.3.7. Each person carried in the aircraft, other than persons engaged in parachute operations, occupies a seat and fastens their safety belt during takeoff and landing; and

15.3.7.1. Wears an emergency or reserve parachute assembly; is trained in the use of the emergency or reserve parachute assembly.

15.3.7.2. Is briefed on the general procedures to be followed in an aircraft emergency including the method to be used for exiting the aircraft.

15.3.8. Each person carried in the aircraft for the purpose of parachute operations is not in a position in the aircraft that could hazard the safety of the aircraft or its occupants through inadvertent interference with the controls.

15.4. **DROP ZONE (DZ) SAFETY RULES**

15.4.1. Landing area will be according to the number of jumpers, prevailing wind conditions and height of drop, not less than 200 meters radius, for round parachute.

15.4.2. And 100 X 400 meters radius for square parachutes.

15.4.3. No electric line or telephone-line.

15.4.4. No Antennas, Trees, Buildings, water ponds or other obstructions in landing area or in the near vicinity of DZ.

15.4.5. Level-ground preferably with grass (landing area).

15.5. **OPERATING LIMITATIONS**

15.5.1. **HAZARD**

15.5.1.1. A person making a parachute descent shall not unnecessarily hazard:

15.5.1.1.1. The parachute-drop aircraft or its occupants; or

15.5.1.1.2. Other parachutists or other air traffic; or

15.5.1.1.3. Persons or property on the ground.

15.5.2. **EXIT OF AIRCRAFT**

15.5.2.1. A person shall not exit an aircraft to make a parachute descent unless authorized to exit by:

15.5.2.1.1. The pilot-in-command; or

15.5.2.1.2. A qualified jump master nominated by the pilot-in-command for that purpose.

15.5.3. **MINIMUM PARACHUTE ACTIVATION ALTITUDE**

15.5.3.1. Each person making a parachute descent shall activate the main parachute at a height of not less than 2000 feet.

15.5.3.2. A student parachutist shall activate the main parachute at a height of not less than 3000 feet.

15.5.3.3. A tandem master shall activate the main parachute at a height of not less than 5000 feet.

15.5.4. **PARACHUTE DROP ZONE:** Each person making a parachute descent shall descend:

15.5.4.1. Within a PDZ designated; or

15.5.4.2. Within an area authorized by a Microlight Organization - Parachute provided the details of the descent have been promulgated by means of an AIP Supplement or NOTAM.

15.5.5. **PARACHUTE LANDING AREA (PLA)**

15.5.5.1. Each person making a parachute descent shall land within a PLA that is designated by a Microlight Organization - Parachute.

15.5.5.2. Simultaneous parachute and aircraft movements may only be conducted at aerodromes when the PLA is located clear of:

15.5.5.2.1. Any part of the movement area that is in use; and

15.5.5.2.2. Any runway that is in use; and

15.5.5.2.3. Any taxi way which is in use; and

15.5.5.2.4. The approach and departure areas of any runway and heliport in use.

15.5.5.3. A person making a parachute descent into a water PLA shall ensure:

15.5.5.3.1. The PLA has a clearly defined perimeter; and

15.5.5.3.2. Adequate arrangements have been made to retrieve all parachutists.

15.5.5.3.3. Parachutist is a qualified swimmer.

15.5.6. **GROUND SIGNAL**

15.5.6.1. If a ground signal is used to indicate that parachute descents are taking place, that signal shall consist of a white circle with an attached cone pointing into the wind.

15.5.7. **CONTROLLED AIRSPACE**

15.5.7.1. A person shall not carry out a parachute operation in controlled airspace except in accordance with an agreement between the local parachute operator and the ATC unit responsible for that airspace.

15.5.7.2. Each person making a parachute descent in controlled airspace shall:

15.5.7.2.1. Obtain an ATC clearance for that descent; and

15.5.7.2.2. Descend in accordance with that clearance.

15.5.8. **DESCENTS ONTO AERODROMES**

15.5.8.1. Each person making a parachute descent onto an aerodrome shall:

15.5.8.1.1. Have the prior agreement of the aerodrome operator; and

15.5.8.1.2. If ATS is not in attendance, avoid the pattern of traffic formed by other aircraft operating within the PDZ at the aerodrome.

15.5.9. **DESCENTS WITHIN MILITARY OPERATIONAL AREAS AND RESTRICTED AREAS**

15.5.9.1. A person shall not make a parachute descent within a military operational area or restricted area designated unless they have the approval of the controlling authority specified for the area.

15.5.10. **WEATHER LIMITATIONS**

15.5.10.1. Eye contact on ground, one can see earth.

15.5.10.2. Ground wind speed within limits.

- 15.5.10.3. A person making a parachute descent shall remain clear of cloud.
- 15.5.10.4. A person may descend through cloud in airspace designated as controlled airspace if they have an ATC clearance to do so.

15.5.11. **DESCENTS FROM HIGHER ALTITUDES**

- 15.5.11.1. Each person making a parachute jump from an unpressurized aircraft shall:
 - 15.5.11.1.1. When between altitudes of 10000 and 13000 feet for longer than 30 minutes, use supplementary oxygen until immediately prior to exiting the aircraft; and
 - 15.5.11.1.2. When between altitudes of 13000 and 20000 feet, use supplementary oxygen until immediately prior to exiting the aircraft.
- 15.5.11.2. Each person making a parachute descent from a pressurized aircraft shall, when between altitudes of 13 000 and 20000 feet, use supplementary oxygen during the period from immediately prior to depressurizations to immediately prior to exiting the aircraft.
- 15.5.11.3. Each person making a parachute descent from altitudes above 13000 feet shall have satisfactorily completed a training course, for high altitude descents, conducted by an approved organization.
- 15.5.11.4. Each person making a parachute descent from altitudes above 20000 feet shall use individual supplementary oxygen from immediately prior to depressurization, or from immediately after disconnection from any aircraft mounted supplementary oxygen system, until descent below an altitude of 13 000 feet.

15.5.12. **PARACHUTE EQUIPMENT**

- 15.5.12.1. Each person or tandem pair making a parachute descent shall be equipped with a main parachute that complies with the technical standards of a parachute organization.
- 15.5.12.2. Each person or tandem pair making a parachute descent shall be equipped with a reserve parachute assembly which:
 - 15.5.12.2.1. Complies with the technical standards of a parachute organization; and
 - 15.5.12.2.2. Has been inspected, re-packed and certified as airworthy within the previous 4 months by a parachute technician in accordance with the technical standards of a parachute organization.
- 15.5.12.3. Each tandem rider making a tandem descent shall wear a harness which:

- 15.5.12.3.1. Complies with the technical standards of a parachute organization; and
 - 15.5.12.3.2. Is properly secured to a matching tandem-master harness.
- 15.5.13. **ALTIMETER:** Each person, or tandem pair, making a free-fall descent of more than 10 seconds shall:
- 15.5.13.1. Be equipped with a serviceable altimeter of a type suitable for parachuting; and
 - 15.5.13.2. Be equipped with an illuminated altimeter at night; and
 - 15.5.13.3. Prior to take-off, zero the altimeter to the PLA.
- 15.6. **AUTOMATIC ACTIVATION DEVICES:** Each student parachutist or tandem pair making a parachute descent shall be equipped with an AAD on the reserve parachute that has been:
- 15.6.1. Certified as compatible with the parachute assembly on the parachute assembly packing-record.
 - 15.6.2. Maintained and calibrated in accordance with the manufacturer's operating instructions.
 - 15.6.3. Set to operate the reserve parachute at a minimum height above the PLA of:
 - 15.6.3.1. For a student parachute descent 1000 feet; or
 - 15.6.3.2. For a tandem parachute descent, 2000 feet; or
 - 15.6.3.3. Such height as predetermined and set within the AAD by the AAD manufacturer for the category of use and zeroed to the PLA; and
 - 15.6.3.4. Inspected by the parachute technician in accordance with the manufacturer's instructions.
- 15.7. **SAFETY EQUIPMENT**
- 15.7.1. Each person making an intentional parachute descent into water shall wear suitable flotation equipment capable of supporting that person's head clear of the water.
 - 15.7.2. Each student parachutist making an intentional parachute descent within 1 nautical mile of a water hazard shall wear suitable flotation equipment capable of supporting that person's head clear of the water.
 - 15.7.3. Each student parachutist making a parachute descent shall wear a serviceable, rigid, protective helmet of a type approved by a parachute organization.
 - 15.7.4. Each tandem pair making a parachute descent shall wear protective headgear approved by a parachute organization.

