Statutory Instrument No. 8 of 2013

# CIVIL AVIATION ACT (Cap. 71:01)

# CIVIL AVIATION (PERSONNEL LICENSING) (OTHER PERSONNEL) 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 —

## PART I — Preliminary

- **1.** These Regulations may be cited as the Civil Aviation (Personnel Licensing) (Other Personnel) Regulations, 2013.
  - 2. In these Regulations unless the context otherwise requires —
- "aeronautical experience" means pilot time obtained in an aircraft or approved flight simulation training device for meeting the training and flight time requirements of these Regulations;
- "airframe" means the fuselage, booms, nacelles, cowlings, fairings, airfoil surfaces including rotors, but excludes 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
  - (a) used or intended to be used in operating or controlling an aircraft in flight; or
  - (b) installed in or attached to the aircraft and is not part of an airframe, powerplant or propeller;
- "approved maintenance organisation" means an organisationapproved 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 duties assigned by the operator or the pilot-in-command of the aircraft, in the interest of safety of passengers, but who shall not act as a flight crew member;
- "complex aeroplane" means an aeroplane that has retractable landing gear, flaps, and a controllable pitch propeller, or in the case of a seaplane, flaps and a controllable pitch propeller;
- "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;

Citation

Interpretation

- "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;
- "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;
- "human performance" means human capabilities and limitations which have an impact on the safety and efficiency of aeronautical operations;
- "ICAO Annex 1" means Annexure 1 to the Convention on International Civil Aviation;
- "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 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;
- "maintenance" means a task 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:
- "night" means the time between fifteen minutes after sunset and fifteen 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;
- "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;
- "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 standards approved by the Authority;
- "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; and
- "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.

#### PART II — General Requirements for Licences and Ratings

- **3.** The Authority may, where on application, an applicant satisfies the Licences requirements of these Regulations, issue
  - (a) a flight operations officer licence;
  - (b) an aircraft maintenance engineer licence;
  - (c) an aviation repair specialist licence;
  - (d) a parachute rigger licence;
  - (e) an air traffic controller licence;
  - (f) an aeronautical station operator licence;
  - (g) a flight radiotelephone operator licence;
  - (h) a cabin crew licence; and
  - (i) any other licence as may be considered necessary by the Authority.
  - **4.** (1) The Authority may issue —

Ratings

- (a) in relation to an air traffic controller licence
  - (i) an aerodrome control rating,
  - (ii) an approach control rating,
  - (iii) an approach radar control rating,
  - (iv) an area control rating,
  - (v) an area radar control rating,
  - (vi) an air traffic control instructor rating,
  - (vii) an air traffic control examiner rating, and
  - (viii) an aerodrome flight information services rating;

General

requirements

for licences

and ratings

- (b) in relation to an aircraft maintenance engineer licence
  - (i) an airframe rating,
  - (ii) a powerplant rating, and
  - (iii an avionics rating;
- (c) ratings for an aviation repairman specialist licence; and
- (d) ratings for a parachute rigger's licence for seat, back, chest, and lap.
- (2) A rating issued under subregulation (1) shall be shown in the licence that it relates to.
- 5. An applicant shall be eligible for a licence or rating if —
- (a) he or she is a fit and proper person;
- (b) he or she has sufficient ability in reading, speaking and understanding the English language in order to carry out responsibilities of licence or rating applied for;
- (c) he or she meets the eligibility requirements appropriate for the licence or rating applied for; and
- (d) the issue of the licence or rating is not contrary to aviation safety.

## PART III — Aircraft Maintenance Engineer's Licence and Ratings

Aircraft maintenance engineer licence

**6.** (1) A person shall not act as an aircraft maintenance engineer unless he or she is issued with an aircraft maintenance engineer licence by the Authority in accordance with these Regulations.

(2) A person shall not qualify to act as an aircraft maintenance engineer unless he or she is at least 18 years of age.

7. (1) An application for an aircraft maintenance engineer licence and any associated rating shall be made in Form A set out in the Schedule to these Regulations.

- (2) A person who applies for an aircraft maintenance engineer licence shall —
- (a) demonstrate the ability to read, write, speak, and understand the English language, by reading and explaining appropriate maintenance publications and by writing defect and repair statements when required to do so by the Authority;
- (b) comply with the knowledge, experience, and competency requirements prescribed for the licence and rating sought; and
- (c) have passed all of the prescribed tests or examinations for the licence and rating sought, within a period of 24 months.
- (3) An aircraft maintenance engineer who applies for an additional rating shall meet the requirements of this Part, and shall, within a period of 24 months, pass the tests prescribed for the additional rating sought.
- **8.** (1) An applicant for an aircraft maintenance engineer licence shall pass a general knowledge test covering the following areas —
  - (a) air law and airworthiness requirements, in particular, rules and regulations relevant to an aircraft maintenance engineer licence holder, including —
  - - (i) applicable airworthiness requirements governing certification and continuing airworthiness of aircraft, and
    - (ii) approved aircraft maintenance organisation procedures;

Application for aircraft maintenance engineer licence

Knowledge required for aircraft maintenance engineer licence

- (b) natural science and aircraft general knowledge, including
  - (i) basic mathematics.
  - (ii) units of measurement, and
  - (iii) fundamental principles and theory of physics and chemistry applicable to aircraft maintenance;
- (c) aircraft engineering in particular characteristics and applications of the materials of aircraft construction, including
  - (i) the principles of construction and functioning of aircraft structures,
  - (ii) fastening techniques,
  - (iii) powerplants and their associated systems,
  - (iv) mechanical, fluid, electrical and electronic power sources,
  - (v) aircraft instrument and display systems,
  - (vi) aircraft control systems, and
  - (vii) airborne navigation and communication systems;
- (d) aircraft maintenance, in particular 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 requirements of airworthiness; and
- (e) human performance and limitations relevant to the duties of an aircraft maintenance engineer licence holder.
- **9.** Where an applicant for an aircraft maintenance engineer licence meets the requirements of this Part, the Authority may issue an aircraft maintenance engineer licence subject to such conditions as may be specified in the licence.

