CIVIL AVIATION ACT (Cap. 71:01)

CIVIL AVIATION (PERSONNEL LICENSING) (GENERAL) REGULATIONS, 2013

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IN EXERCISE of the powers conferred on the Minister of Transport and Communications by section 89 of the Civil Aviation Act, and on the recommendation of the Civil Aviation Authority, the following Regulations are hereby made -

Citation

- 1. These Regulations may be cited as the Civil Aviation (Personnel Licensing) (General) Regulations, 2013.
- 2. In these Regulation unless the context otherwise requires —
- "accredited medical conclusion" means the conclusion reached by one or more medical experts accredited by the Authority for the purposes of the case concerned;
- "aeronautical experience" means the pilot time obtained in an aircraft or approved flight simulation training device for meeting the training and flight time requirements of these Regulations;
- "aircraft category" means the classification of an aircraft according to specified basic characteristics such as aeroplane, helicopter, glider or free balloon;
- "aircraft type" means all aircraft of the same basic design including modifications thereto, but excluding modifications which result in a change in handling or flight characteristics;
 - "airframe" means the fuselage, booms, nacelles, cowlings, fairings, airfoil surfaces including rotors, but excluding propellers and rotating airfoils of a powerplant, and landing gear of an aircraft and their accessories and controls;
 - "appliance" means an instrument, mechanism, equipment, part, apparatus, appurtenance or accessory, including communications equipment that is used or intended to be used in operating or controlling an aircraft in flight, and that is installed in or attached to the aircraft and is not part of an airframe, powerplant or propeller;
- "approved maintenance organisation" means an organisation approved by the Authority to perform specific aircraft maintenance activities including the inspection, overhaul, maintenance, repair or modification and release to service of aircraft or aircraft component;
- "approved training" means training conducted under curricula and supervision approved by the Authority and in the case of a flight crew member means training conducted by an Approved Training Organisation;
- "Approved Training Organisation" means an organisation as defined in the Civil Aviation (Approved Training Organisations) Regulations;
- "authorised instructor" means a person who
 - (a) holds a valid and current ground or flight instructor rating issued under these Regulations for conducting ground training or flight training; or
 - (b) is authorised by the Authority to provide ground training, flight training, or other training under these Regulations and the Civil Aviation (Approved Training Organisations) Regulations;
- "cabin crew member" means a crew member who performs, in the interest of safety of passengers, duties assigned by the operator or the pilot-in-command of the aircraft, but who shall not act as a flight crew member;
- "category I operations" means a precision instrument approach and landing with a decision height not lower than 60 metres (200 feet) and with either a visibility not less than 800 metres or Runway Visual Range (RVR) not less than 550 metres";

Interpretation

- "category II operations" means a precision instrument approach and landing with a decision height lower than 60 metres (200 feet), but not lower than 30 metres (100 feet) and a RVR not less than 350 metres;
- "competency" means a combination of skills and knowledge required to perform a task in accordance with the prescribed standard.
- "Contracting State" means a State that is a signatory to the Convention on International Civil Aviation (Chicago Convention);
- "course" means a programme of instruction to obtain a licence, rating, qualification, authorisation or current experience required under these Regulations;
- "critical engine" means the engine whose failure would most adversely affect the performance or handling qualities of an aircraft;
- "cross country flight" means any flight during the course of which the aircraft is more than 30 nautical miles from the aerodrome of departure;
- "examiner" means a person authorised by the Authority to conduct a pilot proficiency test, a practical test for a licence or rating, or a knowledge test under these Regulations;
- "flight crew member" means a crew member charged with duties essential to the operation of an aircraft during a flight;
- "flight plan" means specified information provided to air traffic services units, relative to an intended flight or portion of a flight of an aircraft;
- "flight simulation training device" means any one of the following three types of apparatus in which flight conditions are simulated on the ground
 - (a) a simulation flight trainer, which provides an accurate representation of the cockpit of a particular aircraft type to the extent that the mechanical, electrical, electronic, aircraft systems control functions, the normal environment of flight crew members and the performance and flight characteristics of that type of aircraft are realistically simulated;
 - (b) a flight procedures trainer, which provides a realistic cockpit environment, and which simulates instrument responses, simple control functions of mechanical, electrical, electronic, aircraft systems and the performance and flight characteristics of aircraft of a particular class; or
 - (c) a basic instrument flight trainer, which is equipped with appropriate instruments, and which simulates the cockpit environment of an aircraft in flight in instrument flight conditions;
- "flight time" means
 - (a) for aeroplanes or gliders, the total time from the moment an aeroplane or a glider moves for the purpose of taking off until the moment it finally comes to rest at the end of the flight and it is synonymous with the term "block to block" or "chock to chock" time in general usage which is measured from the time an aeroplane first moves for the purpose of taking off until it finally stops at the end of the flight;
 - (b) for a helicopter, the total time from the moment a helicopter rotor blades start turning until the moment a helicopter comes to rest at the end of the flight and the rotor blades are stopped; or
 - (c) for an airship or free balloon, the total time from the moment an airship or free balloon first becomes detached from the surface until the moment when it next becomes attached thereto or comes to rest thereon:

- "glider" means a non-power-driven heavier-than-air aircraft, deriving its lift in flight chiefly from aerodynamic reactions on surfaces, which remain fixed under given conditions of flight;
- "heavier-than-air aircraft" means an aircraft deriving its lift in flight chiefly from aerodynamic forces;
- "helicopter" means a heavier-than-air aircraft supported in flight, chiefly, by the reactions of the air on one or more power-driven rotors on substantially vertical axes:
- "human performance" means human capabilities and limitations which have an impact on the safety and efficiency of aeronautical operations;
- "instrument approach procedure" means a series of predetermined manoeuvres by reference to flight instruments with specified protection from obstacles from the initial approach fix, or where applicable, from the beginning of a defined arrival route to a point from which a landing can be completed and thereafter; and if a landing is not completed, to a position at which holding or enroute obstacle clearance criteria apply;
- "instrument flight time" means the time during which a pilot is piloting an aircraft solely by reference to instruments and without external reference points;
- "instrument time" means time in which cockpit instruments are used as the sole means for navigation and control;
- "instrument training" means training which is received from an authorised instructor under actual or simulated instrument meteorological conditions;
- "knowledge test" means a test on the aeronautical knowledge areas required for a licence or rating that can be administered in written form or by a computer;
- "language proficiency skills" means the knowledge and abilities which impact on the capacity of a person to communicate spontaneously, accurately, intelligibly, meaningfully and appropriately in a given language;
- "maintenance" means tasks required to ensure the continued airworthiness of an aircraft or aircraft component, including any one or combination of overhaul, repair, inspection, replacement, modification and defect rectification;
- "medical certificate" means the evidence issued by the Authority that the licence holder meets specific requirements of medical fitness;
- "medical conclusion" means a medical conclusion reached by one or more medical experts accredited by the Authority;
- "medical examiner" means a medical practitioner with training in aviation medicine and practical knowledge and experience of the aviation environment, who is designated by the Authority to conduct medical examinations of fitness of applicants for licences or ratings for which medical requirements are prescribed;
- "medical practitioner" means a medical practitioner qualified and experienced in the practice of aviation medicine who evaluates medical reports submitted to the Authority by medical examiners;
- "night" means the time between 15 minutes after sunset and 15 minutes before sunrise, sunrise and sunset being determined at surface level, and includes any time between sunset and sunrise when an unlighted aircraft or other unlighted prominent object cannot clearly be seen at a distance of 4,572 metres;
- "pilot-in-command" means the pilot designated by the operator or in the case of general aviation, the owner, as being in command and charged with the safe conduct of a flight;

- "pilot-in-command under supervision" means a co-pilot performing, under the supervision of the pilot-in-command, the duties and functions of a pilot-in-command, in accordance with a method of supervision acceptable to the Authority;
- "pilot time" means the time a person
 - (a) serves as a required pilot;
 - (b) receives training from an authorised instructor in an aircraft or approved flight simulation training device; or
 - (c) gives training as an authorised instructor in an aircraft or approved flight simulation training device;
- "powered-lift" means a heavier-than-air aircraft capable of vertical takeoff, vertical landing and low speed flight that depends principally on engine driven lift devices or engine thrust for lift during these flight regimes and on non-rotating airfoil for lift during horizontal flight;
 - "powerplant" means an engine that is used or intended to be used for propelling aircraft, and it includes turbo superchargers, appurtenances and accessories necessary for its functioning, but does not include propellers;
- "practical test" means a competency test on the areas of operations for a licence, certificate, rating or authorisation that is conducted by having the applicant respond to questions and demonstrate manoeuvres in flight, in an approved synthetic flight trainer or in a combination of these;
- "pressurised aircraft" means an aircraft fitted with means of controlling out flow of cabin air in order to maintain maximum cabin altitude of not more than 10,000 feet to enhance breathing and comfort of passengers and crew:
- "proficiency check" means the process of the check pilot administering each prescribed manoeuvre and procedure to a pilot as necessary until it is performed successfully during the training period;
- "propeller" means a device for propelling an aircraft that has blades on a powerplant driven shaft and that, when rotated, produces by its action on the air, a thrust approximately perpendicular to its plane of rotation, and it includes control components normally supplied by its manufacturer, but does not include main and auxiliary rotors or rotating airfoils of powerplants;
- "psychoactive substance" means alcohol, opioids, canabinoids, sedatives and hypnotics, cocaine, other psychostimulants, hallucinogens and volatile solvents, excluding coffee and tobacco;
 - "psychosis" means a mental disorder in which the individual has manifested delusions, hallucinations, grossly bizarre or disorganised behaviour or other commonly accepted symptoms of this condition; or the individual may reasonably be expected to manifest delusions, hallucinations, grossly bizarre or disorganised behaviour or other commonly accepted symptoms of this condition;
- "rating" means an authorisation entered on or associated with a licence or certificate and forming part of the certificate or licence, stating special conditions, privileges or limitations pertaining to such licence or certificate;
- "repair" means the restoration of an aircraft or aircraft component to a serviceable condition in conformity with an approved standard;

- "solo flight" means a flight on which a student pilot is the sole occupant of the aircraft;
- "specific operating provisions" means a document describing the ratings class or limited in detail and shall contain reference material and process specifications used in performing repair work, along with any limitations applied to an aircraft maintenance organisation;
- "substance" means alcohol, sedatives, hypnotics, anxiolytics, hallucinogens, opioids, cannabis, inhalants, central nervous system stimulants such as cocaine, amphetamines and similarly acting sympathomimetics, phencyclidine or similarly acting arylcyclohexylamines and other psychoactive drugs and chemicals;
 - "substance abuse" means any of the following —
 - (a) the use of a substance in a situation in which that use was physically hazardous, if there has been at any other time an instance of the use of a substance also in a situation in which that use was physically hazardous;
 - (b) a verified positive drug test result acquired under an anti-drug programme or internal programme of the Government; or
 - (c) misuse of a substance that the Authority, based on case history and qualified medical judgment relating to the substance involved, finds that it makes the applicant unable to safely perform the duties or exercise the privileges of the licence applied for or held; or may reasonably be expected, for the maximum duration of the medical certificate applied for or held, to make the applicant unable to perform those duties or exercise those privileges;
- "substance dependence" means a condition in which a person is dependent on a substance, other than tobacco or ordinary xanthine-containing beverages, as evidenced by increased tolerance, manifestation of withdrawal symptoms, impaired control of use, or continued use despite damage to physical health or impairment of social, personal or occupational functioning;
 - "training programme" means a programme that consists of courses, courseware, facilities, flight training equipment, and personnel necessary to accomplish a specific training objective; and includes a core curriculum and a specialty curriculum; and
 - "VMC" means visual meteorological conditions.

PART II — General Rules concerning licences

Application

- 3. (1) These Regulations shall apply to the following —
- (a) flight crew members
 - (i) a private pilot,
 - (ii) a commercial pilot,
 - (iii) a multi-crew pilot,
 - (iv) a airline transport pilot,
 - (v) a glider pilot, and
 - (vi) a free balloon pilot; and

- (b) personnel
 - (i) an aircraft maintenance engineer,
 - (ii) an air traffic controller,
 - (iii) a flight operations officer,
 - (iv) an aeronautical station operator,
 - (v) an aviation repair specialist,
 - (vi) a parachute rigger,
 - (vii) a flight radiotelephone operator,
 - (viii) a cabin crew member, and
 - (ix) any other personnel as may be determined by the Authority.
- **4.** (1) A person shall not act as a flight crew member of an aircraft unless, he or she holds a licence
 - (a) appropriate to the duties to be performed by the person; and
 - (b) issued by the Authority, in accordance with these Regulations.
- (2) Where a person holds a licence issued by a foreign Contracting State, the Authority may validate such licence.
- (3) A flight crew member shall carry the appropriate licence on board the aircraft when engaged in international air navigation.
- **5.** (1) As an alternative to the issuance of its own licence, the Authority may validate a licence issued by another Contracting State, by authorising a person holding such licence to exercise the privileges of the licence:

Provided that —

- (a) such validation shall be done in a manner determined by the Authority;
- (b) the validation period shall not extend beyond the period of validity of the licence; and
- (c) such validation shall cease to be valid if the licence is suspended or revoked.
- (2) Where validation is issued for use in commercial air transport operations, the Authority shall verify the authenticity of the licence with the Contracting State that issued the licence.
- **6.** A holder of a licence shall not exercise privileges other than those granted by the licence.
- **7.** (1) An applicant for a licence shall, where applicable, hold a medical certificate issued by the Authority, in accordance with these Regulations.
- (2) To satisfy the licensing requirements of medical fitness, the applicant shall meet the appropriate medical requirements specified for the licence sought.
- **8.** (1) After issuing a licence, the Authority shall ensure that the privileges granted under the licence or ratings are not exercised unless the holder maintains competency and meets the requirements for recent experience.
- (2) A flight crew member, engaged in commercial air transport operations, shall establish maintenance of competency by demonstration of skill during proficiency flight checks.
- (3) A flight crew member may, to the extent possible, demonstrate his or her continuing competency in a flight simulation training device.
- (4) A flight crew member shall record the maintenance of competency in the operator's records or in the flight crew member's personal log book or licence.

Authority to act as flight crew member

Validation of licence

Privileges of the holder of licence

Medical fitness

Competency and recency requirements Language proficiency

- **9.** (1) An aeroplane, airship, helicopter and powered-lift pilot shall demonstrate the ability to speak and understand the language used for radio telephony communications to the level specified in Schedule 1 to these Regulations.
- (2) An air traffic controller and aeronautical station operator shall demonstrate the ability to speak and understand the language used in radiotelephony communications to the level specified in Schedule 1 to these Regulations.

PART III — General requirements for pilot licences and ratings

General licensing specifications

- **10.** An applicant for a pilot licence shall —
- (a) before being issued with a pilot licence or rating, meet such requirements in respect of age, knowledge, experience, flight instruction, skill and medical fitness specified for the licence or rating sought; and
- (b) demonstrate, in a manner determined by the Authority, such requirements for knowledge and skill specified for the licence or rating sought.

Category ratings

- 11. (1) A person shall not, unless he or she is a holder of a pilot licence issued in accordance with these Regulations, act as a pilot-in-command or co-pilot of an aircraft in any of the following categories
 - (a) an aeroplane
 - (b) an airship of a volume of more than 4600 cubic metres;
 - (c) a free balloon;
 - (d) a glider;
 - (e) a helicopter; and
 - (f) a powered-lift.
- (2) The Authority may include the category of the aircraft in the title of the licence or endorse it as a rating on the licence:

Provided that the category rating shall not be endorsed on a licence if the category is included in the title of the licence.

- (3) Where the holder of a pilot licence seeks a licence for an additional aircraft category, the Authority shall
 - (a) issue the holder of the licence with an additional pilot licence for that category of aircraft; or
 - (b) endorse the original licence with the new category rating.
- (4) The holder of a pilot licence seeking an additional category rating shall meet the requirements of these Regulations, appropriate to the privileges for the category rating sought.
- (5) Where the Authority issues an additional category rating or endorses the additional category rating on a pilot licence, the additional category rating shall indicate the level of licensing privileges at which the category rating is granted.