15.8. **SKYDIVING**

15.8.1. **SEQUENCE OF TRAINING EXERCISES**

- 15.8.1.1. Movement exercises on ground.
- 15.8.1.2. Pack exercise on ground.
- 15.8.1.3. Turn exercise on ground (Dirt Dive).
- 15.8.1.4. Exam exercise on ground.
- 15.8.1.5. Freefall Training on Hanger.

15.8.2. **TRAINING JUMPS**

- 15.8.2.1. 8 Automatic jumps (static line Jumps) from 1500 feet.
- 15.8.2.2. Manual Jumps:
 - 15.8.2.2.1. 3 Jumps from 1200-1500 meters with 5-10 seconds freefall time.
 - 15.8.2.2.2. 3 Jumps from 1500-2000 meters with upto 20 seconds freefall time.
 - 15.8.2.2.3. 14 jumps from 1500 to 4000 meters 50 seconds freefall time.

15.8.3. **THEORY EXAMINATION**

- 15.8.3.1. Air rules.
- 15.8.3.2. Parachute technique.
- 15.8.3.3. Meteorology.
- 15.8.3.4. Free fall.

15.8.4. **EMERGENCY CONDITIONS PRACTICAL EXAMINATION**

- 15.8.5. Two jumps from 2500 meter with 30 second freefall.
 - 15.8.5.1. Freefall movement in two axis (Horizontal and vertical movement).

15.9. **PARA JUMP/SKYDIVING INSTRUCTOR (PJI/SDI)**

- 15.9.1. A qualified Instructor rating from a recognized institute.
- 15.9.2. A Para Jump or a Skydiving Instructor Rating shall be endorsed by the CAA on the Microlight Competency Certificate based on the qualification, experience and suitability of the person.

15.10. **EXAMINATIONS AND TESTS**

- 15.10.1. Pass Para Jump theory Examination by FTO.
- 15.10.2. Pass Skydiving Examination, if applicable.
- 15.10.3. Pass Skill test by an Authorized person.

15.11. **PRIVILEGES OF PARA JUMP/SKYDIVING CATEGORY**

15.11.1. A holder of a Microlight Competency Certificate with Para Jump and/or Skydiving Category endorsed on MCC may exercise the Para Jump and/or Skydiving privileges within restrictions endorsed on the Certificate.

15.11.2. A Para Jump Instructor/Skydiving Instructor may carry a tandem rider provided appropriate equipment is used.

15.12. **CURRENCY OF PARA JUMP/SKYDIVING CATEGORY**

15.12.1. The currency requirement shall be having carried out one Jump in the preceding 90 days in the relevant Category.

15.13. **REGAINING CURRENCY OF PARA JUMP/SKYDIVING CATEGORY**

15.13.1. An Oral test by Instructor.

15.13.2. 02 supervised Jumps in the relevant Category.

16. **MCC – GYROGLIDER/GYROPLANE CATEGORY**
- 16.1. **AERONAUTICAL KNOWLEDGE**
- 16.1.1. The ground training shall be conducted in accordance with the approved syllabus.
- 16.2. **AERONAUTICAL EXPERIENCE**
- 16.2.1. The flying training shall be conducted in accordance with the approved syllabus.
- 16.3. **GYROGLIDER/GYROPLANE OPERATIONS**
- 16.3.1. **AERODROMES**
- 16.3.2. A person shall not operate a Gyroglider/Gyroplane on or within 4 km of an aerodrome boundary unless:
- 16.3.2.1. At an uncontrolled aerodrome, it is operated:
- 16.3.2.1.1. In accordance with an agreement with the aerodrome operator; or
- 16.3.2.2. At a controlled aerodrome, it is operated in accordance with an authorization from ATC.
- 16.3.2.3. When operating on an aerodrome a gyroglider/gyroplane shall not be operated:
- 16.3.2.3.1. on or over any aircraft movement area; and
- 16.3.2.3.2. on or over any active runway or runway strip area.
- 16.4. **AIRSPACE:** Each person operating a gyroglider/gyroplane above 400 feet AGL shall:
- 16.4.1. Ensure that the gyroglider/gyroplane remains more than 4 km from any aerodrome boundary; and
- 16.4.2. Provide the following information to the ATS NOTAM office at least 24 hours before the operation:
- 16.4.2.1. The name, address, and telephone number of the operator:
- 16.4.2.2. The date, time, and duration of the operation:
- 16.4.2.3. A brief description of the gyroglider/gyroplane:
- 16.4.2.4. The height to which the gyroglider/gyroplane will be operated.
- 16.5. **METEOROLOGICAL LIMITATIONS**
- 16.5.1. Each person operating a gyroglider/gyroplane shall:
- 16.5.1.1. Not operate closer than 400 feet below cloud; and
- 16.5.1.2. Limit operations to an area where the ground visibility is at least 5 km.
- 16.6. **NIGHT OPERATIONS:** No person shall operate a Gyroglider/gyroplane at night.

- 16.7. **AIRWORTHINESS:** Each person who operates a Gyroglider/gyroplane shall ensure that it is maintained in an air worthy condition.
- 16.8. **SAFETY EQUIPMENT:** Each person carried in a Gyroglider/gyroplane shall:
- 16.8.1. When flying over water, or within gliding distance of water, wear a permanent positive buoyancy aid; and
 - 16.8.2. When flying over land, wear a rigid protective helmet; and
 - 16.8.3. Be secured to the Gyroglider/gyroplane by a harness.
- 16.9. **PRE-FLIGHT BRIEFING:** Each Gyroglider/gyroplane passenger shall receive a pre-flight briefing on:
- 16.9.1. The nature of the flight; and
 - 16.9.2. The standard operating procedures; and
 - 16.9.3. Emergency procedures.
- 16.10. **OPERATING PROCEDURES:** Each person operating a Gyroglider/gyroplane shall do so in accordance with the operating procedures recommended by the manufacturer.
- 16.11. **GYROGLIDER/GYROPLANE INSTRUCTOR (GGI/GPI)**
- 16.11.1. A Gyroglider/gyroplane Instructor Rating may be endorsed on the Microlight Competency Certificate with Gyroglider/gyroplane Category based on the qualification, experience and suitability of the person.
 - 16.11.2. A Gyroglider/Gyroplane Instructor may carry a another rider provided appropriate equipment is used.
- 16.12. **EXAMINATIONS AND TESTS**
- 16.12.1. Pass Gyrogliding/Gyroplaning Theory Examination by FTO.
 - 16.12.2. Pass Type Technical (TT-1).
 - 16.12.3. Pass Skill test by an authorized person.
- 16.13. **PRIVILEGES OF GYROGLIDER/GYROPLANE CATEGORY**
- 16.13.1. A holder of a Microlight Competency Certificate with Gyroglider/Gyroplane Category may operate the Gyroglider/gyroplane provided he/she has the endorsement of the specific Type on the Logbook.
- 16.14. **CURRENCY OF GYROGLIDER/GYROPLANE CATEGORY**
- 16.14.1. The currency requirement shall be having carried out one launch in the preceding 90 days.
- 16.15. **REGAINING CURRENCY OF GYROGLIDER/GYROPLANE CATEGORY**
- 16.15.1. An Oral test by Instructor.
 - 16.15.2. 02 supervised Launches.

17. **MCC – PARASAIL CATEGORY**

17.1. **AERONAUTICAL KNOWLEDGE**

17.1.1. The ground training shall be conducted in accordance with the approved syllabus.

17.2. **AERONAUTICAL EXPERIENCE**

17.2.1. The flying training shall be conducted in accordance with the approved syllabus.

17.3. **AIRSPACE:** Each person operating a Parasail above 400 feet AGL shall:

17.3.1. Ensure that the Parasail remains more than 4 km from any aerodrome boundary; and

17.3.2. Provide the following information to the ATS NOTAM office at least 24 hours before the operation:

17.3.2.1. The name, address, and telephone number of the operator.

17.3.2.2. The date, time, and duration of the operation.

17.3.2.3. A brief description of the Parasail.

17.3.2.4. The height to which the Parasail will be operated.

17.4. **METEOROLOGICAL LIMITATIONS**

17.4.1. Each person operating a Parasail shall:

17.4.1.1. Not operate closer than 400 feet below cloud; and

17.4.1.2. Limit operations to an area where the ground visibility is at least 5 km.

17.5. **NIGHT OPERATIONS:** No person shall operate a Parasail at night.

17.6. **AIRWORTHINESS:** Each person who operates a Parasail shall ensure that it is maintained in an air worthy condition.