Issue of aircraft maintenance engineer licence

10. (1) An aircraft maintenance licence shall be valid for five years from the date of issue and may be renewed at the end of such period for an additional five years if the holder presents evidence, to the Authority, that he or she has, within the past 24 months, exercised the privileges of the licence for not less than six months.

Duration and renewal of aircraft maintenance engineer licence

(2) Where the aircraft maintenance engineer licence expires before an application for renewal is made, the applicant shall receive refresher training acceptable to the Authority in order to qualify for a renewal of the licence.

Aircraft maintenance engineer licence ratings

11. The Authority may issue an airframe rating, powerplant rating, avionics rating and any other rating, as may be determined by the Authority, in relation to an aircraft maintenance engineer licence.

Knowledge required for aircraft maintenance engineer licence ratings

- **12.** (1) An applicant for an airframe rating shall pass a knowledge test covering the following areas
  - (a) wood structures;
  - (b) aircraft covering;
  - (c) aircraft finishes;
  - (d) sheet metal and non-metallic structures:
  - (e) welding;
  - (f) assembly and rigging;
  - (g) airframe inspection;
  - (h) fuel systems;
  - (j) aircraft landing gear systems;
  - (k) hydraulic and pneumatic power systems;

- (l) cabin atmosphere control systems;
- (m) aircraft instrument systems;
- (n) communication and navigation systems;
- (o) aircraft fuel systems;
- (p) aircraft electrical systems;
- (q) position and warning systems;
- (r) ice and rain control systems; and
- (s) fire protection systems.
- (2) An applicant for a powerplant rating shall pass a knowledge test covering the following areas
  - (a) reciprocating systems;
  - (b) turbine engines;
  - (c) engine inspection;
  - (d) engine instrument systems;
  - (e) engine fire protection systems;
  - (f) engine electrical systems;
  - (g) lubrication systems;
  - (h) ignition and starting systems;
  - (i) fuel metering;
  - (*j*) engine fuel systems;
  - (k) induction and engine airflow systems;
  - (l) engine cooling systems;
  - (m) engine exhaust and reverser systems;
  - (n) propellers; and
  - (o) auxiliary power units.
- (3) An applicant for an avionics rating shall pass a knowledge test covering the following areas
  - (a) aircraft electrical systems;
  - (b) aircraft instrument systems;
  - (c) automatic flight control systems;
  - (d) aircraft radio and radio navigation systems;
  - (e) aircraft navigation systems; and
  - (f) aircraft systems, components or avionics.
- (4) An applicant shall pass each section of any test before applying for the skills tests prescribed in this Part.
- **13.** (1) An applicant for an aircraft maintenance engineer licence or associated rating may qualify by either practical experience or through completion of an approved training in an Approved Training Organisation.
- (2) An applicant, under subsection (1), relying on practical experience shall provide documentary evidence, acceptable to the Authority, of the following experience in the inspection, servicing and maintenance of aircraft or its components
  - (a) in the case of airframe and powerplant rating for aeroplane piston or helicopter piston and avionics rating
    - (i) four years of practical maintenance experience on operating aircraft, if the applicant has no previous relevant technical training,
    - (ii) two years of practical maintenance experience on operating aircraft as a skilled worker and completion of training, considered relevant by the Authority, in the relevant technical trade, or

Experience required for aircraft maintenance engineer licence ratings

- (iii) two years of practical maintenance experience on operating aircraft and completion of basic training course by an Approved Training Organisation; or
- (b) in the case of airframe and powerplant rating for aeroplane turbine or helicopter turbine and avionics rating;
  - (i) airframe and powerplant ratings for 30 months;
  - (ii) avionics rating for eight months in an Approved Training Organisation and 12 months practical work experience; and
  - (iii) airframe, powerplant and avionics ratings for 42 months in an Approved Training Organisation and 12 months practical work experience.
- **14.** An applicant for an aircraft maintenance engineer licence and rating relying on practical experience shall provide documentary evidence, acceptable to the Authority, of the following experience in the inspection, servicing and maintenance of aircraft or its components —

Practical experience for licence and ratings

- (a) airframe rating for 30 months;
- (b) powerplant rating for 30 months;
- (c) airframe and powerplant ratings for 48 months;
- (d) avionics rating for 36 months; and
- (e) airframe, powerplant and avionics ratings for 60 months.
- **15.** (1) A holder of an aircraft maintenance engineer licence may —
- (a) perform or supervise the maintenance, preventive maintenance, modification or inspection of any aircraft and airframe, aircraft engine, propeller, appliance, component; and
- (b) approve for return to service, any aircraft, airframe, aircraft engine, propeller, appliance, component, or part thereof, for which he or she is rated, provided the licensed aircraft maintenance engineer has —
  - (i) satisfactorily performed the service at an earlier date,
  - (ii) demonstrated the ability to perform the service to the satisfaction of the Authority,
  - (iii) received training acceptable to the Authority on the tasks to be performed,
  - (iv) performed the work while working under the direct supervision of a licensed aircraft maintenance engineer or a licensed aviation repairman who is appropriately rated and has previous experience in the specific operation concerned, or
  - (v) received training acceptable to the Authority on the task to be performed.
- (2) A person issued with an aircraft maintenance engineer licence shall not exercise the privileges of the licence or rating within the preceding 24 months unless -
  - (a) the Authority has found that he or she is able to do the engineering work; and
  - (b) he or she has, for at least six months, within the preceding 24 months
    - (i) served as an aircraft maintenance engineer,
    - (ii) technically supervised other aircraft maintenance engineers,
    - (iii) provided aircraft maintenance instruction or served as the direct supervisor of persons providing aviation maintenance instruction for a course or training acceptable to the Authority, or
    - supervised the maintenance and alteration of any aircraft, airframe aircraft engine, propeller appliance, components or part thereof.