Class and type ratings

- **12.** (1) The Authority shall establish class ratings for aeroplanes certificated for single-pilot operation including class ratings for
 - (a) a single-engine land aeroplane;
 - (b) a multi-engine land aeroplane; and
 - (c) a helicopter or powered-lift which has comparable handling, performance and other characteristics.
 - (2) The Authority shall establish type ratings for —
 - (a) an aircraft certificated for operation with a minimum crew of at least two pilots;
 - (b) a helicopter or powered-lift certificated for single-pilot operation except where a class rating has been established under subregulation (1); or
 - (c) any aircraft, whenever the Authority considers it necessary.

- (3) Where the Authority establishes a common type rating, the rating shall only apply to an aircraft with similar characteristics in operating procedures, systems and handling.
- (4) Where an applicant demonstrates the skill and knowledge required for the initial issue of a pilot licence, the category and rating appropriate to the class or type of aircraft used in the demonstration shall be entered on the licence.
- (5) Where the Authority issues a type rating limiting the privileges to act as co-pilot or limiting the privileges to act as pilot only during the cruise phase of the flight, such limitation shall be endorsed on the rating.
- (6) The Authority may issue a licence holder with a special authorisation, in place of a class or type rating, for the purposes of training, testing, specific flight purpose non-revenue or non-passenger carrying flights.
- (7) The Authority shall issue the special authorisation, under subregulation (6), in writing and the authorisation shall be limited to the time needed to complete the special flight.
- **13.** (1) An applicant for a class rating shall demonstrate a degree of skill appropriate to the licence in an aircraft of the class for which the rating is sought.

(2) An applicant for a type rating shall —

- (a) have experience in the appropriate type of aircraft or flight simulator, which experience shall be gained under appropriate supervision, in
 - the normal flight procedures and manoeuvres during all phases of flight,
 - (ii) the abnormal and emergency procedures and manoeuvres in cases of failure and malfunction of equipment, such as powerplant, systems and airframe,
 - (iii) where applicable, the instrument procedures, including instrument approach, missed approach and landing procedures under normal, abnormal and emergency conditions and simulated engine failure, and
 - (iv) the procedures for crew incapacitation and coordination, including allocation of pilot tasks, crew cooperation and use of checklists;
- (b) demonstrate the skill and knowledge required for the safe operation of the applicable type of aircraft, and relevant to the duties of a pilot-in-command or co-pilot; and
- (c) demonstrate, at the airline transport pilot licence level, an extent of knowledge required under these Regulations.
- (3) Where the application is for a type rating for —
- (a) an aircraft certificated for operation with a minimum crew of at least two pilots; or
- (b) a helicopter or powered-lift certificated for single-pilot operation, the applicant shall demonstrate the skill and knowledge required for the safe operation of the applicable type of aircraft and relevant to the licensing requirements and piloting functions of the applicant.
- 14. Where an applicant uses a flight simulation training device to acquire the experience or perform any manoeuvre required during a demonstration of skill for the issue of a licence, the Authority shall ensure that the training device used is appropriate to the task and shall approve the use of such training device.

Requirements for class and type rating

Use of flight simulation training device Instrument rating

Authorisation to conduct instruction

- **15.** A holder of a pilot licence shall not act as a pilot-in-command or co-pilot of an aircraft under instrument flight rules unless he or she has received an instrument rating, from the Authority, appropriate to the aircraft category.
- **16.** (1) A person shall not carry out a flight instruction, required for the issue of a pilot licence or rating, unless he or she -
 - (a) holds an appropriate pilot licence;
 - (b) has received a flight instruction rating, on his or her pilot licence, from the Authority;
 - (c) has been authorised by the Authority to act as an agent of an approved training organisation, carrying out flight instruction; or
 - (d) has received a specific authorisation from the Authority.
- (2) A person shall not carry out an instruction, on a flight simulation training device, required for the issue of a licence or rating, unless he or she
 - (a) holds an appropriate licence; or
 - (b) has the appropriate flight training experience and has received a specific authorisation from the Authority.

Crediting of flight time

- **17.** (1) A student pilot or a holder of a pilot licence shall be entitled to be credited in full, with all solo, dual instruction and pilot-in-command flight time towards the total flight time required for the initial issue of a pilot licence or the issue of a higher grade of pilot licence.
- (2) When acting as a co-pilot of an aircraft certificated for operation by a single pilot, but required by the Authority to be operated with a co-pilot, the holder of a pilot licence shall be entitled to be credited with not more than 50 per cent of the co-pilot flight time towards the total flight time required for a higher grade of pilot licence.
- (3) Notwithstanding subregulation (2), the Authority may authorise that flight time be credited in full towards the total flight time required, if the aircraft is equipped to be operated by a co-pilot and the aircraft is operated in a multi-crew operation.
- (4) When acting as a co-pilot of an aircraft certificated to be operated with a co-pilot, the holder of a pilot licence shall be entitled to be credited in full with the flight time towards the total time required for a higher grade of pilot licence.
- (5) When acting as a pilot-in-command under supervision, the holder of a pilot licence shall be entitled to be credited in full with the flight time towards the total flight time required for a higher grade of pilot licence.
- **18.** A holder of a pilot licence shall not act as a pilot-in-command of an aircraft engaged in commercial air transport operations if he or she has attained the age of 60 years.

Limitation of privileges of pilots aged over 60 years

PART IV — Student Pilot Licence

Student pilot licence

- **19.** (1) The Authority shall prescribe the requirements and privileges for a student pilot and in prescribing the privileges the Authority shall ensure that such privileges do not permit a student pilot to constitute a hazard to air navigation.
 - (2) A student pilot shall not fly solo unless he or she —
 - (a) is under the supervision of or has the authority from an authorised flight instructor; and
 - (b) holds a current Class 2 medical certificate.

PART V — Private Pilot Licence

A – General Requirements

20. An applicant for a private pilot licence, appropriate to the aeroplane, airship, helicopter and powered-lift categories, shall be at least 17 years of age.

Age requirements

21. An applicant for a private pilot licence shall demonstrate a level of knowledge, appropriate to the privileges granted to the holder of a private pilot licence and appropriate to the category of aircraft intended to be included in the licence, in the following subjects —

Knowledge requirements

- (a) air law
 - (i) rules and regulations relevant to the holder of a private pilot licence,
 - (ii) rules of the air,
 - (iii) altimeter setting procedures, and
 - (iv) appropriate air traffic service practices and procedures;
- (b) aircraft general knowledge
 - principles of operation and functioning of powerplants, systems and instruments,
 - (ii) operating limitations of the relevant category of aircraft and powerplants including the relevant operational information from the flight manual or other appropriate document,
 - (iii) in the case of helicopters and powered-lifts, power train transmission,
 - (iv) in the case of airships, physical properties and practical application of gases;
- (c) flight performance, planning and loading, including
 - (i) the effects of loading and mass distribution on flight characteristics,
 - (ii) the use and practical application of take-off, landing and other performance data,
 - (iii) pre-flight and en-route flight planning, appropriate to private operations under visual flight rules,
 - (iv) the preparation and filing of air traffic service flight plans,
 - (v) the appropriate air traffic service procedures,
 - (vi) position reporting procedures,
 - (vii) altimeter setting procedures, and
 - (viii) operations in areas of high-density traffic;
- (d) human performance, including principles of threat and error management;
- (e) meteorology, including
 - (i) the application of elementary aeronautical meteorology,
 - (ii) the use of and procedures for obtaining meteorological information,
 - (iii) altimetry, and
 - (iv) hazardous weather conditions;
- (f) the practical aspects of air navigation, dead-reckoning techniques and the use of aeronautical charts;

- (g) operational procedures, including
 - (i) the application of threat and error management to operational performance,
 - (ii) the use of aeronautical documentation such as NOTAM, aeronautical codes and abbreviations.
 - (iii) appropriate precautionary and emergency procedures, including action taken to avoid hazardous weather, wake turbulence and operating hazards, and
 - (iv) in the case of helicopters and powered-lifts, settling with power, ground resonance, retreating blade stall, dynamic roll over and safety procedures associated with flight in VMC;
- (h) the principles of flight; and
- (i) radiotelephony, including
 - the communication procedures and phraseology applied in visual flight rules operations, and
 - (ii) the action to be taken in case of communication failure.

Skills requirements

- **22.** An applicant for a private pilot licence shall, as a pilot-in-command of an aircraft within appropriate category, demonstrate the ability to
 - (a) perform the procedures and manoeuvres, as may be specified by the Authority, with a degree of competency appropriate to the privileges granted to the holder of a private pilot licence;
 - (b) recognise and manage threats and errors;
 - (c) operate the aircraft within its limitations;
 - (d) exercise good judgement and airmanship;
 - (e) apply aeronautical knowledge; and
 - (f) maintain control of the aircraft at all times such that the successful outcome of a procedure or manoeuvre is assured.

Medical fitness

23. An applicant for a private pilot licence shall hold a current class 2 medical certificate.

Privileges of private pilot licence

24. Subject to the requirements under these Regulation, a holder of a pilot licence may act, but not for remuneration, as a pilot-in-command or co-pilot of an aircraft, within the appropriate aircraft category, engaged in non-revenue flights:

Provided that the holder of a pilot licence shall receive dual instruction, in an aircraft within the appropriate aircraft category, in night flying, including take-off, landing and navigation.

B – Specific requirements for aeroplane category

- **25.** (1) An applicant for a private pilot licence, with an aeroplane category rating, shall have completed, as a pilot of an aeroplane appropriate to the class rating sought, not less than 40 hours of flight time completed in an Approved Training Organisation.
- (2) Where the Authority determines that experience as a pilot, under instruction, in a flight simulation training device is acceptable as part of the total flight time of the 40 hours required under subreglation (1), credit for such experience shall be limited to a maximum of five hours.
- (3) Where an applicant has flight time as a pilot of aircraft in other categories, the Authority shall determine whether such experience is acceptable and credit for such experience shall be limited to a maximum of 10 hours.

- (4) The applicant shall have completed in aeroplanes, not less than —
- (a) 10 hours of solo flight, appropriate to the class rating sought, under the supervision of an authorised flight instructor; and
- (b) 5 hours of solo cross-country flight time with at least one solo cross-country flight totalling not less than 270 kilometres or 150 nautical miles, in the course of which fullstop landings at two different aerodromes shall be made.
- **26.** (1) An applicant for a private pilot licence, with an aeroplane category rating, shall have received dual instruction in an aeroplane appropriate to the class rating sought, from an authorised flight instructor.

Flight instruction

- (2) The instructor shall ensure that the applicant has operational experience, to the level of performance required for a private pilot, in
 - (a) recognising and managing threats and errors;
 - (b) pre-flight operations, including mass and balance determination, aeroplane inspection and servicing;
 - (c) aerodrome and traffic pattern operations, collision avoidance precautions and procedures;
 - (d) controlling the aeroplane by external visual reference;
 - (e) recognising and recovering from incipient and full stalls on flight at critically slow airspeed;
 - (f) normal and crosswind take-off and landing;
 - (g) maximum performance take-off, short-field landing including short field and obstacle clearance;
 - (h) flight by reference solely to instruments, including the completion of a level 180 degree turn;
 - (i) cross-country flying using visual reference, dead reckoning, and where available, road navigation aids;
 - (j) emergency operations, including simulated aeroplane equipment mal functions;
 - (k) compliance with air traffic service procedures during operations to, from and when transiting controlled aerodromes; and
 - (l) communication procedures and phraseology.

C – Specification for helicopter category

27. (1) An applicant for a private pilot licence, with a helicopter rating, shall have completed, as a pilot of a helicopter, not less than 40 hours of flight time, in an Approved Training Organisation.

- (2) Where the Authority determines that experience as a pilot under instruction in a flight simulation training device is acceptable as part of the total flight time of the 40 hours required under subregulation (1), such experience shall be limited to a maximum of five hours.
- (3) Where an applicant has flight time as a pilot of aircraft in other categories, the Authority shall determine whether such experience is acceptable and credit for such experience shall be limited to a maximum of 10 hours.
- (4) An applicant shall have completed, in a helicopter, not less than 10 hours of solo cross-country flight time, with at least one cross-country flight totalling not less than 180 kilometres or 100 nautical miles in the course of which landings at two different points shall be made.

Flight instruction

- **28.** (1) An applicant for private pilot licence with a helicopter rating shall have received not less than 20 hours of dual instruction time, in a helicopter, from an authorised flight instructor.
- (2) The instructor shall ensure that the applicant has operational experience, to the level of performance required for a private pilot, in
 - (a) recognising and managing threats;
 - (b) pre-flight operations, including mass and balance determination, helicopter inspection and servicing;
 - (c) aerodrome and traffic pattern operations, collision avoidance precautions and procedures;
 - (d) controlling the helicopter by external visual reference;
 - (e) recovery at the incipient stage from settling with power;
 - (f) recovery techniques from low-rotor rpm within the normal range of engine rpm;
 - (g) ground manoeuvring and run-ups, hovering, take-offs and landings on normal, out of wind and sloping ground;
 - (h) take-offs and landings with necessary power, including maximum performance take-off and landing techniques on restricted site operations or quick stops;
 - (i) cross-country flying using visual reference, dead reckoning and where available, radio navigation aids in a flight of at least one hour;
 - (j) emergency operations, including simulated helicopter equipment malfunction and autorotative approach;
 - (k) compliance with air traffic service procedures during operations to, from and when transiting controlled aerodromes; and
 - (l) communication procedures and phraseology.
- (3) The applicant shall have received dual instrument flight instruction from an authorised flight instructor.
- (4) The flight instructor shall ensure that the applicant has operational experience in flight, by reference solely to instruments, including the completion of a level 180 degree turn in a suitably instrumented helicopter.

D – Specific requirements for powered-lift category

- **29.** (1) An applicant for a private pilot licence with a powered-lift category rating shall have completed not less than 40 hours of flight time as a pilot of powered-lifts.
- (2) The Authority shall determine whether experience as a pilot under instruction, in a flight simulation training device, is acceptable as part of the total flight time of 40 hours required under subregulation (1).
- (3) Where the applicant has flight time as a pilot of an aircraft in any category, the Authority shall determine whether such experience is acceptable as part of the total flight time and the extent to which the flight time requirements under subregulation (1) may be reduced.
- (4) An applicant shall have completed, in a powered-lift, not less than 10 hours of solo flight time under the supervision of an authorised flight instructor, including five hours of solo cross-country flight time with at least one cross-country flight totalling not less than 270 kilometres or 150 nautical miles, in the course of which full-stop landings at two different aerodromes shall be made.

30. (1) An applicant for a private pilot licence with a powered-lift category rating shall have received not less than 20 hours of dual instruction flight time in a powered-lift, from an authorised flight instructor.

Flight instruction

- (2) A flight instructor shall ensure that the applicant has operational experience, to the level of performance required for a private pilot, in
 - (a) recognising and managing threats and errors;
 - (b) pre-flight operations, including mass and balance determination, powered-lift inspection and servicing;
 - (c) aerodrome and traffic pattern operations, including collision avoidance precautions and procedures;
 - (d) controlling a powered-lift by external visual reference;
 - (e) ground manoeuvring and run-ups, hover and rolling take-offs and climb-out, hover and rolling approach and landings for normal, out of wind and sloping ground;
 - (f) take-off and landing with minimum necessary power, maximum performance take-off and landing techniques in restricted site operations and quick stops;
 - (g) flight by reference solely to instruments, including completion of a level 180 degree turn;
 - (h) recovery at the incipient stage from settling with power, including recovery techniques from low-rotor rpm within the normal range of engine rpm;
 - (i) cross-country flying using visual reference, dead reckoning and where available, radio navigation aids, including normal range engine rpm;
 - (j) emergency operations, including simulated powered-lift equipment malfunctions, power of reconversion to autorotation and autorotative approach, and where applicable, transmission and interconnect driveshaft failure:
 - (*k*) compliance with air traffic service procedures in operations to, from and when transiting controlled aerodromes; and
 - (l) communication procedures and phraseology.