17.7. **PARASAIL OPERATIONS**

17.7.1. **CREW EXPERIENCE**

17.7.1.1. A minimum of two experienced crewmembers shall be onboard at all times during the operation of any winch boat watercraft. The Captain shall have a minimum of one-year operating experience. The first mate shall have six months operating experience. Both Captain and first mate shall have passed a training course offered by a qualified instructor, winch boat and/or parasail manufacturer.

17.7.1.2. The Captain and Crew shall have no less than two weeks training. Training which will include 30 hours of ground school addressing the topics below:

17.7.1.2.1. Water landing Rescue.

17.7.1.2.2. Tow Line Failure Prevention.

17.7.1.2.3. Equipment Failure Prevention.

17.7.1.2.4. Pre-flight safety Procedures.

17.7.1.2.5. Equipment Evaluation and Safe Operating Procedures.

17.7.1.2.6. Whiplash prevention.

17.7.2. **DAILY EQUIPMENT INSPECTION:** It shall be the captain's responsibility for the daily inspection of the winch boat, parasail canopy, towline and related equipment to make certain that they are properly maintained and in safe operating condition.

17.7.2.1. A written log shall be kept onboard at all times.

17.7.3. **PASSENGERS SAFETY BRIEFING:** All passengers and parasail participants shall be given a safety briefing before leaving the dock and/or before the parasail activity commences. This safety briefing shall include:

17.7.3.1. A description of the activity itself.

17.7.3.2. The safety precautions while underway.

17.7.3.3. The procedure in the event of an unexpected emergency.

17.7.3.4. The proper use of hands signals.

17.7.3.5. Precluding any participant who appears to be afraid or intimidated prior to their aerial excursion.

17.7.4. **BASIC WATER SURVIVAL TRAINING:** Operators providing parasail rides using a Harness and/or Tandem bar type passenger support equipment shall provide, to all passengers prior to boarding the parasail vessel, a special water survival training briefing. This briefing shall include:

17.7.4.1. Basic description of the parasail canopy and its dynamics while in the air.

17.7.4.2. Emergency evacuation procedures during unexpected water landings.

17.7.4.3. Drowning prevention techniques.

17.7.4.4. Deck landings.

17.7.4.5. Body position during high-speed water landings.

17.7.4.6. Additional safety warnings and pre-cautions as to the elements of dangers.

17.7.5. **BOAT TRAFFIC/RIGHT OF WAY:** In addition to sea rules of the road for navigation, vessels while engaged in Parasailing should not to be considered a RAM vessel (restricted in their ability to maneuver) and should give way to other vessels while in the Parasail mode.

- 17.7.6. **PRE-FLIGHT WEATHER EVALUATION BRIEFING:** It will be the Captains responsibility to evaluate and determined if weather conditions are favorable for Parasailing. No operator shall knowingly Parasail in rain, fog or during a known lightening storm within 5 miles from the Parasailing area.
- 17.7.7. **WEATHER WARNINGS:** No operator shall conduct parasail activities during a small craft warning alert and/or storm frontal systems approaching within 7 miles from the parasail area.
- 17.7.8. **OPERATING SEA CONDITIONS:** Winch boats under 29' feet in length/8-foot beam shall not operate in seas over 3 feet. Winch boats over 29" and up regardless of beam shall not operate in seas over 5 feet. Additionally, operators shall follow recommendations by winch boat manufacturers on canopy selection for weight and wind speeds. Winch boats under 25' feet and under are not acceptable.
- 17.7.9. **OPERATING WIND CONDITIONS (OPEN OCEAN):** No winch boat shall be operated in wind conditions such that the vessel is stationary while the bow is pointing directly into the wind, in the parasail mode, with passengers aloft.
- 17.7.10. **OPERATING WIND CONDITIONS (INLAND WATERS):** No winch boat shall be operated in wind conditions such that, the vessel is not capable of maintaining a forward speed of less than 5 mph while the bow is pointing directly into the wind, in the parasail mode, with passengers aloft.
- 17.7.11. **TOW LINE LENGTH (OPEN OCEAN):** At no time shall any winch boat spool drum be equipped with more than 600 feet of tow rope while operating a parasail in an open ocean.
- 17.7.12. **TOW LINE LENGTH (INLAND WATERS E.G. INLAND WATERS SHALL INCLUDE LAKES, BAYS AND DAMS):** At no time shall any winch boat spool drum be equipped with more than 300 feet of tow rope while operating a parasail upon inland waters unless the overall operating size exceeds two square miles.
- 17.7.13. **TYPES OF TOW LINE / BREAKING STRENGTH REQUIREMENTS:** Only polyester, nylon and spectra 12 (or other similar high tensile synthetics) type line with a double braided / low stretch construction shall be used/utilized with any commercial winch boat. The minimum diameter for polyester and nylon is .375 diameters and .125 diameter for Spectra 12 and/or synthetics. The minimum working strength of any towrope should be no less than 3,500 lbs with the maximum strength not to exceed the vessels ability to remain upright.
- 17.7.14. **APPROVED WINCH SYSTEMS:** Only hydraulic winch systems equipped with functional level-winds should be utilized during parasail operations.
- 17.7.15. **ROPE GUIDES:** All of the surfaces that contact the rope must be smooth; rolling pulleys should be used in place of sliding fixed surfaces.
- 17.7.16. **WINCH DRUM DIAMETERS:** The winch drum should have a diameter of at least 20 times the rope diameter.

- 17.7.17. **PROXIMITY TO SHORELINE, OBJECTS OR OTHER BOAT TRAFFIC:** At no time shall parasail vessels operate within a distance equal to 3 times the towline length in proximity to a shoreline, objects or other boat traffic. Example: If 600 feet of towline is spooled out, then the minimum proximity to a shoreline, objects or other boat traffic would be 1,800 feet. No beach or platform Parasailing is allowed.
- 17.7.18. **APPROVED WINCH BOATS:** Only Para Nautique, Premium, Nordic Ascenders, Aerial Pro, Ocean Pro and Para craft Warrior 32 are approved for use. All other winch boats must be approved in advance on a case-by-case basis. The engine of the boat shall have at least 200 HP.
- 17.7.19. **DIPPING:** Deliberate dipping below the ankles and/or allowing a participant to touch the water during his or her flight within 3 times the tow length of any object is not permitted.
- 17.7.20. **MULTIPLE PASSENGER FLIGHTS:** Multiple passenger flights are allowed only when using the equipment specifically designed for such an activity and approved by the CAA.
- 17.7.21. **APPROVED PARASAIL CANOPIES:** Only Water bird, Custom Chutes, Sport Chutes, Power sail, Windstar, Ascending Parasails, Water chute, CWS and SportLite parasail canopies are approved for commercial use or any other canopy approved by the CAA.
- 17.7.22. **CITY, PORT AND GOVERNMENT RULES AND REGULATIONS:** All operators are required to abide by all local, port, city and Government watercraft laws.
- 17.7.23. **VESSEL SEAWORTHINESS:** It shall be the responsibility of the Captain in charge to ensure that the winch boat vessel is in seaworthy conditions prior to leaving the dock.
- 17.7.24. **COMMUNICATIONS:** All winch boats must be equipped with a VHF radio and/or other reliable communications onboard at all times. The above rules are in addition to existing Government Rules governing safe boating practices
- 17.7.25. **VESSEL CERTIFICATION FOR TOWING PARASAILS:** Since a parasailing vessel's stability is essential for passenger and crew safety, all vessels towing a Parasail for hire must meet with the towing rules based on a force equal to the towline breaking strength acting at 0 degrees above the horizon. Thus allow a comfortable safety factor during unpredictable wind and sea conditions.
- 17.8. **PARASAIL INSTRUCTOR (PSI)**
- 17.8.1. A Parasail Instructor Rating shall be endorsed on the Microlight Competency Certificate with Parasail Category based on the qualification, experience and suitability of the captain.
- 17.8.2. A Parasail Instructor may carry a tandem rider provided appropriate equipment is used.

17.9. **EXAMINATIONS AND TESTS**

17.9.1. Pass Parasailing Theory Examination by FTO.

17.9.2. Pass Type Technical (TT-1).

17.9.3. Pass Skill test by an authorized person.

17.10. **PRIVILEGES OF PARASAIL CATEGORY**

17.10.1. A holder of a Microlight Competency Certificate with Parasail Category endorsed may operate the Parasail provided he/she has the endorsement of the specific Type on the Logbook.

17.11. **CURRENCY OF PARASAIL CATEGORY**

17.11.1. The currency requirement shall be having carried out one launch in the preceding 90 days.

17.12. **REGAINING CURRENCY OF PARASAIL CATEGORY**

17.12.1. An Oral test by Instructor.

17.12.2. 02 supervised Launches.