Privileges for aircraft maintenance engineer licence

- (3) Notwithstanding the provisions of subregulation (1), a person issued with an aircraft maintenance engineer licence may
  - (a) with an airframe rating, after he or she has performed the 100 hour inspection required in this Part on an airframe, or any related part or appliance, approve and return the airframe to service;
  - (b) with a powerplant rating, perform the 100 hour inspection required in this Part on a powerplant or propeller or any related part or appliance, approve and return the powerplant to service.
  - (c) with an avionics rating, inspect, repair, maintain, function test and return to service aircraft avionics systems and components.
- (4) An aircraft maintenance engineer with an airframe or powerplant or avionics rating shall not -
  - (a) supervise the maintenance, preventive maintenance, or modification of, or approve and return to service, any aircraft, airframe, aircraft engine, propeller, appliance, component, or part thereof, for which he or she is rated unless he or she has satisfactorily performed the work concerned at an earlier date;
  - (b) exercise the privileges of the licence under subregulation (1), unless he or she understands the current instructions for continued airworthiness and the maintenance instructions for the specific operation concerned; and
  - (c) perform a major repair or major modification of a propeller.
- (5) An aircraft maintenance engineer with an airframe or powerplant rating shall not, in addition to the provisions of subregulation (4),
  - (a) perform or supervise, unless under the direct supervision and control of an air operator certificate holder that is authorised to perform maintenance, preventative maintenance, or modifications under an equivalent system, any repair or alteration of instruments; or
  - (b) approve for return to service
    - (i) any aircraft, airframe, aircraft engine, propeller, appliance, component or part thereof after completion of a major alteration or major repair, or
    - (ii) any instrument after the completion of any repair or alteration.
- (6) An aircraft maintenance engineer shall exercise the privileges of his or her licence only in respect of -
  - (a) aircrafts as specified in the licence; and
  - (b) airframes, powerplants and aircraft systems or components specified in the licence.
- (7) An aircraft maintenance engineer shall only exercise certification privileges on a specific type of aircraft after completing aircraft task training relevant to the type of aircraft and conducted by an Approved Training Organisation.
  - (8) The training under subregulation (7) shall include —
  - (a) theoretical and practical elements specific to the type of aircraft; and
  - (b) additional elements introduced by technological changes to the aircraft.

- **16.** (1) A person who holds a current and valid aircraft maintenance engineer licence issued by a foreign Contracting State may apply to the Authority for validation of such licence for use on an aircraft registered in Botswana.
- Validation of foreign aircraft maintenance engineer licence
- (2) The Authority may issue a validation certificate to an applicant under subregulation (1), if the Authority is satisfied that
  - (a) the applicant's licence is not suspended or revoked by the country that issued the licence:
  - (b) the applicant's licence was issued in accordance with ICAO Annex 1;
  - (c) the applicant does not hold a licence issued by the Authority.
- (3) The Authority shall, before issuing a validation certificate, verify the authenticity of the licence being validated with the foreign Contracting State that issued the licence.
  - (4) An applicant for a validation certificate shall —
  - (a) demonstrate the ability to read, speak, write and understand the English language;
  - (b) demonstrate to the satisfaction of the Authority, knowledge relevant to the licence being validated; and
  - (c) complete a skills test relevant to the licence and ratings and privileges of the licence.
- (5) A person who holds a validation certificate may exercise the privileges of the certificate on an aircraft registered in Botswana, subject to the limitations and restrictions on the licence being validated.
- (6) A validation certificate issued under subregulation (2) shall be valid for a period of 12 months, provided that the foreign licence remains valid.
- 17. (1) A person who holds a current and valid aircraft maintenance engineer licence issued by a foreign Contracting State may apply to the Authority for conversion of that licence and be issued with an aircraft maintenance engineer licence, by the Authority, for use on an aircraft registered in Botswana, if he or she —

Conversion of foreign aircraft maintenance engineer licence

- (a) holds a valid and current aircraft maintenance engineer licence, issued in accordance with ICAO Annex 1;
- (b) satisfies the applicable aeronautical experience requirements, as may be determined by the Authority; and
- (c) passes a knowledge test, relevant to the licence held.
- (2) An applicant who fails a knowledge test under subregulation (1) shall be disqualified for further testing, until the applicant proves that he or she has gained a practical experience of one month.
- **18.** (1) A military aircraft maintenance engineer may apply to the Authority, on the basis of his or her military training, for an aircraft maintenance engineer licence.

Recognition of military competency

- (2) An applicant under subregulation (1) shall —
- (a) submit to the Authority, a certificate of discharge from military service;
- (b) provide evidence of experience of not less than six years in aircraft maintenance, which shall include six months recent experience acquired within the 12 months preceding the application.

Display of aircraft maintenance engineer licence

- (3) The Authority may issue an aircraft maintenance engineer licence to an applicant under subregulation (1), if it is satisfied that the applicant meets the knowledge and skills requirements under these Regulations.
- **19.** A person who holds an aircraft maintenance engineer licence shall display it where he or she normally exercises the privileges of the licence and shall present it for inspection upon the request by the Authority.