E – Specific requirements for airship category

31. An applicant for a private pilot licence with an airship category rating shall have completed not less than 25 hours of flight time, as a pilot of an airship, including —

Experience

- (a) three hours of cross-country flight training in an airship, with a cross-country flight totalling not less than 45 kilometres or 25 nautical miles;
- (b) five take-offs and five landings to a full stop at an aerodrome, with each landing involving a flight in the traffic pattern at an aerodrome;
- (c) three hours of instrument time; and
- (d) five hours as a pilot assuming the duties of a pilot-in-command, under the supervision of the pilot-in-command.
- **32.** (1) An applicant for a private pilot licence with an airship category rating shall have received dual instruction, in an airship, from an authorised flight instructor.

Flight instruction

- (2) A flight instructor shall ensure that the applicant under subregulation (1) has received instruction in
 - (a) recognising and managing threats and errors;
 - (b) pre-flight operations, including mass and balance determination, airship inspection and servicing;
 - (c) ground reference and manoeuvres;
 - (d) aerodrome and traffic pattern operations, including collision avoidance precautions and procedures;
 - (e) techniques and procedures for take-off, including appropriate limitations, emergency procedures and signals used;
 - (f) controlling an airship by external visual reference;
 - (g) take-offs, landings and go-arounds;
 - (h) maximum performance, obstacle clearance, take-offs;
 - (i) flight by reference solely to instruments, including the completion of a level 180 degree turn;
 - (j) navigation, cross-country flying using visual reference, including dead reckoning and radio navigation aids;
 - (k) emergency operations, recognition of leaks, including simulated airship equipment malfunctions; and
 - (l) communication procedures and phraseology.

PART VI — Commercial Pilot Licence

A – General requirements

Age requirements

Knowledge requirements

- **33.** An applicant for a commercial pilot licence shall not be less than 18 years of age.
- **34.** (1) An applicant for a commercial pilot licence shall have demonstrated a level of knowledge, appropriate to the privileges granted to the holder of a commercial licence and appropriate to the category of aircraft intended to be included in the licence, in
 - (a) air law -
 - (i) rules and regulations relevant to the holder of a commercial pilot licence,
 - (ii) rules of the air, and
 - (iii) air traffic service practices and procedures;
 - (b) aircraft general knowledge for aeroplanes, airship, helicopters and powered-lift, including —
 - (i) principles of operation and functioning of powerplants, systems and instruments,
 - (ii) operating limitations of the relevant category of aircraft and powerplants,
 - (iii) relevant operational information from the flight manual or other documents.
 - (iv) use and serviceability checks of equipment and systems of the appropriate aircraft,
 - (v) maintenance procedures for airframes, systems and powerplants of the appropriate aircraft,
 - (vi) in the case of a helicopter or powered-lift, power train transmission,
 - (vii) in the case of an airship, physical properties and practical application of gases;
 - (c) flight performance, planning and loading, including —

- (i) the effects of loading and mass distribution on aircraft handling, flight characteristics and performance, including mass and balance calculations;
- (ii) the use and practical application of take-off, landing and other performance data,
- (iii) in the case of an airship, helicopter or powered-lift, the effects of external loading on handling;
- (d) human performance including principles of threat and error management;
- (e) meteorology, including
 - (i) the interpretation and application of aeronautical meteorological reports, charts and forecasts,
 - (ii) the use of, and procedures for obtaining meteorological information pre-flight and in-flight,
 - (iii) altimetry;
 - (iv) aeronautical meteorology including climatology of relevant areas in relation to elements that have effect on aviation,
 - (v) the movement of pressure systems, the structure of fronts and the origin and characteristics of significant weather phenomena which affect take-off, en-route and landing conditions,
 - (vi) the causes, recognition and effects of icing, including frontal zone penetration procedures and harzadous weather avoidance;
- (f) navigation, including
 - (i) air navigation including the use of aeronautical charts, instruments and navigation aids,
 - (ii) an understanding of the principles and characteristics of appropriate navigation systems,
 - (iii) the operation of airborne equipment,
 - (iv) in the case of airships
 - (aa) the use, limitation and serviceability of avionics and instruments necessary for control and navigation,
 - (bb) the use, accuracy and reliability of navigation systems used in departure, en-route, approach and landing phases of flight and identification of radio navigation, and
 - (cc) the principles and characteristics of self-contained and external referenced navigation system and operation of airborne equipment;
- (g) operational procedure, including
 - (i) the application of threat and error management to operational performance,
 - (ii) the use of aeronautical documentation including NOTAM, aeronautical codes and abbreviations,
 - (iii) altimeter setting procedures,
 - (iv) the appropriate precautionary and emergency procedures,
 - (v) the operational procedures for carriage of freight, potential hazards associated with dangerous goods,
 - (vi) the requirements and practices for safety briefing to passengers, including precautions to be observed when embarking and disembarking from the aircraft, and
 - (vii) in the case of helicopter and where applicable powered-lift, settling with power, ground resonance, retreating blade stall, dynamic rollover and other operating hazards including safety procedures associated with flight in VMC;
- (h) principles of flight; and
- radiotelephony communication procedures and phraseology applied to visual flight rules operations and action to be taken in the case of communication failure.

Skills requirements

- **35.** An applicant for a commercial pilot licence shall demonstrate the ability to -
 - (a) perform as pilot-in-command of an aircraft within the appropriate category of aircraft, the procedures and manoeuvres, as may be specified by the Authority, with a degree of competency appropriate to the privileges granted to the holder of a commercial pilot licence;
 - (b) recognise and manage threats and errors;
 - (c) operate the aircraft within its limitations;
 - (d) complete all manoeuvres with smoothness and accuracy;
 - (e) apply aeronautical knowledge; and
 - (f) maintain control of the aircraft at all times and ensure the successful outcome of a procedure or manoeuvre.

Medical fitness

36. An applicant for a commercial pilot licence shall hold a class 1 medical certificate.

Privileges and conditions of commercial pilot licence

- **37.** The holder of a commercial pilot licence may —
- (a) exercise all the privileges of the holder of a private pilot licence in an aircraft, within the appropriate aircraft category;
- (b) act as a pilot-in-command of an aircraft, within the appropriate aircraft category and certificated for single-pilot operation, engaged in commercial air transportation;
- (c) act as a co-pilot of an aircraft, within the appropriate aircraft category, required to be operated with a co-pilot; and
- (d) in the case of an airship category, pilot an airship under instrument flight rules.
- (2) Where the privileges are exercised at night, the holder of the licence shall have received dual instruction in aircraft, within the appropriate category of aircraft in night flying, including take-off, landing and navigation.

B – Specific requirements for aeroplane category

- **38.** (1) An applicant for a commercial pilot licence with an aeroplane category rating shall have completed, as a pilot of an aeroplane, not less than 200 hours of flight time.
- (2) Where the Authority determines that experience as a pilot under instruction, in a flight simulation training device, is acceptable as part of the total flight time of 200 hours under subregulation (1), credit for such experience shall be limited to a maximum of 10 hours.
 - (3) The applicant shall have completed in an aeroplane, not less than —
 - (a) 100 hours as a pilot-in-command or, in the case of a course of approved training, 70 hours as a pilot-in-command;
 - (b) 20 hours of cross-country flight time as a pilot-in-command including a cross-country flight totalling not less than 540 kilometres or 300 nautical miles, in the course of which full-stop landings at two different aerodromes shall be made:
 - (c) 10 hours of instrument instruction time, of which not more than five hours may be instrument ground time; and
 - (d) five hours of night flight time including five take-offs and five landings as a pilot-in-command, if the privileges of the licence are to be exercised at night.

- (4) Where an applicant has flight time as a pilot of aircraft in other categories, the Authority shall determine whether such experience is acceptable and credit for such experience shall be limited to a maximum of
 - (a) 30 hours as a pilot-in-command on helicopters, if the applicant holds a private pilot licence with a helicopter category rating;
 - (b) 100 hours as a pilot-in-command on helicopters, if the applicant holds a commercial pilot licence with a helicopter category rating; and
 - (c) 10 hours as a pilot-in-command in a category other than a helicopter category.
- **39.** (1) An applicant for a commercial pilot licence with an aeroplane category rating shall have received dual instruction in an aeroplane, appropriate to the class or type rating sought, from an authorised flight instructor.
- (2) A flight instructor shall ensure that the applicant has operational experience, to the level of performance required for a commercial pilot, in
 - (a) recognising and managing errors and threats;
 - (b) pre-flight operations, including mass and balance determination, aeroplane inspection and servicing;
 - (c) aerodrome and traffic pattern operations, collision avoidance precautions and procedures;
 - (d) controlling an aeroplane by external visual reference;
 - (e) recognising flight at critically slow airspeed and recovery from incipient and full stalls:
 - (f) flight with asymmetrical power for multi-engine class or type rating;
 - (g) recognising flight at critically high airspeed and recovery from spiral dives;
 - (h) maximum performance in short field and obstacle clearance take-offs and landings;
 - (i) normal and cross-wind take-offs and landings;
 - (j) basic flight manoeuvres and recovery from unusual attitudes by reference solely to basic flight instruments;
 - (k) cross-country flying using visual reference, dead reckoning and radio navigation aids or diversion procedures;
 - (l) abnormal and emergency procedures including simulated aeroplane equipment malfunctions;
 - (m) operations to, from and transiting controlled aerodromes, compliance with air traffic service procedures; and
 - (n) communication procedures and phraseology.

C – Specific requirements for powered-lift category

- **40.** (1) An applicant for a commercial pilot licence with a powered-lift category rating shall have completed, as a pilot of a powered-lift, not less than 200 hours of flight time in a powered-lift, in an Approved Training Organisation.
 - (2) The applicant shall have completed, in a powered-lift, not less than —
 - (a) 50 hours as a pilot-in-command;
 - (b) 10 hours of cross-country flying as a pilot-in-command, including cross-country flight totalling not less than 540 kilometres or 300 nautical miles, in the course of which full-stop landings at two different aerodromes shall be made;
 - (c) 10 hours of instrument instruction, of which not more than five hours may be instrument ground time; and
 - (d) if the privileges are to be exercised at night, five hours of night flight time including five take-offs and landings as a pilot-in-command.
- (3) Where the applicant has flight time as a pilot of aircraft in other categories, the Authority shall determine whether such experience is acceptable and the extent to which flight time requirements under subregulation (1) may be reduced.

Flight instruction

Flight instruction

- **41.** (1) An applicant for a commercial pilot licence with a powered-lift category shall have received dual instruction in a powered-lift from an authorised flight instructor, in an Approved Training Organisation.
- (2) A flight instructor shall ensure that the applicant under subregulation (1) has operational experience, to the level of performance required for the commercial pilot, in
 - (a) recognising and managing errors and threats;
 - (b) pre-flight operations including mass and balance determination, powered-lift inspection and servicing;
 - (c) aerodrome and traffic pattern operations, including collision avoidance precautions and procedures;
 - (d) controlling a powered-lift by external visual reference;
 - (e) recovery at incipient stage from settling with power, recovery techniques from low-rotor rpm within the normal range engine rpm;
 - (f) ground manoeuvring and run-ups, hovering, take-offs and landings in normal, out of wind and sloping ground including steep approaches;
 - (g) take-off and landing with minimum necessary power, maximum performance take-off and landing techniques in restricted site operations and quick stops;
 - (h) hovering out of ground effect or operations with external load, if applicable, on flight at altitude;
 - basic flight manoeuvres and recovery from unusual attitudes by reference solely to basic flight instruments;
 - (j) cross-country flying using visual reference, dead reckoning and where available, radio navigation aids in a flight of at least one hour;
 - (k) emergency operations including simulated powered-lift equipment malfunctions, power of reconversion to autorotation and autorotative approach, and where applicable, transmission and interconnect driveshaft failure:
 - (l) compliance with air traffic service procedures in operations to, from and when transiting controlled aerodromes; and
 - (m) communication procedures and phraseology.

D – Specific requirements for airship category

- **42.** (1) An applicant for commercial pilot licence with an airship category rating shall have received not less than 200 hours of flight time as a pilot in an airship.
- (2) The applicant shall have completed not less than
 - (a) 50 hours as a pilot of an airship;
 - (b) 30 hours in an airship as a pilot-in-command or pilot-in-command under supervision, which shall include not less than —
 - (i) 10 hours of cross-country flight time, and
 - (ii) 10 hours of night flight;
 - (c) 40 hours of instrument time, of which 20 hours shall be in flight and 10 hours in flight in an airship; and
 - (d) 20 hours of flight training in airships in the areas of operation specified by the Authority.

43. (1) An applicant for a commercial pilot with an airship category rating shall have received dual instruction, in an airship, from an authorised flight instructor.

Flight instruction

- (2) A flight instructor shall ensure that the applicant under subregulation (1) has operational experience, to the level of performance required for the commercial pilot, in —
 - (a) recognising and managing errors and threats;
 - (b) pre-flight operations including mass and balance determination, airship inspection and servicing;
 - (c) aerodrome and traffic pattern operations including collision avoidance precautions and procedures;
 - (d) techniques and procedures for take-off including appropriate limitations, emergency procedures and signals used;
 - (e) controlling an airship by external visual reference;
 - (f) recognising leaks;
 - (g) normal take-off and landing;
 - (h) maximum performance including short field and obstacle clearance take-off and short field landing;
 - (i) flight under instrument flight rules;
 - (i) cross-country flying using visual reference, dead reckoning and where applicable, radio navigation aids;
 - (k) emergency operations including simulated airship equipment malfunctions;
 - (1) compliance with air traffic service procedures in operations to, from and transiting controlled aerodromes; and
 - (m) communication procedures and phraseology.

PART VII — Multi-crew pilot licence for aeroplane category

A – General requirements

44. An applicant for multi-crew pilot licence shall not be less than 18 years

requirements Knowledge requirements

45. An applicant for a multi-crew pilot licence shall meet the requirements specified for an airline transport pilot licence, appropriate to the aeroplane category rating.

46. (1) An applicant for a multi-crew licence shall have demonstrated, as a pilot flying and a pilot not flying, to the level of performance required for a co-pilot of turbine-powered aeroplane certificated for operation with a minimum crew

of at least two pilots, the skills —

- (a) required for fulfilling all competency units, as set out in Part B of Schedule 2 to these Regulations;
- (b) to recognise and manage threats and errors;
- (c) to smoothly and accurately, manually control the aeroplane within its limitations at all times such that the successful outcome of a procedure or manoeuvre is assured;
- (d) to operate the aeroplane in the mode of automation, appropriate to the phase of flight and to maintain awareness of the active mode of automation;
- (e) to perform, in an accurate manner, normal, abnormal and emergency procedures in all phases of flight; and
- (f) to communicate effectively with other flight crew members and demonstrate the ability to effectively perform procedures for crew incapacitation, crew coordination, including allocation of pilot tasks, crew cooperation, adherence to standard operating procedures and the use of checklist.
- (2) The Authority shall continuously assess the applicant's progress in acquiring the skills specified in subregulation (1).

requirements

Medical fitness

47. An applicant for a multi-crew pilot licence shall hold a class 1 medical certificate.

Privileges and conditions of multi-crew licence

- **48.** (1) A holder of a multi-crew pilot licence may —
- (a) exercise all the privileges of the holder of a private pilot licence in an aeroplane category, provided the specific requirements for the aeroplane category under Part V are met;
- (b) exercise the privileges of an instrument rating in a multi-crew operation; and
- (c) act as a co-pilot of an aeroplane required to be operated with a co-pilot.
- (2) Before exercising the privileges of an instrument rating in a single-pilot operation in an aeroplane, the licence holder shall have
 - (a) demonstrated an ability to act as pilot-in-command in a single-pilot operation, exercised by reference solely to instruments; and
 - (b) met the skill requirements for an instrument rating, appropriate to the aeroplane category.
- (3) Before exercising the privileges of a commercial pilot licence in a singlepilot operation in an aeroplane, the holder of a multi-crew pilot licence shall have—
 - (a) completed, in an aeroplane, 70 hours of flight time
 - (i) as a pilot-in-command, or
 - (ii) made up of not less than 10 hours as a pilot-in-command and the necessary additional flight time as a pilot-in-command under supervision;
 - (b) completed 20 hours of cross-country flight time
 - (i) as a pilot-in-command, or
 - (ii) made up of not less than 10 hours as a pilot-in-command and 10 hours as a pilot-in-command under supervision, including a cross-country flight totalling not less than 540 kilometres or 300 nautical miles, in the course of which full-stop landings at two different aerodromes shall be made; and
 - (c) met the knowledge, skill, experience and flight instruction requirements for a commercial pilot licence, appropriate to the aeroplane category.
- for a commercial pilot licence, appropriate to the aeroplane category. **49.** (1) An applicant for a multi-crew pilot licence shall have completed, in an Approved Training Organisation, not less than 240 hours as a pilot flying
 - (2) Flight experience in actual flight shall include —
 - (a) the experience required for an aeroplane category rating;
 - (b) upset recovery training;
 - (c) night flying; and
 - (d) flight by reference solely to instruments.

and pilot not flying an actual or simulated flight.