18. **MICROLIGHT ORGANIZATION (MO)**

18.1. **‘MICROLIGHT ORGANIZATION (MO)’** means an Organization, approved by the CAA, that conducts and monitors the activities of the Microlights that are registered with it; and their operating crew.

18.2. A Microlight Organization shall hold a Certificate of Approval from the CAA.

18.3. **MICROLIGHT ORGANIZATION CERTIFICATE (MOC)**

18.3.1. **ELIGIBILITY:** A Microlight Organization, which is a member of an internationally recognized association conducting activity in a specific category/categories in a contracting state, shall be eligible to apply for a Microlight Organization Certificate in the specified category/categories. The MO shall provide evidence of its membership and produce the technical training and maintenance literature in that specific category to the satisfaction of CAA.

18.3.2. **ASSESSMENT:** A Microlight Organization shall be assessed by the CAA for its adequacy in meeting the prescribed requirements in this Air Navigation Order. During the assessment, due consideration shall be given to the nature of its activity, scope of its work and its overall workload.

18.3.3. **INSURANCE:** A Microlight Organization shall have a third party risk coverage at an appropriate level in accordance with type and nature of its operations.

18.4. **PRIVILEGES OF MO CERTIFICATE**

18.4.1. A Microlight organization may be certified to exercise all or any of the following privileges:

18.4.1.1. To supervise the Glider flying operation.

18.4.1.2. To conduct training for the Glider Pilot Licence.

18.4.1.3. To supervise the Balloon flying operation.

18.4.1.4. To conduct training for the Balloon Pilot Licence.

18.4.1.5. To supervise Microlight flying operation in any of the following categories:

18.4.1.5.1. Ultralight Aircraft

18.4.1.5.2. Sport Aircraft flying.

18.4.1.5.3. Hang Glider.

18.4.1.5.4. Paraglider

18.4.1.5.5. Paramotor.

18.4.1.5.6. Powered Parachute.

18.4.1.5.7. Parachute.

18.4.1.5.8. Sky Diving.

- 18.4.1.5.9. Gyroglider
- 18.4.1.5.10. Gyroplane.
- 18.4.1.5.11. Parasail.
- 18.4.1.5.12. To conduct training for Microlight Competency Certificate in any one of the above Categories.
- 18.4.1.5.13. To conduct and supervise Model Aircraft flying activities.
- 18.4.1.5.14. To conduct and supervise Kite flying activities.
- 18.4.1.5.15. To conduct Air Shows and exhibitions of Microlights.
- 18.4.1.6. Subject to approval by the CAA, establishing and certifying competency of persons flying Microlights by:
 - 18.4.1.6.1. Prescribing ground training syllabus.
 - 18.4.1.6.2. Prescribing flying training syllabus.
 - 18.4.1.6.3. Conducting examinations.
 - 18.4.1.6.4. Prescribing flight check standards and criterion.
 - 18.4.1.6.5. Conducting flight checks.

18.5. **DURATION OF CERTIFICATE**

- 18.5.1. A Microlight Organization Certificate may be granted or renewed for a period of up to one year.
- 18.5.2. A Microlight organization Certificate remains in force until it expires, suspended or revoked by the CAA.

18.6. **FLYING TRAINING ORGANIZATION:** Subject to meeting the prescribed requirements for a Flying Training Organization, a Microlight Organization may be authorized by the CAA to conduct training for the issue of Glider Pilot Licence, Balloon Pilot Licence and Microlight Competency Certificates in different Categories.

18.7. A Microlight Flying Organization authorized to conduct training may use the detailed training program issued by its parent Association/organization.

18.8. Any approved FTO may be approved as a Microlight Organization provided it meets the prescribed requirements of a Microlight Organization.

18.9. **PERSONNEL REQUIREMENTS**

18.9.1. An applicant for the grant of Microlight Organization Certificate shall have available the services of, or in their employment, the following personnel:

- 18.9.1.1. A senior person identified as the Chief Executive who has the authority within the applicant's organization to ensure that all activities undertaken by the organization can be

financed and carried out in accordance with the requirements of the CAA.

18.9.1.2. A senior person or group of senior persons who are responsible to the Chief Executive.

18.9.1.3. Sufficient adequately qualified and trained personnel to plan, perform, supervise, inspect and otherwise provide the activities for which certification is sought.

18.9.1.4. The applicant shall:

18.9.1.4.1. Establish a procedure to initially assess the competence of personnel performing the activities specified in the Certificate; and

18.9.1.4.2. Establish a procedure to maintain the competence of those authorized personnel; and

18.9.1.4.3. Provide those authorized personnel with written evidence of the scope of their authorization.

18.10. **RESOURCE REQUIREMENTS**

18.10.1. Each applicant for the grant of a Microlight Organization Certificate shall provide resources that enable the satisfactory provision of the activities for which certification is sought. Such resources shall, where appropriate, include:

18.10.1.1. Accommodation, offices, workshops, hangars, and buildings; and

18.10.1.2. Equipment, tools, material, training aids, data and documentation.

18.10.2. The applicant shall ensure that the environment it provides is appropriate for the tasks to be performed. In particular, the applicant shall ensure protection from weather elements and compliance with any special requirements specified within applicable Airworthiness requirements and compliance with other special requirements considered applicable by the CAA.

18.11. **INTERNAL QUALITY ASSURANCE**

18.11.1. Each applicant for the grant of a Microlight Organization Certificate shall establish internal quality assurance procedures to ensure compliance with, and the adequacy of, the procedures required by the CAA.

18.11.2. The senior person who has the responsibility for internal quality assurance shall have direct access to the Chief Executive on matters affecting internal quality assurance.

18.12. **OPERATIONAL REQUIREMENTS**

18.12.1. An applicant for the grant of a Microlight Organization Certificate shall provide the CAA with an Operations Manual which shall contain:

- 18.12.1.1. Definition of the mission and objectives of the organization;
- 18.12.1.2. General policy of operations;
- 18.12.1.3. Means and methods for ensuring ongoing compliance with this ANO;
- 18.12.1.4. The titles and names of the key personnel employed;
- 18.12.1.5. The duties and responsibilities of the key personnel including matters for which they have responsibility to deal directly with the CAA;
- 18.12.1.6. An organization chart showing lines of responsibility of the key personnel and extending to each location;
- 18.12.1.7. Details of those locations where members or employees of the organization are to exercise functions or powers delegated by the CAA;
- 18.12.1.8. A summary of the resources at and the scope of activity to be conducted at each location; and
- 18.12.1.9. Detailed procedures of its working.

18.13. **REQUIREMENTS FOR CONTINUED COMPLIANCE**

- 18.13.1. Each holder of a Microlight Organization Certificate shall:
 - 18.13.1.1. Hold at least one complete and current copy of their operation manual at each location;
 - 18.13.1.2. Comply with all procedures detailed in their operations manual;
 - 18.13.1.3. Continue to meet the standards and comply with the requirements prescribed for certification; and
 - 18.13.1.4. Notify the CAA any change of address for service, telephone number, or facsimile number within 10 days of the change.

18.14. **RECORDS – PERSONNEL**

- 18.14.1. Each holder of a Microlight Organization Certificate shall maintain a record of each member or employee exercising any:
 - 18.14.1.1. Delegations of the CAA functions or powers; or
 - 18.14.1.2. Authorizations granted by the organization.
- 18.14.2. The record shall include details of the members or employee's experience, qualifications, training and current delegations and authorizations.
- 18.14.3. The record shall be retained for one year from the date that the member or employee ceases to exercise all of his or her delegations and authorizations.

18.15. **RECORDS – FACILITIES, EQUIPMENT, TOOLS AND MATERIAL**

18.15.1. Each holder of a Microlight Organization Certificate shall record details of testing, checking and calibration of any safety-critical facilities, equipment, tools and material used in carrying out any of the activities specified in the Certificate.

18.16. **REPORTING OF DEFECTS OR UNAIRWORTHY CONDITIONS**

18.16.1. Each holder of a Microlight Organization Certificate shall establish a procedure for reporting any defect or condition of a Microlight aircraft operated by a member of the holder's organization that could jeopardizes the safe operation of the aircraft.

18.16.2. Any such defects or conditions shall be reported to the CAA.

18.17. **MONTHLY ACTIVITIES RETURN**

18.17.1. Each Microlight Organization shall submit a monthly return of its activities to the Airworthiness Directorate, Flight Standards Directorate and Personnel Licensing Office.

18.18. **CHANGES TO CERTIFICATE HOLDER'S ORGANISATION**

18.18.1. Holders of a Microlight Organization Certificate shall ensure that their organization operations manual is amended so as to remain a current description of the holder's organization.