## PART IV — Inspection Authorisation

Inspection authorisation

- **20.** (1) An applicant for an inspection authorisation shall —
- (a) hold a currently effective and valid aircraft maintenance engineer licence with both an airframe and powerplant rating, each of which is valid and has been in effect for a total of at least three years;
- (b) have been actively engaged, for at least two years before the date of application, in the maintenance of certified aircraft and maintained in accordance with these Regulations;
- (c) have a fixed base of operations at which the applicant may be located in person or by telephone during normal working hours but which need not be the place where the applicant exercises his or her inspection authority;
- (d) have available the equipment, facilities, and inspection data necessary to properly inspect airframes, aircraft engines, propellers, or any related component, part or appliance; and
- (e) pass a knowledge test that demonstrates the applicant's ability to inspect according to safety standards for approving aircraft for return to service after major and minor repairs, major and minor modifications, annual inspections, and progressive inspections.
- (2) An applicant who fails the knowledge test prescribed in subregulation (1) (e) may not apply for retesting until at least 90 days after the date he or she failed the test.
- **21.** (1) An applicant for an inspection authorisation shall pass a knowledge test covering, at least, the following areas
  - (a) certification procedures for products and parts;
  - (b) airworthiness standards for an aircraft or rotocraft;
  - (c) airworthiness directives;
  - (d) maintenance, preventive maintenance, rebuilding, and alteration;
  - (e) identification and registration marking;
  - (f) certification for maintenance licensing;
  - (g) general operating and flight rules; and
  - (h) aircraft weight and balance.
  - (2) An inspection authorisation shall cease to be valid where —
  - (a) the authorisation is surrendered, suspended, or revoked;
  - (b) the holder of the authorisation no longer has a fixed base of operation; or
  - (c) the holder of the authorisation no longer has the equipment, facilities, and inspection data required under subregulation (1).
- 22. (1) An inspection authorisation shall be valid for 12 months from the date of issue and may be renewed at the end of such period if the holder of the authorisation, presents evidence to the Authority that he or she still meets the requirements under these Regulations and shows that he or she
  - (a) has performed at least one annual inspection every three months during the time that the applicant held the inspection authorisation;

Knowledge required for inspection authorisation

Duration and renewal of inspection authorisation

- (b) has performed inspection on at least two major repairs or major modifications every three months during the time he or she held the inspection authorisation;
- (c) has performed or supervised and approved at least one progressive inspection in accordance with standards prescribed by the Authority;
- (d) has performed any combination of paragraphs (a), (b) or (c);
- (e) has successfully completed an inspection authorisation refresher course or series of courses acceptable to the Authority, of not less than 16 hours of instruction during the one year period preceding the application for renewal; and
- (f) has passed a knowledge test administered by the Authority to determine that the applicant's knowledge of applicable regulations and standards is current
- (2) The holder of an inspection authorisation that has been in effect for less than three months before the expiration date need not comply with this regulation.
- **23.** (1) The holder of an inspection authorisation may, when exercising the privileges of the authorisation
  - (a) keep it available for inspection by the aircraft owner and aircraft maintenance engineer submitting the aircraft repair or alteration, if any, for approval; and
  - (b) present it on the request by the Authority.
- (2) The holder of an inspection authorisation with a valid aircraft maintenance engineer licence may
  - (a) inspect and approve for return to service any aircraft, airframe, aircraft engine, propeller appliance, component, or part thereof on any aircraft with a maximum take-off weight of 5,700 kg or less, after completion of a major repair or major alteration performed in accordance with these Regulations and done in accordance with technical data approved by the Authority;
  - (b) perform an annual inspection, or perform or supervise a progressive inspection, on any aircraft with a maximum take-off weight of 5,700 kg or less, except those aircraft on a continuous maintenance program, and approve the aircraft for return to service; or
  - (c) exercise the privileges of the authorisation until he or she has notified the Authority in writing of any changes in the fixed base of operation and equipment, facilities or inspection data and received approval in writing from the Authority for the proposed change.
- (3) The holder of an inspection authorisation with a valid aircraft maintenance engineer licence shall not
  - (a) exercise the privileges of the authorisation unless he or she holds a current and valid aircraft maintenance engineer licence with airframe and powerplant ratings;
  - (b) inspect and approve for return to service any aircraft with a maximum take-off weight exceeding 5,700 kg;
  - (c) inspect and approve any airframe, aircraft engine, propeller, appliance, component, or part thereof which is subject to a maintenance program;
  - (d) inspect and approve for return to service any aircraft maintained in accordance with a continuous maintenance program; or

Privileges and limitations for inspection authorisation

- (e) exercise any privilege of an inspection authorisation whenever he or she no longer —
  - (i) has a fixed base of operation, and
  - (ii) has access to the equipment, facilities or inspection data.

## PART V — Aviation Repair Specialist Licence

Aviation repair specialist licence

Application for aviation repair specialist licence

- **24.** A person shall not perform the functions of an aviation repair specialist unless he or she is issued by the Authority with an aviation repair specialist licence in accordance with these Regulations.
- **25.** (1) An application for an aviation repair specialist licence shall be made to the Authority in Form B set out in the Schedule to these Regulations.
  - (2) An applicant for an aviation repair specialist licence and ratings shall –
  - (a) be at least 18 years of age;
  - (b) demonstrate the ability to read, write, speak, and understand the English language, by reading and explaining appropriate maintenance publications and by writing defect and repair statements;
  - (c) demonstrate a level of knowledge relevant to the privileges to be granted and appropriate to the duties to be performed;
  - (d) be employed for a specific job requiring special qualifications by an approved maintenance organisation or an air operator certificated that provides maintenance, preventive maintenance, or modifications to aircrafts with a continuous maintenance program;
  - (e) be recommended for certification by his or her employer, to the satisfaction of the Authority, as able to satisfactorily maintain aircraft or components, appropriate to the job for which he or she is employed; and
  - (f) have
    - (i) at least 24 months of practical experience in the procedures, practices, inspection methods, materials, tools and equipment generally used in the maintenance duties of the specific job the applicant is employed to do and be licensed; or
    - (ii) completed formal training that is acceptable to the Authority specifically designed for an aviation repairman.