(3) In addition to the requirements under subregulation (2), the applicant shall have gained, in a turbine-powered aeroplane certificated for operation with a minimum crew of two pilots, or in a flight simulation training device approved for that purpose by the Authority, the experience necessary to achieve the advanced level of competency, as set out in Part A of Schedule 2 to these Regulations.

Flight instruction

- **50.** (1) An applicant for a multi-crew pilot licence shall have completed a course of approved training covering the experience requirements under regulation 49.
- (2) The applicant shall have received dual flight instruction in all the competency units set out in Part B of Schedule 2 to these Regulations, to the level required for the issue of the multi-crew pilot licence, including the competency units required to pilot under instrument flight rules.

PART VIII — Airline transport pilot licence

A – General requirements

51. An applicant for an airline transport pilot licence shall not be less than 21 years of age.

Age requirements

Knowledge requirements

- **52.** (1) An applicant for an airline transport pilot licence shall have demonstrated a level of knowledge appropriate to the privileges granted to the holder of an airline transport pilot licence and appropriate to the category of aircraft intended to be included in the licence, in the following subjects
 - (a) air law, including
 - (i) rules and regulations relevant to the holder of an airline transport pilot licence,
 - (ii) rules of the air, and
 - (iii) appropriate air traffic service practices and procedures;
 - (b) aircraft general knowledge for aeroplanes, helicopters and powered-lifts, including —
 - (i) the general characteristics and limitations of electrical, hydraulic, pressurisation and other aircraft systems, including flight control systems, autopilot and stability augmentation,
 - (ii) the principles of operation, handling procedure, operating limitations of aircraft powerplants and effects of atmospheric conditions on engine performance relevant operational information from the flight manual or other appropriate document,
 - (iii) the operating procedures and limitations of the relevant category of aircraft, effects of atmospheric conditions on aircraft performance in accordance with the relevant operational information from the flight manual,
 - (iv) the use and serviceability checks of equipment and systems of appropriate aircraft,
 - (v) flight instruments, including compasses, turning and acceleration errors, gyroscopic instruments operational limits and precession effects,
 - (vi) practice and procedure in the event of malfunctions of various flight instruments and electronic display units,
 - (vii) the maintenance procedures for airframes, systems and power plants of appropriate aircraft, and
 - (viii) for helicopters and powered-lift, and where applicable, power trains transmission;
 - (c) flight planning performance, planning and loading, including
 - the effects of loading and mass distribution on aircraft handling, flight characteristics and performance, mass and balance calculations,
 - (ii) the use of practical application of take-off, landing and other performance data including procedures for cruise control,
 - (iii) pre-flight and en-route operational flight planning, preparation and filing of air traffic services flight plans, appropriate air traffic service procedure, altimeter setting procedures, and
 - (iv) in the case of helicopters and powered lifts, the effects of external loading on handling;
 - (d) human performance including principles of threat and error management;

- (e) meteorology, including
 - the interpretation and application of aeronautical meteorological reports, charts and forecasts,
 - (ii) codes and abbreviations,
 - (iii) the use of, and procedures for, obtaining meteorological information, pre-flight and in-flight,
 - (iv) altimetry,
 - (v) aeronautical meteorology, including climatology of relevant areas in respect of the elements having an effect upon aviation,
 - (vi) the movement of pressure systems, the structure of fronts and the origin and characteristics of significant weather phenomena which affect take-off, en-route and landing conditions,
 - (vii) the causes, recognition and effects of icing, including frontal zone penetration procedures and hazardous weather avoidance,
 - (viii) in the case of aeroplanes and powered-lifts, practical high altitude meteorology, including interpretation and use of weather reports, charts and forecasts, and
 - (ix) jetstreams;
- (f) navigation, including
 - (i) air navigation including the use of aeronautical charts, instruments and navigation aids and area navigation systems,
 - (ii) the specific navigation requirements for long-range flights,
 - (iii) the use, limitation and serviceability of avionics and instruments necessary for the control and navigation of aircraft,
 - (iv) the use, accuracy and reliability of navigation systems used in departure, en-route, approach and landing phases of flight and identification of radio navigation aids, and
 - (v) principles and characteristics of self-contained and external referenced navigation system and operation of airborne equipment;
- (g) operational procedure, including
 - (i) application of threat and error management to operational performance,
 - (ii) interpretation and use of aeronautical documentation including NOTAM, aeronautical codes and abbreviations,
 - (iii) precautionary and emergency procedures, safety practices,
 - (iv) operational procedures for carriage of freight and dangerous goods,
 - (v) requirements and practices for safety briefing to passengers, including precautions to be observed when embarking and disembarking from aircraft, and
 - (vi) in the case of helicopter and where applicable, powered-lift, settling with power, ground resonance, retreating blade stall, dynamic rollover and other operating hazards including safety procedures associated with flight in VMC;
- (h) principles of flight; and
- radiotelephony communication procedures and phraseology and action to be taken in the case of communication failure.
- (2) An applicant for airline transport pilot licence appropriate to the aeroplane or powered-lift category shall, in addition to the knowledge requirements under subregulation (1), have met the knowledge requirements for an instrument rating.

- **53.** (1) An applicant for an airline transport pilot licence shall demonstrate the ability to perform, as pilot-in-command of an aircraft within the appropriate category required to be operated with a co-pilot, the following procedures and manoeuvres —
- Skills requirements
- (a) pre-flight procedures including the preparation of the operational flight plan and filing of the air traffic service flight plan;
- (b) normal flight procedures for and manoeuvres during all phases of flight;
- (c) abnormal and emergency procedures and manoeuvres related to failures and malfunctions of equipment, such as powerplant, systems and airframe;
- (d) procedures for crew incapacitation and crew coordination, including allocation of pilot tasks, crew cooperation and the use of checklists; and
- (e) in the case of an aeroplane and powered-lift, procedures and manoeuvres, including simulated engine failure, for a flight instruction required for an instrument rating.
- (2) An applicant shall, in the case of an aeroplane, have demonstrated the ability to perform the procedures and manoeuvres, required for an airline transport pilot licence, as a pilot-in-command of a multi-engine aeroplane.
 - (3) The applicant shall have demonstrated the ability to —
 - (a) perform the procedures and manoeuvres, required for an airline transport pilot licence, with a degree of competency appropriate to the privileges granted to the holder of an airline transport pilot licence;
 - (b) recognise and manage threats and errors;
 - (c) smoothly and accurately, manually control the aircraft within its limitations at all times, such that the successful outcome of a procedure or manoeuvre is assured;
 - (d) operate the aircraft in the mode of automation appropriate to the phase of flight and to maintain awareness of the active mode of automation;
 - (e) perform, in an accurate manner, normal, abnormal and emergency procedures in all phases of flight;
 - (f) exercise good judgement and airmanship including structured decision making and maintenance of situational awareness;
 - (g) communicate effectively with other flight crew members; and
 - (h) effectively perform procedures for crew incapacitation, crew coordination standard operating procedures and use of checklist.
- **54.** An applicant for an airline transport pilot licence shall hold a current class 1 medical certificate.
 - **55.** A holder of an airline transport pilot licence may —
 - (a) exercise all the privileges of the holder of a private pilot licence and commercial pilot licence, in an aircraft within the appropriate aircraft category;
 - (b) in the case of an aeroplane or powered-lift category, exercise the privileges of an instrument rating; and
 - (c) act as a pilot-in-command, in commercial air transportation, of an aircraft within the appropriate category and certificated for operation with more than one pilot.
- (2) Where the holder of an airline transport pilot licence in the aeroplane category has previously held only a multi-crew pilot licence, the privileges of the licence shall be limited to the appropriate multi-crew operations, provided that any limitation shall be endorsed on the licence.

Medical fitness

Privileges and conditions of airline transport pilot licence

B – Specific requirements for aeroplane category rating

Experience

- **56.** (1) An applicant for an airline transport pilot licence shall have completed not less than 1500 hours of flight time in an aeroplane.
- (2) The Authority shall determine whether experience as a pilot under instruction, in a flight simulation training device is acceptable as part of the total flight of 1500 hours:

Provided that credit for such experience shall be limited to a maximum of 100 hours, of which not more than 25 hours shall have been acquired in a flight procedure trainer or a basic instrument flight trainer.

- (3) The applicant shall have completed, in an aeroplane, not less than —
- (a) 500 hours as a pilot-in-command under supervision, or
- (b) 250 hours
 - (i) as a pilot-in-command, or
 - (ii) made-up of not less than 70 hours as a pilot-in-command and the necessary additional flight time as pilot-in-command under supervision.
- (4) In addition to the requirements under subregulation (4), the applicant shall have completed, in an aeroplane, not less than
 - (a) 200 hours of cross-country flight time, of which not less than 100 hours shall be as a pilot-in-command or as a pilot-in-command under supervision;
 - (b) 75 hours of instrument time, of which not more than 30 hours may be instrument ground time; and
 - (c) 100 hours of night flight as a pilot-in-command or as a co-pilot.
- (3) Where an applicant holds a commercial pilot licence with a helicopter rating, the Authority shall determine whether such experience is acceptable and credit for such experience shall be limited to a maximum of 50 per cent of the total flight time as a pilot-in-command of a helicopter.

Flight instruction

- **57.** An applicant for an airline transport pilot licence shall have received dual instruction required for the issue of -
 - (a) a commercial pilot licence with an aeroplane category rating;
 - (b) an instrument rating; and
 - (c) where applicable, a multi-crew pilot licence appropriate to the aeroplane category.

C – Specific requirements for helicopter category rating

Experience

- **58.** (1) An applicant for an airline transport pilot licence with a helicopter category rating shall have completed not less than 1000 hours of flight time, as a pilot of a helicopter.
- (2) The Authority shall determine whether experience as a pilot under instruction, in a flight simulation training device, is acceptable as part of the total flight time of 1000 hours required under subregulation (1):

Provided that credit for such experience shall be limited to a maximum of 100 hours.

- (3) The applicant shall have completed in helicopters not less than —
- (a) 250 hours
 - (i) as a pilot-in-command, or
 - (ii) made up of not less than 100 hours as a pilot-in-command and the necessary additional flight time as a pilot-in-command under supervision:
- (b) 200 hours of cross-country flight time, of which not less than 100 hours shall be as a pilot-in-command or as a pilot-in-command under supervision;
- (c) 30 hours of instrument time, of which not more than 10 hours may be instrument ground time; and
- (d) 50 hours of night flight as a pilot-in-command or as a co-pilot.
- (4) Where the applicant has flight time as a pilot of an aircraft in other categories, the Authority shall determine whether such experience is acceptable and may reduce flight time requirements under subregulation (1) by 50 per cent.
- **59.** An applicant for airline transport pilot licence with a helicopter rating shall have received flight instruction required for the issue of a commercial pilot licence.

Flight instruction

D – Specific requirements for powered-lift category rating

60. (1) An applicant for an airline transport pilot licence with a powered-lift category rating shall have completed not less than 1500 hours of flight time as a pilot of a powered-lift.

Experience

- (2) The Authority shall determine whether experience as a pilot under instruction, in a flight simulation training device, is acceptable as part of the total flight time of 1500 hours.
 - (3) The applicant shall have completed in a powered-lift not less than —
 - (a) 250 hours
 - (i) as a pilot-in-command, or
 - (ii) made up of not less than 100 hours as a pilot-in-command and the necessary additional flight time as pilot-in-command under supervision;
 - (b) 100 hours of cross-country flight time, of which not less than 50 hours shall be as a pilot-in-command or as a pilot-in-command under supervision;
 - (c) 75 hours of instrument time, of which not more than 30 hours may be instrument ground time; and
 - (d) 25 hours of night flight as a pilot-in-command or as a co-pilot.

PART IX – Instrument rating (aeroplane, airship, helicopter and powered-lift categories)

61. An applicant for an instrument rating shall have demonstrated a level of knowledge appropriate to the privileges granted to the holder of an instrument rating in —

Knowledge requirements

- (a) air law, including
 - (i) rules and regulations relevant to flight under instrument flight rules,
 - (ii) rules of the air, and
 - (iii) related air traffic services practices and procedures;

- (b) aircraft general knowledge for the aircraft category being sought, including —
 - (i) use, limitation and serviceability of avionics, electronic device and instruments necessary for the control and navigation of an aircraft under instrument flight rules and in instrument meteorological conditions, use and limitations of autopilot, and
 - (ii) compasses, turning and acceleration errors, gyroscopic instruments, operational limits and precession effects, practices and procedures in the event of malfunctions of various flight instruments;
- (c) flight performance and planning for the aircraft category Sought, including —
 - (i) pre-flight preparations and checks appropriate to flight under instrument flight rules, and
 - (ii) operational flight planning, preparation and filing of air traffic service flight plans under instrument flight rules, altimeter setting procedures;
- (d) human performance for the aircraft category sought, including human performance relevant to instrument flight in aircraft including principles of threat and error management;
- (e) meteorology for the aircraft sought, including
 - application of aeronautical meteorology, interpretation and use of reports, charts and forecasts, codes and abbreviations, use of, and procedures for obtaining meteorological information, altimetry,
 - (ii) effects of icing, frontal zones penetration procedures and hazardous weather avoidance,
 - (iii) in the case of helicopter or powered-lift, effects of rotor icing;
 - (iv) practical air navigation using radio navigation aids, and
 - (v) use, accuracy and reliability of navigation systems used in departure, en-route, approach and landing phases of flight, identification of radio navigation aids;
- (f) operational procedures for the aircraft category sought, including
 - (i) application of threat and error management to operational performance,
 - (ii) interpretation and use of aeronautical documentation such as AIP, NOTAM, aeronautical codes and abbreviations, and instrument procedure charts for departure, en-route, descent and approach, and
 - (iii) precautionary and emergency procedures, safety practices associated with flight under instrument flight rules, obstacle clearance criteria; and
- (g) radiotelephony including communication procedures and phraseology as applied to aircraft under instrument flight rules, action to be taken in case of communication failure.