18.18.2. The Certificate holder shall provide the CAA with a copy of each amendment for approval.

18.18.3. Where a Certificate holder proposes to make a change to any of the following, prior notification to and acceptance by the CAA is required:

18.18.3.1. The Chief Executive:

18.18.3.2. The listed key personnel:

18.18.3.3. The location or locations at which the members or employees of the organization exercise functions and powers delegated by the CAA:

18.18.3.4. The scope of activities covered by the Certificate.

18.18.4. CAA may prescribe conditions under which a Certificate holder may operate during or following any of the changes incorporated into its operations manual.

18.18.5. A Certificate holder shall comply with any conditions prescribed in the Certificate.

18.18.6. Where any of the changes are required to the Certificate, the Certificate holder shall forward the Certificate to the CAA for affecting the changes.

18.18.7. The Certificate holder shall make such amendments to the holder's operations manual as the CAA may consider necessary in the interests of aviation safety.

18.19. **SAFETY INSPECTIONS AND AUDITS**

18.19.1. CAA may in writing require the holder of a Microlight Organization Certificate to undergo or carry out such inspections and audits of the holder's facilities, documents, and records as the CAA considers necessary in the interests of civil aviation safety and security.

18.19.2. CAA may require the holder of a Microlight Organization Certificate to provide such information as the CAA considers relevant to the inspection or audit.

18.19.3. For any out of schedule inspection/audit, the Microlight Organization shall bear all expenses incurred by the CAA Officers during such a visit.

18.20. **FEE SCHEDULE**

18.20.1. As per CAA Fee Schedule (Personnel Licensing)

18.21. **DOCUMENTS TO BE SUBMITTED**

18.21.1. Application for approval as a Microlight Organization.

18.21.2. Category of Microlight Operation applied for.

18.21.3. Photocopy of Company Registration.

18.21.4. Evidence of membership of a recognized international association conducting flying activities in the Category applied for.

18.21.5. List of the training, operational and safety literature available with the applicant in the Category applied for.

18.21.6. Contact Address, Tel Numbers, Fax, and email.

18.21.7. Name of Head and contact information.

18.21.8. Detail of Physical Infrastructure.

18.21.9. Full time employees and their charter of duties.

18.21.10. Names of Members registered with Organization.

18.21.11. Members experience and aviation Licences/Certificates.

18.21.12. Types and number of Microlights registered with organization along with their photograph and performance data.

18.21.13. Copy of Standard Operating Procedures.

18.21.14. Draft copy of operations Manual.

18.21.15. Any other relevant information.

19. **AIR SHOWS**

19.1. **AVIATION EVENTS**

- 19.1.1. No person shall conduct an aviation event for general public and no person shall operate an aircraft in an aviation event unless the organizer of the event is the holder of an aviation event authorization issued by the CAA. For in-house aviation event for the Microlight Organization Members, a permission shall be required from the Airport Manager.
- 19.1.2. Each applicant for an aviation event authorization shall submit an aviation event plan to the CAA at least 60 days prior to the start of the aviation event.
- 19.1.3. The aviation event plan shall contain at least the following information about the proposed aviation event:
 - 19.1.3.1. Name, position, and address of the organizer.
 - 19.1.3.2. Place, date and time.
 - 19.1.3.3. Type of event.
 - 19.1.3.4. Details of the structure of the organization including persons who are responsible for supervising the aviation event.
 - 19.1.3.5. Details of the flying program and flight safety measures.
 - 19.1.3.6. Detailed plan and description of the site with sufficient detail to show the conduct of the event.
 - 19.1.3.7. Details of control methods to be used for the safety of the spectators.
 - 19.1.3.8. Details of emergency services to be provided.

19.2. **AEROBATIC FLIGHT LIMITATIONS**

- 19.2.1. An aerobatic flight may be conducted under following conditions:
 - 19.2.1.1. Aircraft is cleared for aerobatics by the manufacturer.
 - 19.2.1.2. Pilot is qualified for the exercise to be performed.
 - 19.2.1.3. Aerobatics are performed not closer than 2000 feet of horizontal distance from an open assembly of spectators.
 - 19.2.1.4. Aerobatics are not conducted below 500 feet above ground level.
 - 19.2.1.5. No passenger is carried.
 - 19.2.1.6. Within controlled airspace, ATC has given an authorization.

19.3. **DISPLAY FLIGHT LIMITATIONS**

19.3.1. Pilot-in-Command participating in a display flight, other than a display of agricultural operations or helicopter operations, operate at a height not below 100 feet above the surface.

19.3.1.1. Fly the aircraft aligned with reference to a display line sufficiently distanced from spectators so as not to cause undue risk to persons or property on the surface.

19.3.1.2. Not carry any passengers.

19.3.1.3. Not fly over any spectator area.

19.3.1.4. Not conduct any maneuver between the display line and any spectator area.

19.3.1.5. With the exception of a helicopter hovering or taxiing, not initiate any maneuver in the direction of any spectator area.

19.4. **TOWING OBJECTS OTHER THAN GLIDERS**

19.4.1. No pilot shall tow an object other than a glider in flight unless they hold:

19.4.1.1. A commercial pilot Licence; or

19.4.1.2. An airline transport pilot Licence; and

19.4.1.3. Pilot has an Authorization for Towing from the CAA.

19.4.2. The aircraft

19.4.2.1. Is equipped with a tow hook and attachment assembly which has a quick release mechanism and the equipment is approved by the CAA;

19.4.2.2. Has a positive rate of climb at the altitudes to be operated.

19.4.3. No pilot operating an aircraft that is towing an object other than a glider shall carry any passengers.

20. **OPERATING LIMITATIONS – MOORED BALLOON**

20.1.1. **FLYING HAZARD:** A moored Balloon shall always carry a Balloon Pilot Licence holder. A person shall not operate a moored balloon in a manner that creates a hazard to aircraft or to persons or property.

20.1.2. **DROPPING OF ARTICLES:** A person operating a moored balloon shall not allow any object to be dropped in flight if such action creates a hazard to other persons or property on ground.

20.1.3. **AERODROME AREA:** Unless authorized, a person shall not operate a moored balloon:

20.1.3.1. On or over any active aircraft movement area of an aerodrome; or

20.1.3.2. On or over any runway or runway strip area.

20.1.4. **AERODROME BOUNDARY**

20.1.4.1. Except for a shielded operation, a person shall not operate a moored balloon within 4 km of an aerodrome boundary unless:

20.1.4.1.1. The balloon does not exceed 400 feet AGL.

20.1.4.1.2. The balloon remains at least 400 feet vertically below cloud.

20.1.4.1.3. The horizontal visibility is not less than 4 km.

20.1.4.1.4. If the aerodrome is a controlled aerodrome, they have an ATC authorization; and

20.1.4.1.5. If the aerodrome is an uncontrolled aerodrome, the operation is performed in accordance with an agreement established with the aerodrome operator.

20.1.5. **AIRSPACE**

20.1.5.1. Except for a shielded operation, each person operating a moored balloon at a height of more than 400 feet AGL shall:

20.1.5.1.1. Operate in a designated area for that purpose.

20.1.5.1.2. Operate in accordance with the restrictions specified.

20.1.5.2. And following information is provided to the ATS NOTAM office at least 24 hours before the operation:

20.1.5.2.1. The name, address and telephone numbers.

20.1.5.2.2. The date, time and duration of the operation.

20.1.5.2.3. A brief description of the moored balloon, including size and predominant colour.

20.1.5.2.4. The weight of the moored balloon.

20.1.5.2.5. The height to which the moored balloon will be operated.

- 20.1.6. **NIGHT OPERATION:** A person shall not operate a moored balloon at night.
- 20.1.7. **BALLOON MOORING LINE MARKING:** A person shall not operate a moored balloon by day unless the mooring lines have coloured streamers or pennants attached at intervals of not more than 45 feet commencing no more than 150 feet above ground level and visible for at least 1 nm.
- 20.1.8. **BALLOON RAPID DEFLATION DEVICE:** A person shall not operate a moored balloon unless it contains a device that will automatically and rapidly deflate the balloon if it escapes from its moorings.
- 20.1.9. **BALLOON ESCAPE:** Each person operating a moored balloon that escapes from its mooring without the deflation device functioning properly shall immediately notify the nearest ATS unit:
 - 20.1.9.1. The original location of the balloon.
 - 20.1.9.2. The time the balloon broke free.
 - 20.1.9.3. The estimated flight path of the balloon.