26. The Authority may issue the following ratings to a person who holds an aviation repair specialist licence -

- (a) propeller rating;
- (b) computer rating;
- (c) instrument rating;
- (d) accessory rating;
- (e) components rating;
- (f) welding rating;
- (g) non-destructive testing rating; or
- (h) any other ratings as may be determined by the Authority.
- **27.** (1) An aviation repair specialist licence shall not be issued with an airframe and powerplant or avionics rating to circumvent the process of obtaining an aircraft maintenance engineer licence.

Ratings for aviation repair specialist licence

Privileges and limitations for aviation repair specialist licence

- (2) Ratings for an applicant employed by an approved maintenance organisation shall coincide with the ratings issued at the approved maintenance organisation limited to the specific job for which the applicant is employed to perform, supervise or approve for return to service.
- (3) Ratings for an applicant employed by an air operator shall coincide with the approved specific operating provisions and the approved maintenance control manual that identifies the air operator's authorisations limited to the specific job for which the person is employed to perform, supervise, or approve for return to service.
- (4) An aviation repair specialist may perform or supervise the maintenance or alteration of aircraft, airframes, aircraft engines, propellers, appliances, components, and parts appropriate to the designated speciality area for which the aviation repair is licensed and rated, but only in connection with employment by an approved maintenance organisation or a holder that is authorised to perform maintenance or modifications under an equivalent system.
- (5) An aviation repair specialist shall not perform or supervise any duties unless the aviation repair specialist understands the current instructions of the employing certificate holder and the instructions for continued airworthiness, which relate to the specific operations concerned.
- (6) An aviation repair specialist licence shall be surrendered to the Authority at the time the licence holder leaves the employ of the approved maintenance organisation.
- **28.** A person who holds an aviation repair specialist licence shall display it where he or she normally exercises the privileges of the licence and shall present it for inspection upon the request by the Authority.

Display of aviation repair specialist licence

# PART VI — Aircraft Maintenance Engineer Instructor Rating and Designated Examiner Certificate

- **29.** (1) A person shall not act as an aircraft maintenance engineer instructor unless he or she is issued with an aircraft maintenance engineer instructor rating.
- (2) A person shall not qualify to be an aircraft maintenance engineer instructor unless he or she is at least 21 years of age.
- **30.** An application for an aircraft maintenance engineer instructor rating shall be made to the Authority in Form A set out in the Schedule to these Regulations and shall meet the requirements in this Part and any additional requirements as may be specified by the Authority.
- **31.** An applicant for an aircraft maintenance engineer instructor rating shall hold at least a current and valid aircraft maintenance engineer licence and rating for which the instructor rating is sought, and shall have a minimum of three years experience as an aircraft maintenance engineer.
- **32.** The holder of an aircraft maintenance engineer instructor rating may give instruction to an aircraft maintenance engineer licence applicant and endorse the applicant for a knowledge or skills test as applicable.

Aircraft maintenance engineer instructor rating

Application for aircraft maintenance engineer instructor rating

Experience required for aircraft maintenance engineer instructor rating

Privileges for aircraft maintenance engineer instructor rating Duration and renewal of aircraft maintenance engineer instructor rating

Aircraft maintenance engineerdesignated examiner certificate

Application for aircraft maintenance engineer designated examiner certificate

- **33.** (1) An aircraft maintenance engineer instructor rating shall be valid for a period of two years.
- (2) The holder of an aircraft maintenance engineer instructor rating may renew his or her rating for an additional two years, if the holder presents to the Authority evidence that he or she has, within the past 12 months
  - (a) conducted at least six exercises in an approved course for a aviation engineer licence or rating; or
  - (b) received a refresher training acceptable to the Authority.
- **34.** A person shall not qualify to be an aircraft maintenance engineer designated examiner unless he or she is at least 23 years of age.
- **35.** An applicant for an aircraft maintenance engineer designated examiner certificate shall
  - (a) show evidence of a high level of aeronautical knowledge in the subject areas for an aircraft maintenance engineer certification in both reciprocating and turbine engine aircraft;
  - (b) have held a valid aircraft maintenance engineer licence with the ratings to which the designation shall apply for a period five years;
  - (c) have been actively exercising the privileges of the aircraft maintenance engineer licence in the previous three years;
  - (d) have a good record as an aircraft maintenance engineer and a person engaged —
    - (i) to test at least 25 percent of all level 1, level 2, level 3 skill elements listed in objective 3 of each subject area in the STS for the general, airframe and powerplant, and
    - (ii) to perform all of the core competencies elements identified in objective 2 of each subject area in the STS for general, airframe and powerplant ratings;
  - (e) have a fixed base of operation, equipment and materials adequate for an applicant to demonstrate the basic skills of the rating sought;
  - (f) have an airworthy aircraft, other aircrafts, aircraft subassemblies, operational mock-ups, and other aids that may be used for testing; and
  - (g) have tools, equipment, material, current publications, and the necessary apparatus required to complete a project assignment recommended by aircraft manufacturers or accepted in the aviation industry.
- **36.** An applicant for an aircraft maintenance engineer designated examiner certificate shall pass a pre-designation test on
  - (a) air law and regulations for aircraft maintenance engineer personnel;
  - (b) current practices for the fleet of aircraft to be utilised;
  - (c) best industry practices; and
  - (d) recent improvement in technology, testing and tooling.
- **37.** (1) An applicant for an aircraft maintenance engineer designated examiner certificate shall conduct a complete, actual skills test using the approved STS in a satisfactory manner and shall be observed by the Authority when conducting such test.
- (2) The applicant shall complete the required documentation in a satisfactory manner and shall be observed by the Authority when completing such documentation.