Skills requirements

- **62.** (1) An applicant for an instrument rating shall have demonstrated, in an aircraft of the category for which the instrument rating is sought, the ability to
 - (a) perform the procedures and manoeuvres, specified by the Authority, with a degree of competency appropriate to the privilege granted to the holder of an instrument rating;
 - (b) recognise and manage threats and errors;
 - (c) operate the aircraft for the category sought within its limitations;

- (d) complete all manoeuvres with smoothness and accuracy;
- (e) exercise good judgement and airmanship;
- (f) apply aeronautical knowledge; and
- (g) maintain control of the aircraft at all times in a manner such that the successful outcome of a procedure or manoeuvre is assured.
- (2) Where the privileges of the instrument rating are exercised at night, the applicant shall have demonstrated the ability to operate multi-engine aircraft, within the appropriate category, by reference solely to instruments with one engine inoperative or simulated inoperative.
- **63.** An applicant for an instrument rating, who holds a private pilot licence, shall have established his or her hearing acuity on the basis of compliance with the hearing requirements for the issue of a class 1 medical certificate.
- **64.** A holder of an instrument rating with a specific aircraft category may pilot a category of aircraft under instrument flight rules.
- **65.** Before exercising the privileges on a multi-engine aircraft, a holder of an instrument rating shall have met the skill requirements provided in regulation 62.
- **66.** (1) An applicant for an instrument rating shall hold a pilot licence for the aircraft category sought.
 - (2) The applicant shall have completed not less than —
 - (a) 50 hours of cross-country flight time as a pilot-in-command of an aircraft category acceptable to the Authority, of which not less than 10 hours shall be in the aircraft category sought; and
 - (b) 40 hours of instrument in an aircraft, of which not more than 20 hours or 30 hours, where a flight simulator is used, may be instrument ground time, under the supervision of an authorised instructor, in an Approved Training Organisation.
- **67.** (1) An applicant for an instrument rating shall have gained not less than 10 hours of instrument flight time required in regulation 66 (2) (b) while receiving dual instrument flight instruction in the aircraft category sought, from an authorised flight instructor, in an Approved Training Organisation.
- (2) An instructor shall ensure that the applicant has operational experience, to the level of performance required for the holder of an instrument rating, in
 - (a) pre-flight procedures, including the use of the flight manual or equivalent document, and appropriate air traffic service documents in the preparation of an instrument flight rules flight plan;
 - (b) pre-flight inspection, including the use of checklists, taxiing and pretake-off checks;
 - (c) procedures and manoeuvres for instrument flight rules operation under normal, abnormal and emergency conditions including
 - (i) transition to instrument on take-off,
 - (ii) standard instrument departures and arrivals,
 - (iii) en-route instrument flight rules procedures,
 - (iv) holding procedures,
 - (v) instrument approaches to specified minima,
 - (vi) missed approach procedures, and
 - (vii) landing from instrument approaches; and
 - (d) in-flight manoeuvres and particular flight characteristics.

Medical fitness

Privileges of instrument rating

Conditions for exercising privileges of instrument rating

Experience

Flight instruction

- (3) If the privileges of the instrument rating are to be exercised on multi-engine aircraft, the applicant shall have received dual instrument flight instruction in a multi-engine aircraft, within the appropriate category, from an authorised flight instructor in an Approved Training Organisation.
- (4) The instructor shall ensure that the applicant has operational experience in the operation of the aircraft within the appropriate category by reference solely to instruments with one engine inoperative or simulated inoperative.

PART X — Flight instructor rating (aeroplane, airship, helicopter and powered-lift categories)

Knowledge requirements

- **68.** (1) An applicant for a flight instructor rating shall have met the knowledge requirements for the issue of a commercial pilot licence, appropriate to the aircraft category to be included in the licence.
- (2) In addition to the requirements under subregulation (1), the applicant shall have demonstrated a level of knowledge, appropriate to the privileges granted to the holder of a flight instructor rating, in the following subjects
 - (a) techniques of applied instruction;
 - (b) assessment of student performance in those subjects in which ground instruction is given;
 - (c) the learning process;
 - (d) elements of effective teaching;
 - (e) student evaluation and testing, training philosophies;
 - (f) training programme development;
 - (g) lesson planning;
 - (h) classroom instructional techniques;
 - (i) use of training aids, including flight simulation training devices as appropriate;
 - (*j*) analysis and correction of student errors;
 - (k) human performance relevant to flight instruction including principles of threat and error management; and
 - (l) hazards involved in simulating system failures and malfunctions in that aircraft.

Skills requirements

69. An applicant for a flight instructor rating shall have demonstrated, in the category and class of aircraft for which flight instructor privileges are sought, the ability to instruct in areas the flight instruction is to be given, including pre-flight, post-flight and ground instruction as appropriate.

Experience

70. An applicant for a flight instructor rating shall have met the experience requirements for the issue of a commercial pilot licence specified for an aeroplane, helicopter, powered-lift and airship category, as appropriate.

Fight instruction

- **71.** An applicant for a flight instructor rating shall, under the supervision of a flight instructor
 - (a) have received instruction in flight instructional techniques including demonstration, student practices, recognition and correction of common student errors; and
 - (b) have practised instructional techniques in flight manoeuvres and procedures in flight instruction to be given.

- **72.** (1) A holder of a flight instructor rating may —
- (a) supervise solo flights by a student pilot; or
- (b) carry out flight instruction for the issue of a private pilot licence.
- (2) A flight instructor shall exercise the privileges provided for under subregulation (1), if he or she holds a pilot licence and rating for the instruction given
 - (a) in the appropriate aircraft category; and
 - (b) allowing him or her to act as a pilot-in-command of the aircraft on which the instruction is given.
- (3) An applicant, in order to carry out instruction for a multi-crew pilot licence, shall have met all the instructor rating requirements.
- (4) The Authority shall enter the privileges of a flight instructor rating on the pilot licence.

PART XI — Glider pilot licence

- **73.** An applicant for a glider pilot licence shall be at least 16 years of age.
- **74.** An applicant for a glider pilot licence shall have demonstrated a level of knowledge, appropriate to the privileges granted to the holder of a glider pilot, in the following subjects
 - (a) air law, including
 - (i) rules and regulations relevant to the holder of a glider pilot licence,
 - (ii) rules of the air, and
 - (iii) appropriate air traffic service practices and procedures;
 - (b) aircraft general knowledge, including
 - (i) principles of operation of glider systems and instruments, and
 - (ii) operating limitations of gliders, relevant operational information from the flight manual or other appropriate document;
 - (c) flight performance, planning and loading, including
 - the effects of loading and mass distribution on flight characteristics, mass and balance considerations,
 - (ii) the use and practical application of launching, landing and other performance data, and
 - (iii) pre-flight and en-routing flight planning appropriate to operations under instrument flight rules, appropriate air traffic service procedures, altimeter setting procedures, operations in areas of high-density traffic;
 - (d) human performance relevant to the glider pilot including principles of threat and error management;
 - (e) meteorology including the application of elementary aeronautical meteorology, use of, and procedures for obtaining, meteorological information, altimetry;
 - (f) practical aspects of air navigation and dead-reckoning techniques, use of aeronautical charts;
 - (g) operational procedures including
 - (i) the use of aeronautical documentation such as AIP, NOTAM, aeronautical codes and abbreviations,
 - (ii) the different launch methods and associated procedures, and
 - (iii) the appropriate precautionary and emergency procedures including action to be taken to avoid hazardous weather, wake turbulence and other operating hazards; and
 - (h) the principles of flight relating to gliders.

Privileges and conditions of instructor rating

Age requirements

Knowledge requirements

Experience

- **75.** (1) An applicant for a glider pilot licence shall have completed not less than six hours of flight time as a pilot of gliders, including two hours of solo flight time, during which not less than 20 launches and landings shall have been performed.
- (2) Where the applicant has flight time as a pilot of an aeroplane, the Authority shall determine whether such experience is acceptable and the extent to which the flight time requirements under subregulation (1) may be reduced.
- (3) The applicant shall have gained, under the appropriate supervision, operational experience in gliders in
 - (a) pre-flight operations, including glider assembly and inspection;
 - (b) techniques and procedures for the launching method used, including appropriate airspeed limitations, emergency procedures and signals used;
 - (c) traffic pattern operations, collision avoidance precautions and procedures;
 - (d) control of the glider by external visual reference;
 - (e) flight throughout the flight envelope;
 - (f) recognition of, and recovery from, incipient and full stalls and spiral dives;
 - (g) normal and crosswind launches, approaches and landings;
 - (h) cross-country flying using visual reference and dead-reckoning; and
 - (i) emergency procedures.

Skills requirements

- **76.** An applicant for a glider pilot licence shall have demonstrated the ability to
 - (a) perform as pilot-in-command of a glider, the procedures and manoeuvres provided for in regulation 75, with a degree of competency appropriate to the privileges granted to the holder of glider pilot licence;
 - (b) recognise and manage threats and errors;
 - (c) operate the glider within its limitations;
 - (d) complete all manoeuvres with smoothness and accuracy;
 - (e) exercise good judgement and airmanship;
 - (f) apply aeronautical knowledge; and
 - (g) maintain control of the glider at all times in a manner such that the successful outcome of a procedure or manoeuvre is assured.

Medical fitness

77. An applicant for a glider pilot licence shall hold a current class 2 medical certificate.

Privileges and conditions of glider pilot licence **78.** A holder of a glider pilot licence may act as a pilot-in-command of any glider provided the licence holder has operational experience in the launching method used.

PART XII — Free balloon pilot licence

Age requirements

79. An applicant for a free balloon pilot licence shall be at least 16 years of age.

Knowledge requirements

- **80.** An applicant for a free balloon pilot licence shall have demonstrated a level of knowledge appropriate to the privileges granted to the holder of a free balloon pilot licence, in the following subjects
 - (a) air law, including
 - rules and regulations relevant to the holder of a free balloon pilot licence.
 - (ii) rules of air, and
 - (iii) the appropriate air traffic services practices and procedures;

- (b) aircraft general knowledge, including
 - (i) the principles of operation of free balloon systems and instruments,
 - (ii) the operating limitations of free balloons,
 - (iii) the relevant operational information from the flight manual or other appropriate document, and
 - (iv) the physical properties and practical application of gases used in free balloons;
- (c) flight performance, planning and loading, including
 - (i) the effects of loading on flight characteristics and mass calculations,
 - (ii) the use and practical application of launching, landing and other performance data, including the effect of temperature, and
 - (iii) pre-flight and en-route flight planning appropriate to the operations under visual flight rules, appropriate air traffic services procedures, altimeter setting procedures, operations in areas of high density traffic:
- (d) human performance relevant to the free balloon pilot, including the principles of threat and error management;
- (e) meteorology, including
 - (i) the application of elementary aeronautical meteorology,
 - (ii) the use of and procedures for obtaining meteorological information, and
 - (iii) altimetry;
- (f) navigation, including
 - the practical aspects of air navigation and dead-reckoning techniques, and
 - (ii) the use of aeronautical codes and abbreviations;
- (g) operational procedures, including
 - (i) the use of aeronautical documentation such as AIP, NOTAM, aeronautical codes and abbreviations, and
 - (ii) the appropriate precautionary and emergency procedures, including action to be taken to avoid hazardous weather, wake turbulence and other operating hazards; and
- (h) the principles of flight to free balloons.
- **81.** (1) An applicant for a free balloon pilot licence shall have completed not less than 16 hours of flight time as a pilot of a free balloon, including at least eight launches and ascents, of which one shall be solo.
- (2) The applicant shall have gained operational experience in free balloons, under appropriate supervision, in
 - (a) pre-flight operations, including balloon assembly, rigging, inflation, mooring and inspection;
 - (b) techniques and procedures for the launching and ascent, including appropriate limitations, emergency procedures and signals used;
 - (c) collision avoidance precautions;
 - (d) control of the free balloon by external visual reference;
 - (e) recognition of and recovery from rapid descents;
 - (f) cross-country flying using visual reference and dead-reckoning;
 - (g) approaches and landings including ground handling; and
 - (h) emergency approaches.

Experience

- (3) The applicant shall have gained operational experience in a free balloon, in night flying, under appropriate supervision, if the privileges of the licence are to be exercised at night.
- (4) A holder of a free balloon pilot licence shall have completed not less than 35 hours of flight time, including 20 hours as a pilot of a free balloon if the privileges of the licence are to be exercised for remuneration or hire.

Skills requirements

- **82.** An applicant for a free balloon pilot licence shall have demonstrated the ability, as pilot-in-command of a free balloon, to
 - (a) perform the procedures and manoeuvres, specified by the Authority, with a degree of competency appropriate to the privileges granted to the holder of a free balloon pilot licence;
 - (b) recognise and manage threats and errors;
 - (c) operate the free balloon within its limitations;
 - (d) complete all manoeuvres with smoothness and accuracy;
 - (e) exercise good judgement and airmanship;
 - (f) apply aeronautical knowledge; and
 - (g) maintain control of the free balloon at all times in a manner such that the successful outcome of a procedure or manoeuvre is assured.

Medical fitness

Privileges of

free balloon

pilot licence

- **83.** An applicant for a free balloon pilot licence shall hold a current class 2 medical certificate.
- **84.** (1) The privileges of a holder of a free balloon pilot licence shall be to act as a pilot-in-command of free balloon, provided that the licence holder has operational experience in hot air or gas balloons, as appropriate.
- (2) The holder of a licence shall have completed not less than 35 hours of flight time, including 20 hours as a pilot of free balloon, before exercising the privileges at night.

PART XIII — Licences and ratings for personnel other than flight crew member

General requirements

- **85.** (1) An applicant shall, before being issued with a licence or rating for personnel other than a flight crew member, meet such requirements in respect of age, knowledge, experience and where appropriate medical fitness and skill, as are specified for the licence or rating sought.
- (2) An applicant for a licence or rating for personnel other than a flight crew member shall demonstrate, in a manner determined by the Authority, such requirements in respect of knowledge and skill as are specified for the licence or rating sought.

A – Aircraft maintenance engineer licence

Knowledge and age requirements

- **86.** (1) An applicant for an aviation maintenance engineer licence shall be at least 18 years of age.
- (2) An applicant for an aviation maintenance engineer licence shall have demonstrated a level of knowledge relevant to the privileges to be granted and appropriate to the responsibilities of an aircraft maintenance licence holder, in the following subjects —

- (a) air law and airworthiness requirements, including
 - (i) rules and regulations relevant to an aircraft maintenance licence holder, including applicable airworthiness requirements governing certification and continuing airworthiness of an aircraft, and
 - (ii) approved aircraft maintenance organisation and procedures;
- (b) natural science and aircraft general knowledge, applicable to aircraft maintenance, including —
 - (i) basic mathematics and units of measurements, and
 - (ii) fundamental principles and theory of physics and chemistry;
- (c) aircraft engineering, including
 - (i) characteristics and applications of the materials of aircraft construction, including principles of construction, functioning of aircraft structures and fastening techniques,
 - (ii) powerplants and their associated systems,
 - (iii) mechanical, fluid, electrical and electronic power sources,
 - (iv) aircraft instrument and display systems,
 - (v) aircraft control systems, and
 - (vi) airborne navigation and communication systems;
- (d) aircraft maintenance relating to tasks required to ensure the continuing airworthiness of an aircraft, including methods and procedures for the overhaul, repair, inspection, replacement, modification or defect rectification of aircraft structures, components and systems in accordance with the methods prescribed in the relevant maintenance manuals and the applicable standards of airworthiness; and
- (e) human performance relevant to aircraft maintenance.
- **87.** An applicant for an aviation maintenance engineer licence shall have the following experience in the inspection, servicing and maintenance of an aircraft or its components —

Experience

- (a) for the issue of a licence with privileges for the aircraft in its entirety, at least —
 - (i) four years, or
 - (ii) two years, if the applicant has satisfactorily completed an approved training course; and
- (b) for the issue of a licence with restricted privileges
 - (i) two years, or
 - (ii) such a period as the Authority considers necessary to provide an equivalent level of practical experience to an applicant who has satisfactorily completed an approved training course conducted by an Approved Training Organisation.
- **88.** An applicant for aviation maintenance engineer licence shall have demonstrated the ability to perform functions applicable to the privileges to be granted.
- **89.** (1) A holder of an aircraft maintenance licence may certify an aircraft or parts of the aircraft as airworthy after an authorised repair, modification or installation of a powerplant, accessory, instrument or item of equipment, and to sign a maintenance release following inspection, maintenance operation or routine servicing.