21. **OPERATING LIMITATIONS – MODEL AIRCRAFT**

21.1. **MASS LIMITATIONS:**

21.1.1. The restrictions in this ANO are not applicable to Model aircraft with a gross mass of less than 500 grams.

21.1.2. Special CAA Authorization shall be obtained to assemble and operate Model aircraft of a mass greater than 25 KG.

21.2. **CONTROL LINE MODEL AIRCRAFT:** No person shall operate a control line model aircraft with a single or multiple wire system longer than 30 m.

21.3. **RADIO CONTROLLED MODEL AIRCRAFT:** A person shall not operate a radio controlled model aircraft unless the aircraft is constructed and operated under the authority of a model aircraft association approved by the CAA.

21.4. **AERODROMES**

21.4.1. With the exception of a control line model aircraft, no person shall operate a model aircraft on or within 4 km of:

21.4.1.1. An uncontrolled aerodrome, unless:

21.4.1.1.1. It is undertaken in accordance with an agreement with the aerodrome operator; and

21.4.1.1.2. In the case of a free flight model aircraft, it is launched downwind of an active runway; and

21.4.1.1.3. In the case of a radio controlled model aircraft, it is operated at a height not exceeding 400 feet AGL, and each pilot has an observer in attendance while the model aircraft is active in the air;

21.4.1.2. A controlled aerodrome, unless it is operated in accordance with an authorization from ATC; and

21.4.1.3. Any aerodrome, unless:

21.4.1.3.1. The person is the holder of, or is under the direct supervision of the holder of a pilot qualification issued by a model aircraft association approved by the CAA; or

21.4.1.3.2. The person is under the direct supervision of a person appointed to give instruction in the operation of radio controlled model aircraft by a model aircraft association approved by the CAA.

21.4.2. A person shall not operate a model aircraft:

21.4.2.1. On or over any active aircraft movement area of an aerodrome; or

21.4.2.2. On or over any active runway strip area.

21.5. **AIRSPACE:** Each person operating a radio controlled model aircraft more

than 4 km from an aerodrome boundary and above 400 feet AGL shall ensure the operation remains clear of controlled airspace and shall:

- 21.5.1.1. Operate in a designated area designated for that purpose by the ATS; or
- 21.5.1.2. Provide the following information to the ATS NOTAM office, at least 24 hours before the operation:
 - 21.5.1.2.1. Their name, address, and telephone number.
 - 21.5.1.2.2. The location of the proposed operation.
 - 21.5.1.2.3. The date and time and duration of the proposed operation.
 - 21.5.1.2.4. The type and number of aircraft.
 - 21.5.1.2.5. The maximum height AGL proposed for aircraft operation.
- 21.6. **METEOROLOGICAL LIMITATIONS:** Except for control line model aircraft, a person shall not operate a model aircraft:
 - 21.6.1. In any area where the ground visibility is less than 3 km; or
 - 21.6.2. In any area where the cloud base is at a level where a model aircraft is unable to be operated:
 - 21.6.2.1. In sight of the operator; and
 - 21.6.2.2. Beneath the cloud base at all times.
- 21.7. **NIGHT OPERATIONS:** With the exception of control line model aircraft, a person shall not operate a model aircraft at night unless the operation is:
 - 21.7.1. Indoors; or
 - 21.7.2. A shielded operation.
- 21.8. **RIGHT OF WAY:** Each person operating a model aircraft shall ensure it gives way to, and remains clear of, all manned aircraft on the ground and in flight.

22. **OPERATING LIMITATIONS - KITES**

22.1. **MASS LIMITATIONS:**

22.1.1. The restrictions in this ANO are not applicable to Kites with a gross mass of less than 500 grams.

22.1.2. Special CAA Authorization shall be obtained to assemble and operate Kites of a mass greater than 25 KG.

22.2. **PROFESSIONAL KITE FLYING:** A person shall not operate a kite, in professional category, unless it is constructed and operated under the authority of a Kite flying association approved by the CAA.

22.3. **AERODROME AREA:** A person shall not operate a kite:

22.3.1. On or over any active aircraft movement area of an aerodrome; or

22.3.2. On or over any runway or runway strip area.

22.4. **AERODROME BOUNDARY:** Except for a shielded operation, a person shall not operate a kite within 4 km of an aerodrome boundary unless:

22.4.1. Kite does not exceed 400 feet AGL; and

22.4.2. Kite remains at least 400 feet vertically below cloud; and the horizontal visibility is not less than 4 km.

22.4.3. If the aerodrome is a controlled aerodrome, they have an ATC authorization; and

22.4.4. If the aerodrome is an uncontrolled aerodrome, the operation is performed in accordance with an agreement established with the aerodrome operator.

22.5. **AIRSPACE**

22.5.1. Except for a shielded operation, each person operating a kite at a height of more than 400 feet AGL shall:

22.5.1.1. Operate in a designated area for that purpose; or

22.5.1.2. Operate in accordance with the restrictions specified by the ATS.

22.5.2. Each person operating a kite at a height of more than 400 feet AGL outside of a designated area shall ensure that:

22.5.2.1. The kite remains more than 4 km from any aerodrome boundary; and

22.5.2.2. Kite remains within free airspace; and

22.5.2.3. Kite does not exceed 15 kg; and

22.5.2.4. Kite remains at least 400 feet vertically below cloud; and

22.5.2.5. The horizontal visibility is not less than 4 km; and

22.5.2.6. They provide the following information to the ATS NOTAM office at least 24 hours before the operation:

- 22.5.2.6.1. Their name, address and telephone numbers:
- 22.5.2.6.2. The date, time and duration of the operation:
- 22.5.2.6.3. A brief description of the kite, including size and predominant colour:
- 22.5.2.6.4. The weight of the kite:
- 22.5.2.6.5. The height to which the kite will be operated.

22.6. **NIGHT OPERATION:** A person shall not operate a kite at night.

23. **CANCELLATION**

23.1. With the enforcement of this Air Navigation Order, Air Navigation Orders Numbers 91.0007, 91.0008, 91.0013, 91.0014, 91.0018, 91.0022, 91.0023 and Personnel Licensing Manual (PLM) shall stand cancelled.

Date: ,2003

(SALIM ARSHAD)
Air Marshal (Retd)
Director General
Civil Aviation Authority

PRIVATE PILOT SKILL TEST GUIDE

SECTION – 1 PRE – FLIGHT OPERATIONS	
Use of checklist, airmanship (control of aeroplane by external visual reference, anti/deicing procedures etc.) apply in all sections.	
a)	Aeroplane knowledge
b)	Mass and balance
c)	Pre – flight inspection
d)	Engine starting
e)	Taxying
f)	Pre-take-off procedures
g)	ATC liaison – compliance, R/T procedures
SECTION – 2 GENERAL AIRWORK	
a)	Take-off
b)	Aerodrome departure procedure
c)	Straight and level flight with speed changes
d)	Climbing
e)	Climbing turns
f)	Leveling of f
g)	Medium (30° bank) turns
h)	Steep (45° bank) turns (including recognition and recovery from a spiral dive)
i)	Flight at critically slow airspeed with and without flaps
j)	Clean stall, recovery without power
k)	Clean stall, recovery with power
l)	Approach to stall in landing configuration
m)	Descent with and without power
n)	Descending turns
o)	Leveling off

SECTION – 3 ABNORMAL AND EMERGENCY OPERATIONS	
a)	Simulated engine failure after take-off
b)	*Simulated forced landing
c)	Simulated precautionary landing
d)	Simulated emergencies
e)	*approach to landing without power
SECTION – 4 ARRIVAL AND LANDING PROCEDURES	
a)	Aerodrome arrival procedures
b)	*Precision landing (short field landing)
c)	*Flapless landing
d)	Touch and go
e)	*Crosswind landing, if suitable conditions available
f)	Go around from low height
g)	ATC Liaison – compliance, R/T procedures
h)	Actions after flight
SECTION – 5 NAVIGATION	
a)	Flight plan; dead reckoning and map reading
b)	Maintenance of altitude and heading
c)	Orientation, timing and revisions of ETAs
d)	Diversion to alternate aerodrome (planning and implementation)
e)	Use of radio navigation aids
f)	Basic instrument flying check (180° turn in simulated IMC)
g)	Internal checks (fuel management, systems and carburetor icing checks, etc)
h)	Actions after flight
SECTION – 6	
As determined by the DE any relevant items of the class/type rating skill test	

* Some of these items may be combined at the discretion of the Check Pilot.



Ref No.