Knowledge for aircraft maintenance engineer designated examiner certificate

Skills test for aircraft maintenance engineer designated examiner certificate

- **38.** (1) An aircraft maintenance engineer designated examiner shall maintain currency by
  - (a) attending initial and recurrent training conducted by the Authority; and
- (b) maintaining a current and valid aircraft maintenance engineer licence and applicable ratings.
- (2) The aircraft maintenance engineer designated examiner shall conduct at least six skills tests during any 12 months period in order for the designation to remain current.
- (3) The aircraft maintenance engineer designated examiner shall be observed by the Authority in the conduct of a skills test, at least once each year.
- **39.** (1) An aircraft maintenance engineer examiner certificate shall be valid for 12 months.
- (2) The aircraft maintenance engineer designated examiner certificate may be renewed by the Authority, if
  - (a) the need for the designation remains valid;
- (b) the performance of the aircraft maintenance engineer designated examiner has been satisfactory; and
- (c) the aircraft maintenance engineer examiner has attended the aviation engineer examiner training conducted by the Authority in the previous 12 months.

# PART VII — Air Traffic Controller Licence and Air Traffic Controller Ratings

**40.** (1) A person shall not act as an air traffic controller unless he or she is issued with an air traffic controller licence by the Authority in accordance with these Regulations.

(2) A person applying for an air traffic controller licence shall be at least 21 years of age.

**41.** (1) An application for air traffic controller licence shall be made in Form C set out in the Schedule to these Regulations.

- (2) An applicant shall, before being issued with an air traffic controller licence, meet such requirements in respect of age, knowledge, experience, skill, medical fitness and language proficiency as are specified for that licence or rating.
- (3) An applicant for an air traffic controller licence shall hold a class 3 medical certificate issued under these Regulations.
- **42.** (1) An applicant for an air traffic controller licence shall receive knowledge instruction through an approved training course on the knowledge areas appropriate to the holder of an air traffic controller licence on the following
  - (a) air law, in particular rules and regulations relevant to the air traffic controller;
  - (b) air traffic control equipment, in particular principles, use and limitations of equipment used in air traffic control;
  - (c) general knowledge, in particular principles of flight, principles of operation and functioning of aircraft, powerplants and systems, aircraft performances relevant to air traffic control operations;

Recent experience for aircraft maintenance engineer designated examiner certificate

Duration and renewal of aircraft maintenance engineer designated examiner certificate

Air traffic controller licence

Application for air traffic controller licence

Knowledge required for air traffic controller licence

- (d) human performance relevant to air traffic control;
- (e) meteorology in particular aeronautical meteorology use and appreciation of meteorological documentation and information, origin and characteristics of weather phenomena affecting flight operations and safety;
- (f) altimetry;
- (g) navigation, in particular principles of air navigation, principle, limitation and accuracy of navigation systems and visual aids; and
- (h) operational procedures, in particular air traffic control, communication, radiotelephony and phraseology procedures routine, non-routine and emergency, use of the relevant aeronautical documentation, safety practices associated with flight.
- (2) An applicant for an air traffic controller licence shall —
- (a) receive an endorsement for the knowledge test from an authorised instructor who
  - (i) conducted the training on the knowledge areas, and
  - (ii) certifies that the applicant is prepared for the required knowledge test; and
- (b) pass the required knowledge test.
- **43.** (1) The applicant shall have completed —
- (a) an approved training course; and
- (b) three months' satisfactory service engaged in the actual control of air traffic under the supervision of an appropriately rated air traffic controller.
- (2) The experience requirements specified for air traffic controller ratings shall be credited as part of the experience specified in this regulation.
  - **44.** An air traffic controller licence shall be valid for five years.

Duration of air traffic controller licence

Air traffic

controller

rating

Experience required

for air

traffic

licence

controller

**45.** Air traffic controller ratings shall comprise the following categories — (a) aerodrome control rating;

(a) aerodrome control rating(b) approach control rating;

- (c) approach radar control rating;
- (d) approach precision radar control rating;
- (e) area control rating; and
- (f) area radar control rating.

Knowledge required for air traffic controller rating

- **46.** (1) An applicant for an air traffic controller rating shall receive knowledge instruction through an approved training course on the knowledge areas appropriate to an air traffic controller rating on the subjects, as specified below, for each rating sought
  - (a) aerodrome control rating
    - (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, search and rescue plans;

- (b) approach control and area control ratings
  - (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, search and rescue plans; and
- (c) approach radar, approach precision radar and area radar control ratings.
- (2) The applicant shall meet the requirements specified 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
  - (a) principles, use and limitations of radar, other surveillance systems and associated equipment; and
  - (b) procedures for the provision of approach, precision approach or area radar control services, as appropriate, including procedures to ensure appropriate terrain clearance.
  - **47.** An applicant for an air traffic controller rating shall —
  - (a) receive an endorsement for the knowledge test from an authorised instructor who —
    - (i) conducted the training on the knowledge areas, and
    - (ii) certifies that the applicant is prepared for the required knowledge test; and
  - (b) pass the required knowledge test.
  - **48.** (1) An applicant for an air traffic controller rating shall have —
  - (a) satisfactorily completed an approved training course; and
  - (b) provided, satisfactorily, under the supervision of an appropriately rated air traffic controller
    - (i) aerodrome control service for a period of not less than 90 hours or one month, whichever is greater, at the unit for the rating sought,
    - (ii) approach radar, area or area radar control rating for the 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 the rating sought, and
    - (iii) approach precision radar control rating for not less than 200 precision approaches with not more than 100 carried out on a radar simulation approved for that purpose by the Authority and not less than 50 of those precision approaches shall have been carried out at the unit and on the equipment for the rating sought; and
- (2) Where the privileges of the approach radar control rating include surveillance radar approach duties, the experience under subregulation (1) shall include 25 plan position indicator approaches on the surveillance equipment of the type in use at the unit for the rating sought and under the supervision of an appropriately rated approach radar controller.
- (3) The experience specified under subregulation (1) shall be completed within the six months period immediately preceding the application.