Skills requirements

Privileges and conditions of aircraft maintenance engineer licence

- (2) The holder of an aircraft maintenance licence specified in subregulation (1) shall be exercise the privileges
 - (a) only in respect of
 - (i) an aircraft entered on the licence, in its entirety, specifically or under broad categories, or
 - (ii) the airframes, powerplants and aircraft systems or components entered on the licence either specifically or under broad categories, and
 - (iii) aircraft avionics systems or components entered either specifically or under broad categories:

Provided that the licence holder is familiar with all the relevant information relating to the maintenance and airworthiness of the particular aircraft for which the licence holder is signing a maintenance release or such airframe, powerplant, aircraft system or component and aircraft avionic system or component which the licence holder is certifying as being airworthy; and

- (b) on the condition that, within the preceding 24 months, the licence holder has had experience in the inspection, servicing or maintenance of an aircraft or components in accordance with the privileges granted by the licence held, for not less than six months, or has met the provision for the issue of a licence with the appropriate privileges, to the satisfaction of the Authority.
- (3) Where the Authority authorises an approved maintenance organisation to appoint non-licensed personnel to exercise the privileges of an aviation maintenance engineer licence, the person appointed shall meet the requirements specified for the issue of an aviation maintenance engineer licence.

B – Air traffic controller licence

Requirements for issue of licence

Age requirements

Knowledge requirements

- **90.** Before issuing an air traffic controller licence, the Authority shall require an applicant to meet all the requirements for an air traffic controller licence and the requirements of at least one of the ratings set out in this Part.
- **91.** An applicant for an air traffic controller licence shall not be less than 21 years of age.
- **92.** An applicant for an air traffic controller licence shall have demonstrated a level of knowledge appropriate to the holder of an air traffic controller licence, in the following subjects
 - (a) air law in respect of rules and regulations relevant to an air traffic controller;
 - (b) the principles, use and limitations of equipment used in air traffic control;
 - (c) general knowledge, including
 - (i) the principles of flight,
 - (ii) the principles of operation and functioning of aircraft, powerplants and systems, and
 - (iii) aircraft performance relevant to air traffic control operations;
 - (d) human performance including principles of threat and error management;
 - (e) meteorology, including
 - (i) aeronautical meteorology;
 - (ii) the use and appreciation of meteorological documentation and information.
 - (iii) the origin and characteristics of weather phenomena affecting flight operations and safety, and
 - (iv) altimetry;

- (f) navigation, including
 - (i) the principles of air navigation, and
 - (ii) the principles, limitation and accuracy of navigation system and visual aids; and
- (g) operational procedures, including
 - (i) air traffic control communication, radiotelephony and phraseology procedures, and
 - (ii) the use of the relevant aeronautical documentation and safety practices associated with a flight.
- **93.** (1) An applicant for air traffic controller licence shall have completed, in an Approved Training Organisation, not less than three months of satisfactory service, engaged in the actual control of air traffic under the supervision of an appropriately rated air traffic controller.

(2) The requirements specified for an air traffic controller rating may be credited as part of the experience required under subregulation (1).

94. An applicant for an air traffic controller licence shall hold a current class 3 medical certificate.

Medical

Experience

C – Air traffic controller ratings

- **95.** The Authority may, on application, issue the following air traffic controller ratings, to an applicant who meets the requirement in this Part
 - (a) aerodrome control rating;
 - (b) approach control procedural rating;
 - (c) approach control surveillance rating;
 - (d) approach precision radar control rating;
 - (e) area control procedural rating; and
 - (f) area control surveillance rating.
- **96.** An applicant for an air traffic controller rating shall have demonstrated a level of knowledge appropriate to the privileges granted, in the following subjects, in so far as they affect the area of responsibility
 - (a) aerodrome control rating, including
 - (i) aerodrome layout, physical characteristics and visual aids,
 - (ii) airspace structure,
 - (iii) applicable rules, procedures and source of information,
 - (iv) air navigation facilities,
 - (v) air traffic control equipment and its use,
 - (vi) terrain and prominent landmarks,
 - (vii) characteristics of air traffic,
 - (viii) weather phenomena, and
 - (ix) emergency and search rescue plans;
 - (b) approach control procedural and area control procedural ratings, including —
 - (i) airspace structure,
 - (ii) applicable rules, procedures and source of information,
 - (iii) air navigation facilities,
 - (iv) air traffic control equipment and its use,
 - (v) terrain and prominent landmarks,
 - (vi) characteristics of air traffic and traffic flow,
 - (vii) weather phenomena, and
 - (viii) emergency and search and rescue plans; and

Categories of air traffic controller ratings

Knowledge requirements for air traffic controller rating

- (c) in the case of approach control surveillance, approach precision radar control and area control surveillance rating, the applicant shall meet the requirements under paragraph (b), in so far as they affect the area of responsibility, and shall have demonstrated a level of knowledge appropriate to the privileges granted, in the following additional subjects
 - (i) principles, use and limitations of applicable ATS surveillance systems and associated equipment, and
 - (ii) procedures for the provision of ATS surveillance service, including procedures to ensure appropriate terrain clearance.
- **97.** (1) An applicant for an air traffic controller licence shall have —
- (a) satisfactorily completed an approved training course conducted by an Approved Training Organisation; and
- (b) satisfactorily provided, under the supervision of an appropriately rated air traffic controller
 - (i) in the case of an aerodrome control rating, an aerodrome control service, for a period of not less than 90 hours or one month, whichever is greater, at the unit at which the rating is sought,
 - (ii) in the case of an approach control procedural, approach control surveillance, area control procedural or area control surveillance rating, a control service for the rating sought, for a period of not less than 180 hours or three months, whichever is greater, at the unit for which the rating is sought; and
 - (iii) in the case of an approach precision radar control rating, not less than 200 precision approaches of which not more than 100 shall have been carried out on a radar simulator approved for that purpose by the Authority, provided that not less than 50 of the precision approaches shall have been carried out at the unit and on the equipment for which the rating is sought.
- (2) If the privileges of the approach control surveillance rating include surveillance radar approach duties, the experience under subregulation (1) shall include not less than 25 plan position indicator approaches carried out
 - (a) on the surveillance equipment of the type in use, at the unit for which the rating is sought; and
 - (b) under the supervision of an appropriately rated controller.
- (3) The experience under subregulation (1) (b) shall have been completed within the six-month period immediately preceding the application.
- (4) Where the applicant already holds an air traffic control rating in another category, or the same rating for another unit, the Authority shall determine whether the experience requirement under this regulation may be reduced and the extent to which the experience may be reduced.
- **98.** An applicant for an air traffic controller rating shall have demonstrated, at a level appropriate to the privileges being granted, the skill, judgement and performance required to provide a safe, orderly and expeditious control service.
- **99.** Where two air traffic controller ratings are sought concurrently, the Authority shall determine the applicable requirements on the basis of the requirements for each rating, provided that such requirements shall not be less than that of the more demanding rating.

Experience

Skills requirements

Concurrent issue of two air traffic controller ratings

- **100.** (1) A holder of an air traffic controller licence endorsed with one or more of the aeronautical ratings may
 - (a) in the case aerodrome control rating, provide or supervise the provision of aerodrome control service for the aerodrome for which the licence holder is rated:
 - (b) in the case of approach control procedural rating, provide or supervise the provision of approach control service for the aerodrome for which the licence holder is rated, within the airspace or portion thereof, under the jurisdiction of the unit providing approach control service;
 - (c) in the case of approach control surveillance rating, provide and supervise the provision of approach control service with the use of applicable ATS surveillance systems for the aerodrome for which the licence holder is rated, within the airspace or portion thereof, under the jurisdiction of the unit providing approach control service;
 - (d) in the case of approach precision radar control rating, provide and supervise
 the provision of precision approach radar service at the aerodrome for
 which the licence holder is rated;
 - (e) in the case of area control procedural rating, provide and supervise the provision of area control service within the control area or portion thereof, for which the licence holder is rated; and
 - (f) in the case of area control surveillance rating, provide and supervise the provision of area control service with the use of an ATS surveillance system, within the control area or portion thereof, for which the licence holder is rated.
- (2) Before exercising the privileges indicated in subregulation (1), the holder of air traffic controller rating shall be familiar with all pertinent and current information.
- (3) The Authority shall not permit the holder of the licence, to carry out instruction in an operational environment unless such holder has received specific authorisation from the Authority.
- **101.** (1) An air traffic controller rating shall become invalid when an air traffic controller has ceased to exercise the privileges of the rating for a period determined by the Authority:

Provided that such period shall not exceed six months.

(2) An air traffic controller rating shall remain invalid until the air traffic controller's ability to exercise the privileges of the rating has been re-established.

D – Flight operations officer licence

- **102.** An applicant for a flight operations officer licence shall not be less than 21 years of age.
- **103.** An applicant for a flight operations officer licence shall have demonstrated a level of knowledge appropriate to the privileges granted to the holder of a flight operations officer licence, in the following subjects
 - (a) air law with respect to the rules and regulations relevant to the holder of a flight operations officer licence and the appropriate air traffic service practices and procedures;

Privileges and conditions of air traffic controller rating

Validity of ratings

Age requirements Knowledge requirements

- (b) aircraft general knowledge, including
 - the principles of operation of aeroplane powerplants, systems and instruments,
 - (ii) the operating limitations of an aeroplane and powerplants, and
 - (iii) minimum equipment list;
- (c) flight performance calculation, planning procedures and loading, including —
 - (i) the effects of loading and mass distribution on aircraft performance and flight characteristics, mass and balance calculations,
 - (ii) operational flight planning, fuel consumption and endurance calculations, alternate aerodrome selection procedures, en-route cruise control, and extended range operation,
 - (iii) the preparation and filing of air traffic services flight plans, and
 - (iv) the basic principles of computer-assisted planning systems;
- (d) human performance relevant to dispatch duties;
- (e) meteorology, including
 - (i) aeronautical meteorology, the movement of pressure systems, the structure of fronts and the origin and characteristics of significant weather phenomena which affect take-off, en-route and landing conditions, and
 - (ii) the interpretation and application of aeronautical meterological reports, charts and forecasts, codes and abbreviations, use of and procedures for obtaining meteorological information;
- (f) principles of navigation with particular reference to instrument flight;
- (g) operational procedures, including
 - (i) the use of aeronautical documentation,
 - (ii) the operational procedures for the carriage of freight and dangerous goods,
 - (iii) the procedures relating to aircraft accidents, incidents, and emergency flight procedures, and
 - (iv) the procedures relating to unlawful interference and sabotage of an aircraft;
- (h) principles of flight relating to the appropriate category of aircraft; and
- (i) radio communication procedures for communicating with aircraft and relevant ground stations.
- **104.** (1) An applicant for a flight operations officer licence shall have the following experience
 - (a) a total of two years of service in any one or in any combination of the following capacities, provided that in any combination of experience the period serviced in any capacity shall be at least 12 months
 - (i) for a flight crew member in air transportation,
 - (ii) for a meteorologist in an organisation dispatching aircraft in air transportation, or
 - (iii) for an air traffic controller, or a technical supervisor of flight operations officers or air transportation flight operations systems;
 - (b) at least 12 months as an assistant in the dispatching of air transport; and
 - (c) have satisfactorily completed a course of approved training conducted by an Approved Training Organisation.
- (2) The applicant shall have served, under the supervision of a flight operations officer, for, at least 90 working days, within the six months immediately preceding the application.

Experience

105. An applicant for a flight operations officer licence shall have demonstrated the ability to -

Skills requirements

- (a) make an accurate and operationally acceptable weather analysis, from a series of daily weather maps and weather reports;
- (b) provide an operationally valid briefing on weather conditions prevailing in the general neighbourhood of a specific air route and forecast weather trends pertinent to air transportation with particular reference to destination and alternates;
- (c) determine the optimum flight path for a given segment, and create accurate manual and computer generated flight plans;
- (d) provide operating supervision and all other assistance to a flight in actual or simulated adverse weather condtions, as appropriate to the duties of the holder of a flight operations officer licence; and
- (e) recognise and manage threats and errors.

106. A holder of a flight operations officer licence may serve in that capacity, with the responsibility for each area for which the applicant meets the requirements specified by the Authority.

Privileges of flight operations officer licence

E – Aeronautical station operator licence

107. An applicant for an aeronautical station operator licence shall be at least 18 years of age.

Age requirements Knowledge requirements

- **108.** An applicant for an aeronautical station operator licence shall have demonstrated a level of knowledge appropriate to the holder of an aeronautical station operator, in the following subjects
 - (a) general knowledge in air traffic service provided within the Botswana;
 - (b) operational procedures, including radiotelephony procedures, phraseology and telecommunications network;
 - (c) rules and regulations applicable to the aeronautical station operator; and
 - (d) telecommunications equipment, principles, use and limitation of telecommunications equipment in an aeronautical station.
 - **109.** An applicant for an aeronautical station operator licence shall have —
 - (a) satisfactorily completed an approved training course conducted by an Approved Training Organisation, within the 12 months period immediately preceding the application, and have served satisfactorily under a qualified aeronautical station operator for not less than two months; or
 - (b) satisfactorily served under a qualified aeronautical station operator, for not less than six months, during the 12 months period immediately preceding the application.
- **110.** An applicant for an aeronautical station operator licence shall demonstrate competency in
 - (a) operating the telecommunication equipment used; and
 - (b) transmitting and receiving radiotelephony messages with efficiency and accuracy.
- **111.** (1) A holder of an aeronautical station operator licence may act as an operator in an aeronautical station.
- (2) The holder of an aeronautical station operator licence shall, before exercising the privileges of the licence, be familiar with all pertinent and current information regarding the types of equipment and operating procedures used at the aeronautical station.

Experience

Skills requirements

Privileges of aeronautical station operator licence

PART XIV — Medical requirements for licensing

Medical certificates

- **112.** (1) The Authority may, on an application made in Form A set out in Schedule 3 to these Regulations, issue a class 1, class 2 or class 3 medical certificate.
- (2) A medical certificate under subregulation (1) shall be in Form B set out in Schedule 3 to these Regulations.

Aviation medical examiners

- 113. (1) The Authority shall designate and authorise a qualified and licensed medical practitioner to
 - (a) be an aviation medical examiner; and
 - (b) conduct medical examinations of fitness of applicants for the issue, renewal or re-issue of the licences or ratings, as may be required in these Regulations.
- (2) The Authority may, in writing, appoint an aviation medical examiner based outside Botswana to conduct the functions under subregulation (1).
 - (3) An aviation medical examiner shall receive —
 - (a) basic training in aviation medicine for class 2 and class 3 medical examinations on the relevant subjects;
 - (b) advanced training in aviation medicine for class 1 medical examinations on the relevant subjects; and
 - (c) refresher training at intervals determined by the Authority.
- (4) An aviation medical examiner shall acquire knowledge and experience of the conditions in which the holders of licences and ratings carry out their duties.
- (5) An aviation medical examiner shall have completed at least 10 examinations for a medical certificate per year.
- (6) An authorisation for an aviation medical examiner shall be valid for three years and re-authorisation shall be at the discretion of the Authority.
- (7) An aviation medical examiner shall submit a signed report to the Authority, after completing the medical examination of an applicant, detailing the results of the examination, and where the medical examination is carried out by a constituted group of aviation medical examiners, the Authority shall appoint the head of the group responsible for coordinating the results of the examination and signing the report.
- (8) The Authority shall use the services of physicians experienced in the practice of aviation medicine, where necessary to evaluate reports submitted to it by aviation medical examiners.
- (9) The Authority shall retain the right to reconsider any action of an aviation medical examiner.
- (10) Where the medical report is submitted to the Authority in electronic format, adequate identification of the aviation medical examiner shall be established.
- **114.** (1) An applicant for a licence or rating, where medical fitness is prescribed, shall sign and furnish to the aviation medical examiner a declaration stating whether he or she has previously undergone such an examination and, if so, state the results of the examination.
- (2) An applicant for a medical certificate shall provide the aviation medical examiner with a personal certified statement of medical facts concerning personal, familial and hereditary history.