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APPLICATION – MICROLIGHT COMPETENCY CERTIFICATE

(For Gliders and Balloons, Use CAAF-600, CAAF-601, CAAF-602)

- ULTRALIGHT
- SPORTS
- HANG GLIDER
- PARAGLIDER
- PARA JUMP
- GYROPLANE

- POWERED PARACHUTE
- SKY DIVING
- GYROGLIDER
- PARA SAIL
- PARA MOTOR
-

- ISSUE
- RENEWAL
- RE - VALIDATION
- ENDORSEMENT
-

☆ Fill only where applicable

Name (Block Letters)		Father's Name		
Address.		Phone, Fax & e mail		
Educational Qualification	<input type="checkbox"/> Male	Place of Birth	Date of Birth	Nationality
	<input type="checkbox"/> Female			
National ID Card No.		Do you hold any Pak CAA Licence (s) (Type & No.)		Organization

Military Experience (First time only)	Rank & Service No	<input type="checkbox"/> Serving <input type="checkbox"/> Retired	NOC Yes No						
Foreign Licences & Experience (First time only)	Country	Licence (s) / Certificate Type							
Name & Address of Flying School	From	To	Hours Flown						
MICROLIGHT TYPE	HOURS – AIRCRAFT				LAUNCHES – OTHERS				REMARKS
	Training	Solo	P-1	Total	Training	Solo	P-1	Total	
Recent Experience (Last six Months)	Day	Night	Date last Flown:				Microlight Flown		
Grand Total Hours			Grand Total Launches						

Application Certificate

a) I certify that the statements made by me on this application are true to the best of my knowledge and belief.

Date _____

Signature of Applicant

b) **Certification** (by approved person of organization)

Certified that I have examined the credentials of Mr./Mrs./Miss _____ and, to the best of my knowledge, the above information is correct.

Date _____

AUTHORISED PERSON

Note: It is an offence to make any false presentation for the purpose of issue of any licence, Certificate, Category or rating under Civil Aviation Rules. Any person doing so would render him/her self liable to disciplinary action.

Document submission Check list

<input type="checkbox"/> Application Form CAAF-665. <input type="checkbox"/> Medical Certificate CAAF- 667. <input type="checkbox"/> Security Clearance, if not already available with CAA. <input type="checkbox"/> Photocopy of Foreign Licence or Certificate, if applicable. <input type="checkbox"/> 04 coloured photographs 1" X 1" (both ears visible, uncovered & blue background). <input type="checkbox"/> Theory Examination results in the specific Category.	<input type="checkbox"/> Type Technical results (TT-1), where applicable. <input type="checkbox"/> Photocopy of page/pages of Logbook showing required experience. <input type="checkbox"/> MCC Course Certificate (in specific Category). <input type="checkbox"/> Skill Test Report CAAF-643 (For Sport & Ultralight). <input type="checkbox"/> Skill Test Report CAAF-665(on reverse of this Form) <input type="checkbox"/> Fee Voucher/Authorization.
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SKILL TEST REPORT – MICROLIGHT COMPETENCY CERTIFICATE

(For Ultralights & Sports, Use CAAF – 643 for Skill Test)

Location

Type Machine

Total Training Launches

SUBJECT

Sat

Un-sat

Knowledge of CAA Rules

Knowledge of Aviation Law

Knowledge of Safety Precautions

Knowledge of Normal Procedures

Knowledge of Emergency Procedure

Knowledge of Equipment Maintenance

SUBJECT

Sat

Un-sat

Understanding of weather

Practical Skill of Flying

Judgment

Confidence

Airmanship

R.T. Procedures & Phraseology

Remarks

CERTIFICATION & RECOMMENDATION:

☆ *Strike out where not applicable:*

Certified that the applicant's performance is
satisfactory
and
recommend

the following clearance:

unsatisfactory

not recommend

Issue

Renewal

Revalidation

Endorsement

Hang Glider

Paraglider

Para Jump

Parasail

Paramotor

Powered Parachute

Sky Diving

Gyroglider

Date

SIGNATURE OF APPLICANT (If briefed after a failure)

SIGNATURE (DCP)

N a m e

Certificate No.

SIGNATURE
CAA Inspector/ DE (if applicable)

N a m e

Certificate No.



**MICROLIGHT COMPETENCY
CERTIFICATE**

**CIVIL AVIATION AUTHORITY
PAKISTAN**

Issued under the Authority of the Civil Aviation Ordinance 1960 and Civil Aviation Rules 1994.

No entries, endorsements or alterations may be made on this Certificate except by the person(s) authorized for this purpose by the Director General, Civil Aviation Authority.

Any person finding this Certificate is to forward it immediately to the individual address specified on the Certificate or to:

Director General ,
Hqs. Civil Aviation Authority,
Jinnah International Airport,
Karachi- 75200

XIV PRIVILEGES OF THE LICENCE

1. Subject to validity of the Certificate, medical and currency, the holder of this Certificate is authorized to :-

- a) to act in command of a Sport Aircraft, Ultra light Aircraft, Hang Glider, Paraglider, Paramotor, Powered Parachute, Parachute, Gyroglider, Gyroplane, Parasail and any other flying machine below 580 KG provided the category is endorsed on this Certificate.

Note: Specific variant within a category shall require a Logbook Endorsement certified by the Organization's flying supervisor.

2. Operate the radiotelephone Equipment

The holder of this Certificate is authorized to operate Radio Telephone equipment installed in the flying machine.



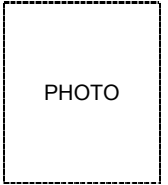
CAAF-627-1

Ref. No.

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**I CIVIL AVIATION AUTHORITY
PAKISTAN**

**II MICROLIGHT COMPETENCY
CERTIFICATE**



III Certificate Number _____

Particulars of the holder.

IV Full Name _____

IV a Date of Birth _____

Place of Birth _____

V Address _____

VI Nationality _____

VII Signature of Holder _____

VIII Issued under the Authority of the Civil Aviation Ordinance 1960 and Civil Aviation Rules 1994 with guidance from the International Civil Aviation Convention 1944 and its Annexes and guidance Documents.

IX Subject to the specific category endorsed on this Certificate, the holder of this Certificate is authorized to act in command of Sport Aircraft, Ultralight Aircraft, Hang Glider, Paraglider, Paramotor, Powered Parachute, Parachute, Gyroglider, Gyroplane, Parasail or any other flying machine below 580 KG within the terms, conditions and limitations imposed in this Certificate and as specified in the Civil Aviation Rules 1994, Air Navigation Orders, Air Safety Circulars and other Instructions issued by the Authority from time to time.

X Signature of Issuing Officer _____

XI Date and stamp _____

XII RATINGS / CATEGORIES

CATEGORIES	SIGNATURE (DATE & STAMP)
Sport Aircraft	
Ultralight Aircraft	
Hang Glider	
Paraglider	
Paramotor	
Powered Parachute	
Para Jump	
Sky Diving	
Gyroglider	
Gyroplane	
Parasail	

**ISSUED UNDER THE AUTHORITY OF THE
DIRECTOR GENERAL, CIVIL AVIATION AUTHORITY**

XIII REMARKS



Ref. No. CAAF-627-2

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**ISLAMIC REPUBLIC OF PAKISTAN
CIVIL AVIATION AUTHORITY**

Certificate of Validity

Status of this Certificate

This Certificate of validity forms a part of Microlight Competency Certificate (MCC) number.....It is Certified that the holder.....has met the Issue/Renewal requirements of the MCC. The MCC is therefore valid for the period as indicated below:

XIV DETAILS

From	To	Signature Date & Stamp

From	To	Signature Date & Stamp

From	To	Signature Date & Stamp

**ATTACHMENT "D"****ISLAMIC REPUBLIC OF PAKISTAN
CIVIL AVIATION AUTHORITY**Ref No.

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 CAAF – 667**MEDICAL ASSESSMENT REPORT**
(For Operation of Microlights)

Name (Block Letters)				Father's Name		
Address & Tel No.				Date of Birth	Place of Birth	Date of Exam
<input type="checkbox"/> Male	Martial	Height	Weight	B.P	Temp.	Colour of Heir/Eyes
<input type="checkbox"/> Female						

Have you ever had or have you now any of the following
(For each yes, describe the condition in remarks below)

YES
NO

YES
NO

1. Eye Trouble
12. Back ache Sciatica, Slipped Disc
2. Ear Trouble
13. Motion or travel Sickness
3. Nose Trouble
14. Fainting, giddiness, blackout, Fits Epilepsy, Convulsions
4. Throat Trouble

5. Heart Trouble

15. Nervous illness, Anxiety-state

6. Rheumatic Fever, Rheumatism

16. Skin disease, dermatitis Eczema

7. Pneumonia, Pleurisy

17. Allergy, Migraine

8. Chronic Bronchitis, asthma other Lung Disorders

18. Diabetes, Hypertension

19. Dysentery, Typhoid, Malaria

9. Stomach Trouble, Severe indigestion

20. Severe Menstrual Disorders

10. Kidney or bladder Disorders

21. Gynaecological Problems

11. venereal Diseases

22.