Knowledge testing for air traffic controller rating

Experience required for air traffic controller rating Skills test for air traffic controller rating

Privileges and limitations for air traffic controller rating

- **49.** An applicant shall demonstrate, by passing the required skills test, at a level appropriate to the privileges being granted, the skill, judgment and performance required to provide a safe, orderly and expeditious control service.
  - **50.** (1) A holder of an air traffic controller licence may —
  - (a) in relation to aerodrome control rating, provide or supervise the provision
    of aerodrome control services for the aerodrome for which the licence
    holder is rated:
  - (b) in relation to approach control rating, provide or supervise the provision of approach control services for the aerodrome or aerodromes for which the licence holder is rated, within the airspace or portion thereof, under the jurisdiction of the unit providing approach control services;
  - (c) in relation to approach radar control rating, provide and supervise the provision of approach control services with the use of radar or other surveillance systems for the aerodrome or aerodromes for which the licence holder is rated, within the airspace or portion thereof, under the jurisdiction of the unit providing approach control services;
  - (d) in relation to approach precision radar control rating, provide and supervise the provision of precision approach radar services at the aerodrome for which the licence holder is rated:
  - (e) in relation to area control rating, provide and supervise the provision of area control services within the control area or portion thereof, for which the licence holder is rated; and
  - (f) in relation to area radar control rating, provide and supervise the provision of area control services with the use of radar, within the control area or portion thereof, for which the licence holder is rated.
- (2) A licence holder shall be familiar with all current information before exercising the privileges indicated in subregulation (1).
- (3) A holder of an air traffic controller licence and ratings shall not provide instruction in an operational environment unless the licence holder has received proper authorisation from the Authority.
- **51.** A rating shall become invalid when an air traffic controller has ceased to exercise the privileges of the rating for a period of six months and the rating shall remain invalid until the air traffic controller's ability to exercise the privileges of the rating has been re-established.

air traffic controller rating

Duration of

## PART VIII — Flight Operations Officer Licence, Instructor Rating and Designated Examiner Certificate

Flight operations officer licence

- **52.** A person shall not act as a flight operations officer unless he or she is issued with a flight operations officer licence by the Authority in accordance with these Regulations.
- (2) An applicant for a flight operations officer licence shall be at least 21 years of age.
- **53.** An application for a flight operations licence shall be made in Form D set out in Schedule 1 to these Regulations.

Knowledge required for flight operations officer licence

Application for

flight operations

officer licence

**54.** (1) An applicant for a flight operations officer licence shall receive and log training from an authorised instructor on the following subjects appropriate to the privileges of the flight operations officer —

- (a) air law, including
  - (i) rules and regulations relevant to the holder of a flight operations officer licence, and
  - (ii) appropriate air traffic services practices and procedures;
- (b) aircraft general knowledge, including
  - principles of operation of aeroplane powerplants, systems and instruments,
  - (ii) operating limitations of aeroplanes and powerplants, and
  - (iii) minimum equipment list;
- (c) flight performance calculation and planning procedures, including
  - 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 airport selection procedures, en-route cruise control 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 moment 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) interpretation and application of aeronautical meteorological reports, charts and forecasts, codes and abbreviations, use of, and procedures for obtaining meteorological information;
- (f) principles of air navigation with particular reference to instrument flight:
- (g) operational procedures, including
  - (i) the use of aeronautical documentation,
  - (ii) operational procedures for the carriage of freight and dangerous goods,
  - (iii) the procedures relating to aircraft accidents and incidents, and emergency flight procedures, and
  - (iv) the procedures relating to unlawful interference and sabotage of aircraft;
- (h) radio communication, in particular, procedures for communicating with aircraft and relevant ground stations; and
  - (i) principles of flight relating to the appropriate category of aircraft.
- (2) An applicant for a flight operations officer licence shall —
- (a) have received an endorsement for the knowledge test from an authorised instructor who —
  - (i) conducted the training on the knowledge areas, and
  - (ii) certifies that the person is prepared for the required knowledge test; and
- (b) pass the required knowledge test.
- **55.** (1) An applicant for a flight operations officer licence shall have satisfactorily completed a course or approved training and gained -
  - (a) a total of two years experience in any one or in any combination of the following capacities, provided that in any combination of experience the period served in any capacity shall be at least 12 months —