General requirements for aviation medical examination

- (3) An applicant for a medical certificate shall produce proof of identification.
- (4) Any false declaration to an aviation medical examiner made by an applicant for a licence or rating shall be reported to the Authority for appropriate action.
- (5) A flight crew member or an air traffic controller shall not exercise the privileges of his or her licence unless he or she holds a current medical certificate, appropriate to the licence, except where otherwise stated in these Regulations.
- **115.** (1) Where the medical requirements prescribed for a particular licence are not met, the appropriate medical certificate will not be issued, renewed or re-issued unless the following conditions are met
 - (a) an accredited medical conclusion indicates that in the special circumstances, the applicant's failure to meet any requirement, whether numerical or otherwise, is such that exercise of the privileges of the licence applied for is not likely to jeopardize flight safety;
 - (b) the relevant ability, skill and experience of the applicant and operational conditions have been given due consideration; and
 - (c) the licence is endorsed by the Authority with any special limitation or limitations when the safe performance of the licence holder's duties is dependent on compliance with such limitation or limitations.
- (2) An aviation medical examiner shall report to the Authority any individual case where, in the aviation medical examiner's judgement, an applicant's failure to meet any requirement, whether numerical or otherwise, is such that exercise of the privileges of the licence being applied for, or held, is not likely to jeopardize flight safety.
- **116.** The Authority may, at its own discretion, defer a prescribed medical re-examination of a licence holder operating in an area distant from designated medical examination facilities:

Provided that such deferment shall not exceed —

- (a) in the case of a flight crew member engaged in non-commercial operations, a single period of six months; and
- (b) in the case of a flight crew member of an aircraft engaged in commercial operations, two consecutive periods of three months each, on the condition that —
 - (i) in each case, a favourable medical report is obtained after examination by a designated medical examiner of the area concerned, or
 - (ii) where a designated medical examiner is not available, the examination shall be done by a physician legally qualified to practice medicine in that area.
- 117. (1) A person who holds a licence issued under these Regulations, shall not exercise the privileges of his or her licence and related ratings at any time when he or she is aware of any decrease in his or her medical fitness which may render him or her unable to safely and properly exercise the privileges of the licence and ratings held.
- (2) In the case of a female, the licence holder shall, immediately, inform the Authority of a confirmed pregnancy.
- (3) A person who holds a licence issued under these Regulations shall inform the Authority of any decrease in medical fitness of a duration of more than 20 days, which -
 - (a) requires continued treatment with prescribed medication; or
 - (b) has required hospital treatment.

Special circumstances for aviation medical examination

Deferred medical examination

Decrease in medical fitness

Use of psychoactive substances

Physical and mental requirements for medical certificates

Visual acuity test requirements for medical certificates

Colour perception requirements for medical certificates

Hearing test requirement for medical certificates

- 118. A person who holds a licence issued under these Regulations shall not
 - (a) exercise the privileges of his or her licence and related ratings while under the influence of any psychoactive substance which might render him or her unable to safely and properly exercise those privileges; and
 - (b) engage in any abusive use of substances.
- 119. An applicant for a medical ceritificate shall be required to be free from any -
 - (a) active, latent, acute or chronic disability;
 - (b) wound, injury or sequela from operation; or
- (c) effect or side-effect of any prescribed or non-prescribed therapeutic medication, which would entail a degree of functional incapacity likely to interfere with the safe operation of an aircraft or with the safe performance of the duties.
- **120.** (1) The visual acuity tests shall be conducted in an environment with a level of illumination that corresponds to ordinary office illumination (30-60cd/m²).
- (2) The visual acuity shall be measured by means of a series of landolt rings or similar optotypes, placed at a distance from the applicant appropriate to the method of testing adopted.
- **121.** (1) An applicant for a medical certificate shall be required to demonstrate the ability to perceive readily those colours the perception of which is necessary for the safe performance of duties.
- (2) An applicant shall be tested for the ability to correctly identify a series of pseudoisochromatic plates in daylight or in artificial light of the same colour temperature such as those provided by the International Commission of Illumination standard illuminants C or D65 as specified by the International Commission of Illumination.
- (3) An applicant obtaining a satisfactory result as prescribed by the Authority shall be assessed as fit.
- (4) An applicant failing to obtain a satisfactory result in a test shall be assessed as unfit unless he or she is able to readily distinguish the colours used in air navigation and correctly identify aviation coloured lights.
- (5) An applicant who fails to meet the criteria in subregulation (4) shall be assessed as unfit except for class 2 assessment with a restriction valid during daytime only.
- **122.** (1) An applicant for a medical certificate shall be required to demonstrate hearing performance sufficient for the safe exercise of the privileges of the licence and rating sought.
- (2) The hearing test may be conducted using a pure tone audiometer or alternate method that will provide equivalent results.
- (3) The hearing test shall be performed at the first medical examination and then at specified intervals according to the class of medical examination and age of the applicant.
- (4) If a pure tone audiometer is used, the reference zero for calibration shall be that of the International Organization for Standardization Recommendation R389, 1964.
- (5) For hearing tests where audiometry is not performed, an applicant shall be tested in a quiet room by whispered and spoken voice tests under the following conditions —

- (a) a quiet room where the intensity of the background noise is less than 35 dB(A) when measured on "slow" response of an "A"-weighted sound level meter;
- (b) the sound level of an average conversational voice at one metre from the point of output is 60dB(A) and that of a whispered voice is 45dB(A);
- (c) at two metres from the speaker, the sound is 6 dB(A) lower; and
- (d) 12 months interval specified for the commercial pilot licence and airline transport pilot licence that is carrying passengers in single-pilot operations shall be reduced to six months.
- (6) Where the holder of a licence and rating is over the age of 50 years the two years interval specified for the private pilot licence and air traffic controller licence shall be reduced to 12 months.
- (7) For the initial issue of the medical certificate, the period of validity shall begin on the date the medical examination is performed.
- (8) The period of validity shall for the last month counted, include the day that has the same calendar number as the date of the medical examination or, if that month has no day with that number, the last day of that month.
- (9) The requirements for the renewal or re-issue of a medical certificate shall be the same as those for the initial certificate except where otherwise specifically stated.
- (10) The renewal of class 1, 2 and 3 medical certificates may be delegated to the authorised aviation medical examiner.
 - (11) The re-issue of class 1 medical certificate shall be done by the Authority.
- (12) The re-issue of class 2 and 3 medical certificates may be delegated by the Authority to an authorised aviation medical examiner.
- **123.** An applicant for a commercial pilot licence or airline transport licence shall undergo an initial medical examination for the issue of a class 1 medical certificate.

Class 1 medical certificate

124. (1) An applicant for a private pilot licence shall undergo an initial medical examination for the issue of a class 2 medical certificate.

Class 2 medical certificate

- (2) Except where otherwise stated in this Part, a holder of a private pilot licence and cabin crew licence shall have his or her class 2 medical certificate renewed at intervals not exceeding those specified in this Part.
- (3) A class 2 medical certificate shall be issued when the applicant complies with the requirements of this Part.
- **125.** (1) An applicant for an air traffic controller licence shall undergo an initial medical examination for the issue of a class 3 medical certificate.
- (2) Except where otherwise stated in this Part, a holder of an air traffic controller licence shall have his or her class 3 medical certificate renewed at intervals not exceeding those specified in this Part.
- intervals not exceeding those specified in this Part.

 126. (1) Subject to subregulations (2) and (3), a medical certificate shall be valid from the data of the medical exemination for a period not
- be valid, from the date of the medical examination, for a period not exceeding
 - (a) 60 months for an aeroplane, airship, helicopter and powered-lift private pilot licence;
 - (b) 12 months for an aeroplane, airship, helicopter and powered-lift commercial pilot licence;
 - (c) 12 months for an aeroplane multi-crew pilot licence;
 - (d) 12 months for an aeroplane, helicopter and powered-lift airline transport pilot licence;
 - (e) 60 months for a glider pilot licence;
 - (f) 60 months for a free balloon pilot licence; and
 - (g) 48 months for an air traffic controller licence.

Class 3 medical certificate

Duration and renewal of medical certificate

- (2) Where the holder of an airline transport licence or a commercial pilot licence under subregulation (1) has attained the age 40 years, the period of validity of the medical certificate shall be reduced to six months.
- (3) Where the holder of a private pilot licence, free balloon pilot licence, glider pilot licence or air traffic controller licence under subregulation (1) has attained the age 40 years, the period of validity of the medical certificate shall be reduced to 24 months and where such licence holder has attained the age of 50 years, the period of validity shall be further reduced to 12 months.
- (4) Where the holder of an airline transport licence, a commercial pilot licence or a multi-crew pilot licence under subregulation (1) has attained the age 60 years, the period of validity of the medical certificate shall be reduced to six months.

PART XV — Suspension of medical certificate

Suspension of medical certificate

- **127.** (1) The Authority shall suspend or revoke a medical certificate, if it is established that an applicant or a certificate holder no longer meets the requirements of a medical certificate under these Regulations.
- (2) In case of doubt of the medical fitness of the holder of a medical certificate, the Authority may
 - (a) require the holder to repeat a complete or partial medical examination as it deems necessary; or
 - (b) suspend the certificate in the case of a temporary rejection on medical grounds.

128. The Authority shall notify in writing, the holder of the medical certificate of the suspension and state reasons for the suspension.

129. The holder of the medical certificate shall surrender the certificate within 14 days of receiving the notice under regulation 127.

Issue of lower class medical certificate

Notice of

medical

certificate

suspension

Surrender of

130. The Authority may provide the person whose medical certificate has been suspended with a new medical certificate of lower class if his or her medical fitness allows it.

Lifting of suspension

- **131.** (1) A suspension may be lifted if the medical examination has been passed satisfactorily.
- (2) Where a suspension has been lifted, the person involved shall receive a new medical certificate unless the medical certificate was revoked.

PART XVI — Miscellaneous provisions

Application for exemption

- **132.** (1) A person may apply to the Authority for an exemption from these Regulations.
- (2) An application for an exemption shall be submitted at least 60 days in advance of the proposed effective date.
 - (3) A request for an exemption shall contain the applicant's —
 - (a) name;
 - (b) physical address and mailing address;
 - (c) telephone number;
 - (d) facsimile number, if available; and
 - (e) electronic mail address, if available.
- (4) The application shall be accompanied by a fee determined by the Authority, for technical evaluation.

- **133.** (1) An application for an exemption shall contain the following —
- (a) a citation of the specific requirement from which the applicant seeks exemption;
- (b) an explanation of why the exemption is needed;
- (c) a description of the type of operations to be conducted under the proposed exemption;
- (d) the proposed duration of the exemption;
- (e) an explanation of how the exemption would be in the public interest;
- (f) a detailed description of the alternative means by which the applicant will ensure a level of safety equivalent to that established by the regulation in question;
- (g) a detailed description of any known safety concerns with the requirement, including information about any relevant accidents or incidents of which the applicant is aware; and
- (h) if the applicant seeks to operate under the proposed exemption outside of Botswana's airspace, an indication whether the exemption would contravene any provision of the International Civil Aviation Organisation Standards and Recommended Practices as well as the regulations pertaining to the airspace in which the operation will occur.
- (2) Where the applicant seeks emergency processing of an application for emergency, the application shall contain supporting facts and reasons why the application was not timely filed, and the reasons why it is an emergency.
- (3) The Authority may deny an application if the Authority finds that the applicant has not justified the failure to apply for an exemption within the specified time.
- **134.** (1) The Authority shall review the application for accuracy and compliance with the requirements under these Regulations.
- (2) If the application satisfies the requirements of this regulation and the Authority determines that a review of its merits is justified, the Authority shall publish a detailed summary of the application in the *Gazette* for comments and specify the date by which comments may be received by the Authority for consideration.
- (3) Where the requirements of these Regulations have not been met, the Authority shall notify the applicant and take no further action until the applicant corrects the application and re-files it in accordance with these Regulations.
- (4) Where an applicant makes an emergency application, the Authority shall publish the application or the Authority's decision as soon as possible after processing the application.
- **135.** (1) Where any comments are received by the Authority, the Authority shall conduct an evaluation of the request to determine
 - (a) whether an exemption would be in the public interest;
 - (b) whether the applicant's proposal would provide a level of safety equivalent to that established by law;
 - (c) whether a grant of the exemption would contravene the applicable International Civil Aviation Organisation Standards and Recommended Practices; and
 - (d) whether the request should be granted or denied, and of any conditions or limitations that should be part of the exemption.

Requirements for exemption

Review by Authority

Evaluation of request

- (2) Where the Authority decides that a technical evaluation of the request would impose a significant burden on the Authority's technical resources, the Authority may deny the exemption on that basis.
- (3) The Authority shall notify the applicant in writing and shall give a detailed summary of its evaluation and decision to grant or deny the request.
- (4) The summary referred to in sub-regulation (2) shall specify the duration of the exemption and any conditions or limitations of the exemption.
- (5) Where the exemption affects a significant population of the aviation community of Botswana, the Authority shall publish the summary in the aeronautical information circular.
- 136. (1) The Authority may charge fees in connection with the issue, validation, renewal, extension or variation of any licence or other document, including the issue of a copy thereof, or the undergoing of any examination, test, inspection or investigation or the grant of any permission or approval, required by, or for the purpose of these Regulations, as the Authority may determine.
- (2) Upon an application being made in connection with which any fee is chargeable in accordance with sub-regulation (1), the applicant shall be required, before the application is considered, to pay the fee so chargeable.
- (3) If, after that payment has been made, the application is withdrawn by the applicant or otherwise ceases to have effect or is refused, the Authority shall not refund the payment made.
- 137. (1) If any provision of these Regulations is contravened in relation to an aircraft, the operator of that aircraft and the pilot-in-command, if the operator or, the pilot-in-command is not the person who contravened that provision he or she shall, without prejudice to the liability of any other person under these Regulations for that contravention, be deemed for the purposes of the following provisions of this subregulation to have contravened that provision.
- (2) Subregulation (1) shall not apply if the person proves that the contravention occurred without his consent or connivance and that he or she exercised due diligence to prevent the contravention.
- (3) Any person who contravenes any provision to these Regulations commits an offence and is liable to a fine not exceeding P50 000, or to imprisonment for a term not exceeding 10 years, or to both.
- (4) Where criminal proceedings are not instituted under subregulation (3), the Authority may impose an appropriate administrative penalty, as set in Schedule 4 to these Regulations, on a person who
 - (a) hinders or obstructs an authorised officer, inspector or authorised person in the exercising of his or her powers or the performance of his or her duties;
 - (b) refuses or fails to give his or her name and address, or gives a false name or address when called upon to do so by an authorised officer, or inspector;
 - (c) obstructs or impedes another person from exercising any privilege, power or duty conferred on such other person by the Authority or under these Regulations;
 - (d) makes or causes to be made, orally or in writing
 - (i) a misleading or false statement for the purpose of obtaining any licence, rating, certificate, approval, authorisation, exemption or other document under these Regulations;
 - (ii) a misleading or false entry in any logbook, record or report which is required to be kept or maintained under these regulations;

Fees

Penalties

- (e) falsifies, counterfeits, alters, defaces or mutilates, or adds anything to, any licence, rating, certificate, approval, authorisation, exemption or other document issued under these Regulations;
- (f) does, causes or permits to be done, an act contrary to, or who fails to comply with, any provision of these Regulations;
- (g) exercises a privilege granted by, or uses any licence, rating, certificate, approval, authorisation, exemption or other document issued under these Regulations, of which he or she is not the holder;
- (h) unless otherwise authorised in these Regulations, permits a licence, rating, certificate, approval, authorisation, exemption or other document issued under these Regulations, of which he or she is the holder, to be used or privileges thereof to be exercised by another person;
- (i) commits an act, by
 - (i) interference with any flight crew member, air traffic controllers or aircraft maintenance engineer,
 - (ii) tampering with any aircraft or any part thereof, or
 - (iii) disorderly conduct or otherwise, which is likely to endanger the safety of an aircraft or its occupants;
- (j) enters in a place within the boundaries of a licensed aerodrome or heliport which is closed to the public, without the permission of an aerodrome or heliport operator; and
- (k) gives false information pertaining to the investigation of an aviation accident or incident.
- (5) Where criminal proceedings are instituted, the administrative penalties for offences under subregulation (4) may be used as a guide in determining the appropriate penalty.
- **138.** (1) Notwithstanding any other provision of these Regulations, a person who at the commencement of these Regulations, is carrying out aviation related training shall, within 12 months from the date of commencement of these Regulations, or within such longer period as the Minister may, by notice in the *Gazette* prescribe, comply with the requirements of these Regulations or cease to carry out such operations.