Additional Remarks:

Have you ever undergone investigations or Treatment in the Hospitals if so give detail:

Have you had a Serious Injury or Accident if so give details:

Is there any family H/O Heart Trouble Diabetes, Allergies, Mental Disorders etc. If so give details:

I declare that all the information given is true and thereby give consent to any Doctor to communicate confidentially with my Medical Attendants

Photo

Date _____

Signature _____

VISUAL ACUITY				DISTANT VISION/NEAR VISION	COLOUR VISION (ISHIHARA)		FIELD OF VISION	
Uncorrected		Corrected			Safe	Unsafe	Normal	Abnormal
R	L	R	L					

Prescription of Glasses / Lenses if any:

Hearing Performance:

Normal

Abnormal

Clinical Examination

Normal

Abnormal

Clinical Examination

Normal

Abnormal

1. Skin, Lymphatic, Glands

9. Heart, Blood Vessels

2. Head, Neck, Face

10. Abdomen

3. Ears, Drums

11. Extremities

4. eyes including Funds copy

12. psychological Disorders

5. Nose, Throat & Nasal Passages

13. Neurological Disorders

6. Chest / Breasts

14. Genitalia

7. Respiratory System

15. Rectal Examination

8. Vaginal Examination

COMMENTS ON CLINICAL EXAMINATION

INVESTIGATIONS

X-Rays Chest (if indicated)

ECG (above 40 years)

FBS (if indicated, D.M. requiring oral Medication is acceptable)

Other Tests (if indicated)

Defects /Restrictions

RECOMMENDATIONS:

Medically **Fit / Unfit** for “**MICROLIGHT CERTIFICATE COMPETENCY**”

Date _____

Signature & Stamp
(Authorised Medical Officer)

For Official use:

Fit / Unfit / Referred to CAM for Accredited Medical Conclusion (AMC)

Date _____

Signature & Stamp
(Authorised Medical Officer)



**CIVIL AVIATION AUTHORITY
PAKISTAN**

ATTACHMENT "E"

CAAF-621

Ref. No

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PERSONAL PARTICULARS FOR SECURITY CLEARANCE

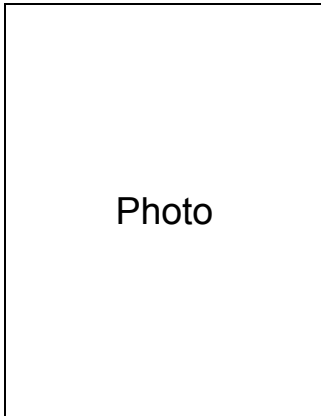
(To be filled in quadruplicate)

1. Name _____
2. Father's Name _____
3. Nationality _____ 4. NIC No. _____
5. Date of Birth _____ 6. Place of Birth _____
7. Educational Qualification _____ 8. Occupation _____
9. Permanent Address _____

10. Present Address _____

11. Date of Joining Flying School / Club _____
12. Area of Police Station _____
13. Passport No. (Foreigners only) _____ Place of Issue _____
Date of issue _____ Valid upto _____
14. Religion _____ 15. Sect _____

Signature of Applicant _____



Signature & Stamp
(Verified by)

Date _____



**CIVIL AVIATION AUTHORITY
PAKISTAN**

CAAF-643

Ref. No

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CHECK REPORT – MICROLIGHT COMPETENCY CERTIFICATE

(Weight Category – Upto 580 KG – ULTRALIGHTS/Sports)

NAME

LIC./MCC & NO.
(IF ANY)

COMPANY

ISSUE

RENEWAL

ENDORSEMENT

TYPE OF EQUIPMENT

DATE

☆ Fill only where applicable

No.	Exercise	Sat	Un-Sat	No.	Exercise	Sat	Un-Sat
a)	<u>Sports /Ultralights</u>				19. Traffic Pattern Procedures		
	1. Oral				20. Go – Around procedures		
	2. Pre-Fight Inspection				21. Landing Glide Path Control.		
	3. Engine Starting				22. Normal Approach & Landing		
	4. Taxi Technique				23. Landing Short / Soft Field		
	5. Pre-Takeoff Checklist				24. Wake turbulence Avoidance		
	6. Straight & Level Flight				25. Crosswind Techniques		
	7. Co-ordinated Turns				26. Forced landings		
	8. Collision Avoidance				27. Airman Ship		
	9. Airspeed Control				28. R / T Procedures		
	10. Altitude Control				29. At Check Pilot – Discretion		
	11. Normal Takeoffs						
	12. Climbing Turns						
	13. Min. Controllable Airspeed						
	14. Power – On Stalls						
	15. Power – Off Stalls						
	16. Descending Turns						
	17. Emergency Descent (Glides)						
	18. Crabbing						

Use reverse for remarks, Recommendation & Authentication

CHECK DETAILS

EQUIPMENT

LOCATION

FLIGHT TIME

Written Test :
(if any)

Sat

Un-Sat

Additional info
(if any)

REMARKS

CERTIFICATION & RECOMMENDATION:

★ *Strike out where not applicable:*

Certified that applicant has performed

satisfactory
unsatisfactory

for

Issue
Renewal
Endorsement

the following MCC:

SPORTS
(300-580 KG)

ULTRALIGHT
(Below 300 KG)

RE - CHECK

SIGNATURE OF APPLICANT
(If briefed after failure)

SIGNATURE
Designated Person

NAME

LIC. NO.

SIGNATURE
CAA Inspector/DE
(If applicable)

NAME

LIC. NO.



**BALLOON PILOT'S
LICENCE**

**CIVIL AVIATION AUTHORITY
PAKISTAN**

Issued under the Authority of the Civil Aviation Ordinance 1960 and Civil Aviation Rules 1994.

No entries, endorsements or alterations may be made on this Certificate except by the person(s) authorized for this purpose by the Director General, Civil Aviation Authority.

Any person finding this Certificate is to forward it immediately to the individual address specified on the Certificate or to:

Director General ,
HQs. Civil Aviation Authority,
Jinnah International Airport,
Karachi- 75200

XV PRIVILEGES OF THE LICENCE

3. Subject to validity of the Licence, medical and currency, the holder of this Certificate is authorized to :-

b) to act in command of a Balloon provided the Category/Class is endorsed on this Licence.

Note: Specific variant within a Category/Class shall require a Logbook Endorsement certified by the Organization's flying supervisor.

4. Operate the radioTelephoneEquipment'.

The holder of this Certificate is authorized to operate Radio Telephone equipment installed in the Balloon.



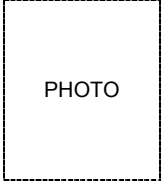
CAAF-641-1

Ref. No.

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**I CIVIL AVIATION AUTHORITY
PAKISTAN**

**II BALLOON PILOT'S
LICENCE**



III Certificate Number _____

Particulars of the holder.

IV Full Name _____

V a Date of Birth _____

Place of Birth _____

V Address _____

VI Nationality _____

VII Signature of Holder _____

VIII Issued under the Authority of the Civil Aviation Ordinance 1960 and Civil Aviation Rules 1994 with guidance from the International Civil Aviation Convention 1944 and its Annexes and guidance Documents.

IX Subject to the specific Class endorsed on this Licence, the holder of this Certificate is authorized to act in command of a Balloon within the terms, conditions and limitations imposed in this Licence and as specified in the Civil Aviation Rules 1994, Air Navigation Orders, Air Safety Circulars and other Instructions issued by the Authority from time to time.

X Signature of Issuing Officer _____

XI Date and stamp _____

**ISSUED UNDER THE AUTHORITY OF THE
DIRECTOR GENERAL, CIVIL AVIATION AUTHORITY**

XII RATINGS/CATEGORIES

Categories/Classes

Signature & stamp

XV **REMARKS**



CAA-641/2
Ref. No.

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**ISLAMIC REPUBLIC OF PAKISTAN
CIVIL AVIATION AUTHORITY**

Certificate of Validity

Status of this Licence

This Certificate of validity forms part of Balloon Pilot's Licence number.....It is Certified that the holderhas met the Issue/Renewal requirements of the BPL. The BPL is therefore valid for the period as indicated below:

XVI **DETAILS**

From	To	Signature Date & Stamp

From	To	Signature Date & Stamp

From	To	Signature Date & Stamp