(2) A person who fails to comply with these Regulations within the prescribed period commits an offence and shall be liable, to the penalties specified under section 88 of the Act.

139. Any valid licence, certificate, permit or authorisation issued or granted by the Authority before the commencement of these Regulations shall remain valid until it expires or is revoked. SCHEDULE

Transitional provisions

Savings

SCHEDULE

SCHEDULE 1 (regulation 9(I)) Language Proficiency – Table

INTERACTIONS	Interacts with ease in nearly all situations. Is sensitive to verbal and non-verbal cues, and responds to them appropriately.	Responses are immediate, appropriate and informative. Manages the speaker or listener relationship effectively.
COMPREHENSION	Comprehension is consistently accurate in nearly all contexts and includes comprehension of linguistic and cultural subfleties.	Comprehension is accurate on common, concrete and work related topics and mostly accurate when the speaker is confronted with a linguistic or situational complication or an unexpected turn of events. Is able to comprehend a range of speech varieties (dialect or accent) or registers.
FLUENCY	Able to speak at length with a natural, effortless flow. Varies speech flow for stylistic effect, e.g. to emphasise a point. Uses appropriate discourse markers and connectors spontaneously.	Able to speak at length with relative ease on familiar topics, but may not vary speech flow as a stylistic device. Can make use of appropriate discourse markers or connectors.
VOCABULARY	Vocabulary range and accuracy are sufficient to communicate effectively on a wide variety of wide variety of familiar and unfamiliar topics. Vocabulary is idiomatic, nuanced, and sensitive to register.	Vocabulary range and accuracy are sufficient to communicate effectively on common, concrete, and work related topics. Paraphrases consistently and successfully. Vocabulary is sometimes idiomatic.
STRUCTURE Relevant grammatical structures and sentence patterns are determined by language functions appropriate to the task	Both basic and complex grammatical structures and sentence patterns are consistently well controlled.	Basic grammatical structures and sentence patterns are consistently well controlled. Complex structures are attempted but with errors which sometimes interfere with meaning.
PRONOUNCIATION Assumes a dialect and accent intelligible to the aeronautical community	Pronunciation, stress, rhythm, and intonation, though possibly influenced by the first language or regional variation, almost never interfere with ease of understanding	Pronunciation, stress, rhythm, and intonation, though influenced by the first language or regional variation, rarely interfere with ease of understanding.
LEVEL	Expert 6	Extended 5

Responses are usually immediate, appropriate and informative. Initiates and maintains exchanges even when dealing with an unexpected turn of events. Deals adequately with apparent misunderstandings by checking, confirming or clarifying.	Responses are sometimes immediate, appropriate, and informative. Can initiate and maintain exchanges with reasonable ease on familiar topics and in predictable situations. Generally inacequate when dealing with an unexpected turn of events.
Comprehension is mostly accurate on common, concrete, and work related topics when the accent or variety used is sufficiently intelligible for an international community of users. When the speaker is confronted with a linguistic or situational complication or an unexpected turn of events, comprehension may be slower or require clarification strategies.	Comprehension is often accurate on common, concrete, and work-related topics when the accent or variety used is sufficiently intelligible for an international community of users. May fail to understand a linguistic or situational complication or an unexpected turn of events.
Produces stretches of language at an appropriate tempo. There may be occasional loss of fluency on transition from rehearsed or formulaic speech to spontaneous interaction, but this does not prevent effective communication. Can make limited use of discourse markers or connectors. Fillers are not distracting.	Produces stretches of language, but phrasing and pausing are often inappropriate. Hestations or slowness in language processing may prevent effective communication. Fillers are sometimes distracting.
Vocabulary range and accuracy are usually sufficient to communicate effectively on common, concrete, and work related topics. Can often paraphrase successfully when lacking vocabulary in unusual or unexpected circumstances.	Vocabulary range and accuracy are often sufficient to communicate on common, concrete, or work-related topics, but range is limited and the word choice often inappropriate. Is often unable to paraphrase successfully when lacking vocabulary.
Basic grammatical structures and sentence patterns are used creatively and are usually well controlled. Errors may occur, particularly in unusual or unexpected circumstances, but rarely interfere with meaning.	Basic grammatical structures and sentence patterns associated with predictable situations are not always well controlled. Errors frequently interfere with meaning.
Pronunciation, stress, rhythm and intonation are influenced by the first language or regional variation but only sometimes interfere with understanding.	Pronunciation, stress, rhythm, and intonation are influenced by the first language or regional variation and frequently interfere with ease of understanding.
Operational 4	Pre- operational 3

Response time is slow and often inappropriate. Interaction is limited to simple routine exchanges.	Performs at a level below the Elementary Level.
Comprehension is limited to isolated, memorised phrases when they are carefully and slowly articulated.	Performs at a level below the Elementary Level.
Can produce very short, isolated, memorised utterances with frequent pausing and a distracting use of fillers to search for expressions and to articulate less familiar words.	Performs at a level below the Elementary Level.
Limited vocabulary range consisting only of isolated words and memorised phrases.	Performs at a level below the Elementary Level.
Shows only limited control of a few simple memorised grammatical structures and sentence patterns.	Performs at a level below the Elementary Level.
Pronunciation, stress, rhythm, and intonation are heavily influenced by the first language or regional variation and usually interfere with ease of understanding.	Performs at a level below the Elementary Level.
Elementary 2	Pre- elementary 1

Note:

(1) An applicant for a licence or a licence holder shall demonstrate, in a manner acceptable to the Authority, compliance with the holistic descriptors in paragraph (a) and with the Operational Level (Level 4) of the Language Proficiency Rating Scale specified in the Language Proficiency – Table.

(a) Holistic descriptors:

A proficient speaker shall

- communicate effectively in voice-only (telephone/radiotelephone) and in face-to-face situations,
 - communicate on common, concrete and work-related topics with accuracy and clarity,
- use appropriate communicative strategies to exchange messages and to recognise and resolve misunderstandings in a general or work-related context,
- handle successfully and with relative ease the linguistic challenges presented by a complication or unexpected turn of events that occur within the context of a routine work situation or communicative task with which he or she is familiar, and **≘∄∄**£
 - use a dialect or accent which is intelligible to the aeronautical community. 3
- Pre-operational levels of language proficiency, respectively, all of which describe a level of proficiency below the language proficiency requirements. Levels 5 and 6 The Operational Level (Level 4) is the minimum required proficiency for radiotelephony communication. Level 1 to 3 describe Pre-elementary, Elementary and describe Extended and Expert levels, at levels of proficiency more advanced than the minimum required standard. As a whole, the scale serves as a benchmark for training and testing, and assists applicants to attain the Operational Level (level 4). 5

SCHEDULE 2

PART A

MULTI-CREW PILOT LICENCE

AEROPLANE LEVELS OF COMPETENCY

(regulation 49 (3))

1. Core flying skills

A level of competency at which the applicant shall have complied with the requirements for the private pilot licence specified in Part V, including night flight requirements, and in addition, have completed smoothly and with accuracy, all procedures and manoeuvres related to upset training and flight with reference solely to instruments. From the outset, all training is conducted in an integrated multi-crew, competency-based and threat and error management (TEM) environment. Initial training and instructional input levels are high as core skills are being embedded in the initial application. Assessment at this level confirms that control of the aeroplane is maintained at all times in a manner such that the successful outcome of a procedure or a manoeuvre is assured.

2. Level 1 (Basic)

A level of competency at which assessment confirms that control of the aeroplane or situation is maintained at all times and in such a manner that if the successful outcome of a procedure or manoeuvre is in doubt, corrective action is taken. Performance in the generic cockpit environment does not yet consistently meet the standards of knowledge, operational skills and level of achievement required in the core competencies. Continual training input is required to meet an acceptable initial operating standard. Specific performance improvement or personal development plans will be agreed and the details recorded. The applicant will be continuously assessed as to his or her suitability to progress to further training and assessment in successive phases.

3. Level 2 (Intermediate)

A level of competency at which assessment confirms that control of the aeroplane or situation is maintained at all times and in such a manner that the successful outcome of a procedure or manoeuvre is assured. The training received at Level 2 shall be conducted under the instrument flight rules, but need not be specific to any one type of aeroplane. On completion of Level 2, the applicant shall demonstrate levels of knowledge and operational skills that are adequate in the environment and achieves the basic standard in the core capability. Training support may be required with a specific development plan to maintain or improve aircraft handling, behavioural performance in leadership or team management. Improvement and development to attain the standard is the key performance objective. Any core competency assessed as less than satisfactory should include supporting evidence and a remedial plan.

4. Level 3 (Advanced)

A level of competency required to operate and interact as a co-pilot in a turbine-powered aeroplane certificated for operation with a minimum crew of at least two pilots, under visual and instrument conditions. Assessment confirms that control of the aeroplane or situation is maintained at all times in such a manner that the successful outcome of a procedure or manoeuvre is assured. The applicant shall consistently demonstrate the knowledge, skills and attitudes required for the safe operation of an applicable aeroplane type as specified in the performance criteria.

PART B

COMPETENCY UNITS FOR MULTI-CREW PILOT LICENCE (regulations 46 (1) and 50 (2))

An applicant for a multi-crew pilot licence in the aeroplane category shall have satisfactorily demonstrated performance in all nine competency unite specified below, at the advanced level of competency -

- 1. Apply threat and error management (TEM) principles;
- 2. Perform aeroplane ground operations;
- 3. Perform take-off;
- 4. Perform climb;
- 5. Perform cruise;
- 6. Perform descent;
- 7. Perform approach;
- 8. Perform landing; and
- 9. Perform after-landing and aeroplane post-flight operations.

SCHEDULE 3 FORM A (regulation 112 (1))

APPLICATION FORM FOR AN AVIATION MEDICAL CERTIFICATE

Complete this page using a black ball point pen and in block letters - Refer to instructions pages for details MEDICAL IN CONFIDENCE

(1) Surname:		(2)	Forenames:	Title:	(3) Licence Number:											
(4) Date of Birth:	Age	e:	(5) Sex:	(6) Applic Initial:	cation (9) Type of licence ap			e app	lied	fc	r:					
a l			10) Class of medical certificate applied for:			(11) Occupation										
(12) Permanent Address: (13)			(13) Postal Address (if different)		(8) Nationality: (14) Employer:				(17) Total flight time Hours:							
Telephone: Mobile No: E-mail:		Telephone: Mobile No: E-mail:				5) Last medical exam: (18) Flight time h since last medicace:										
(16) GP Name and Address:			(19) Aircraft presently flown (e.g.			(e.g. ATR 42, C172)										
Telephone:			(20) Type of flying intended			nded:	led:									
(22) Have you ever had an aviation r				ded	(2	1) P	resent	flying	activ	ity:						
or revoked by any licensing authority No Yes Details:	y? II Date		Place:		Si	ngle	e pilot:			m	ulti	pile	ot: [
						kl	y									
(25) Do you smoke tobacco? Never: No ☐ Yes ☐					Y	Y										
(27) Medical History: Do you have, or have ever had, any of the following? Yes or No (or as indicated) must be ticked after each question. Elaborate Yes answers in the remarks section.																
Ye	Yes No Yes No Yes No															
101. Frequent or severe Headaches		110. Sug	ar/Albumin in Uri	ine	Ц	1	119. N	/Ialaria	a/othe	er tro	pica	al di	seas	2		
102. Dizziness, fainting or unconsciousness		111. Epil	lepsy/Fits]	120. A	Any far pileps					abete	s,	1	
103. Eye trouble		112. Ner	vous trouble of an	y sort	Ц	_ 1	121. F	leart d	liseas	e						
104. Hay fever		113. Mot	tion Sickness requ	iring drugs]	122. F	Have y lying l			en i	efu	sed a			
105. Asthma, lung disease			dical rejection from tary service	n or for]	123. F	amily ligh b								
106. Heart trouble			e you ever been hitted to Hospital]	124. N	/lental	Illne	ss						
107. High/low blood pressure		116. Any	other illness			1	125. A	Allergy	/asth	ma/ec	zei	na				
108. Stomach trouble		117. Hea	d injury]	126. F	emale nenstr		y: Gy	nae	col	ogica	1,		
109. Kidney Stone/Blood in urine		118. Alc	ohol/drug/substan	ce abuse		1	127. A	Are yo	u pre	gnant	?					
28. Remarks: If previously reported and no change since, so state. 29. Declaration: I hereby declare that I have carefully considered the statements made above and that to the best of my belief they are complete and correct and that I have not withheld any relevant information or made any misleading statement. I give my consent to the Medical Examiner to communicate with my physician whom I have consulted or may consult during the period covered by the Medical Certificate issued following this examination. Date Signature of Applicant Signature of AME (Witness)																
Dute		Jignatuli	or repricant		J	15110	acuse 0	1 / 11VIL	2 (** 1	mess)						

FORM B

(regulation 112 (2))

	MEDICAL CERTIFICATE	VIII ISSUING AUTHORITY: Civil Aviation Authority of Botswana					
	CTATE OF VICENTE	II MEDICAL CERTIFICATE CLASS:					
I	STATE OF ISSUE: BOTSWANA	Class 1 Class 2 Class 3					
Ш	LICENCE NUMBER:	X DATE OF ISSUE:					
111	LICENCE NUMBER:	XII EXPIRY DATE:					
IV	LAST AND FIRST NAME OF HOLDER:	Advisory LAST EXAM. NEXT EXAMINIFORMATION	A М.				
		ECG					
XIV	DATE AND PLACE OF BIRTH:	AUDIOGRAM					
VI	NATIONALITY:	CHEST X-RAY					
XIII	LIMITATIONS:	XI AME STAMP:					
VII	SIGNATURE OF HOLDER:	NAME OF AME:					

SCHEDULE 4

Administrative Penalties

(regulation 137 (4))

(1) The administrative penalties, in respect of the offences under regulation 137 (4), shall apply to an individual as indicated in Table A.

TABLE A
PENALTIES APPLICABLE TO AN INDIVIDUAL

Regulation	1st offence	2nd offence	Subsequent offence				
137 (4) (a)	P 5 000	P 10 000	P 15 000				
137 (4) (b)	P 5 000	P 10 000	P 15 000				
137 (4) (c)	P 5 000	P 10 000	P 15 000				
137 (4) (d)	P 15 000	P 20 000	P 25 000				
137 (4) (e)	P 10 000	P 20 000	P 30 000				
137 (4) (f)	P 10 000	P 20 000	P 30 000				
137 (4) (g)	P 10 000	P 20 000	P 30 000				
137 (4) (h)	P 10 000	P 20 000	P 30 000				
137 (4) (i)	P 10 000	P 20 000	P 30 000				
137 (4) (j)	P 5 000	P 10 000	P 15 000				
137 (4) (k)	P 10 000	P 20 000	P 30 000				

(2) The administrative penalties, in respect of the offences under regulation 137 (4), shall apply to an organisation as indicated in Table B.

TABLE B
PENALTIES APPLICABLE TO AN ORGANISATION

Regulation	1st offence	2nd offence	Subsequent offence
137 (4) (<i>a</i>)	P 15 000	P 30 000	P 50 000
137 (4) (<i>b</i>)	P 15 000	P 30 000	P 50 000
137 (4) (<i>c</i>)	P 15 000	P 30 000	P 50 000
137 (4) (<i>d</i>)	P 15 000	P 30 000	P 50 000
137 (4) (<i>e</i>)	P 25 000	P 40 000	P 60 000
137 (4) (<i>f</i>)	P 25 000	P 50 000	P 80 000
137 (4) (g)	P 25 000	P 50 000	P 80 000
137 (4) (<i>h</i>)	P 35 000	P 60 000	P 100 000
137 (4) (<i>i</i>)	P 25 000	P 50 000	P 120 000
137 (4) (<i>j</i>)	P 15,000.00	P 30, 000.00	P 80, 000.00
137 (4) (<i>k</i>)	P 35 000.00	P 60 000	P 120 000

MADE this 22nd day of January, 2013.

NONOFO E. MOLEFHI, Minister of Transport and Communications.