Experience for flight operations officer licence

- (i) as a flight crewmember in air transportation,
- (ii) as a meteorologist in an organisation dispatching aircraft in air transportation, or
- (iii) as an air traffic controller, or a technical supervisor of flight operations officers or air transportation flight operations system;
- (b) 12 months experience as an assistant in the dispatching of air transport.
- (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.
- **56.** The applicant shall have demonstrated by passing the required skills test, at a level appropriate to the privileges being granted, his or her ability to
  - (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;
  - (c) forecast weather trends pertinent to air transportation with particular reference to destination and alternates;
  - (d) determine the optimum flight path for a given segment, and create accurate manual and computer generated flight plans;
  - (e) provide operating supervision and all other assistance to a flight in actual or simulated adverse weather conditions as appropriate to the duties of the holder of a flight operations officer licence; and
  - (f) recognise and manage threats and errors.
- **57.** A holder of a flight operations officer licence may serve in that capacity with responsibility for each area for which the applicant meets the relevant requirements.
  - **58.** (1) A flight operations officer licence shall be valid for five years.
- (2) The flight operations officer licence shall become invalid when a flight operations officer has ceased to exercise the privileges of the licence for a period of six months and remain invalid until the flight operations officer's ability to exercise the privileges of the licence has been re-established.
- (3) The flight operations officer licence may be renewed by presenting to the Authority evidence of successfully passing a competency check on the relevant areas of operation.
- **59.** (1) A person shall not act as a flight operations officer instructor unless he or she is issued by the Authority with a flight operations officer instructor rating.
- (2) A person shall not be qualified to be a flight operations officer instructor unless he or she is at least 21 years of age.
- **60.** An application for a flight operations officer instructor rating shall be made in Form E set out in the Schedule to these Regulations.
- **61.** An applicant for a flight operations officer instructor rating shall hold at least a current and valid flight operations officer licence and have a minimum of three years experience as a flight operations officer.

Skills test for flight operations officer licence

Privilege for flight operations officer licence

Duration and renewal of flight operations officer licence

Flight operations officer instructor rating

Application for flight operations officer instructor rating

Experience required for flight operations officer instructor rating

**62.** A holder of a flight operations officer instructor rating may give instruction to flight operations officer licence applicants and endorse those applicants for a knowledge or skills test as applicable.

Privileges for flight operations officer instructor

**63.** (1) A flight operations officer instructor rating shall be valid for two years.

Duration and renewal of flight operations officer

- (2) A flight operations officer instructor rating that has not expired but due to expire in the next month may be renewed for an additional 24 calendar months if the holder presents to the Authority evidence that he or she has, within the past 12 months preceding the expiry date —
  - (a) conducted at least six exercises in a course for flight operations officer licence: or
  - (b) received refresher training acceptable to the Authority.
- (3) Where the flight operations officer instructor rating has expired, the applicant shall have received refresher training acceptable to the Authority.
- **64.** (1) A person shall not act as a flight operations officer examiner unless he or she is issued by the Authority with a flight operations officer examiner certificate.
- (2) A person shall not be qualified to be a flight operations officer examiner unless he or she is at least 23 years of age.
- **65.** An application for a flight operations officer examiner certificate shall be made in Form F set out in the Schedule to these Regulations and shall —
  - (a) show evidence of a high level of aeronautical knowledge in the subject areas for the flight operations officer certification;
  - (b) have held a flight operations officer licence for at least five years prior to the designation;
  - (c) have been actively exercising the privileges of the flight operations officer licence in commercial air transport in the previous three years;
  - (d) have a good record as a flight operations officer and a person engaged in the industry and community with a reputation for honesty and dependability;
  - (e) have satisfactorily completed the flight operations office examiner orientation program with the Authority; and
  - (f) have a test site that is fully capable of doing all items required for the proper dispatch of a commercial flight in accordance with the regulatory requirements for a flight operations office of an active commercial
- **66.** An applicant for a flight operations officer examiner certificate shall have passed a pre-designation test on —
  - (a) air law and regulations for flight operations officer personnel;
  - (b) aircraft knowledge on the aircraft used for testing;
  - (c) flight performance calculation and planning procedures;
  - (d) human performance;
  - (e) meteorology;
  - (f) navigation;
  - (g) radio communication; and
  - (h) recent changes in technology to include fly-by-wire aircraft systems, GPS navigation, required navigation performance (RNP) requirements, TCAS, ADS-B, as well and enhanced wind shear systems.
- **67.** (1) The Authority shall observe the applicant for a flight operations officer examiner certificate conducting a complete actual certification using the approved STS in a satisfactory manner.

instructor rating

Flight operations officer examiner certificate

Application for flight operations officer examiner certificate

Knowledge required for flight operations officer examiner certificate

Skills test for flight operations officer examiner certificate

Recent experience for flight operations officer examiner certificate

Privileges for

Duration and

flight operations

officer examiner

certificate

renewal of

certificate

flight operations

officer examiner

(2) The applicant for a flight operations officer examiner certificate shall complete all required paper work for the certification as required by the Authority.

- **68.** (1) A flight operations examiner shall maintain currency by —
- (a) attending initial and recurrent training conducted by the Authority; and
- (b) maintaining a current and valid flight operations officer licence.
- (2) The flight operations officer examiner shall conduct at least six skills tests during any 12 months period in order for the designation to remain current.
- (3) The flight operations officer examiner shall be observed by the Authority in the conduct of a skills test at least once each year.
  - **69.** The flight operations officer examiner may —
  - (a) conduct a skills test for the flight operation officer licence in accordance with approved STS standards; or
  - (b) conduct or monitor any portion of a computerized knowledge test.
- **70.** (1) The flight operations officer examiner certificate shall be valid for 12 months.
- (2) The flight operations officer examiner designation may be renewed by the Authority if -
  - (a) the need for the designation remains valid; and
  - (b) the performance of the examiner has been satisfactory.

# PART IX — Aeronautical Station Operator Licence

Aeronautical station operator licence

- **71.** (1) A person shall not act as an aeronautical station operator unless he or she is issued with an aeronautical station operator licence by the Authority in accordance with these Regulations.
- (2) The applicant for an aeronautical station operator licence shall be at least 18 years of age.
- (3) An application for an aeronautical station operator licence shall be made in Form G set out in the Schedule to these Regulations.
- **72.** (1) The applicant for an aeronautical station operator licence shall receive and log ground training from an authorised instructor on the following subjects appropriate to the privileges of an aeronautical station operator
  - (a) general knowledge of air traffic services provided within Botswana;
  - (b) operational procedures of radiotelephony procedures; phraseology, telecommunication network;
  - (c) knowledge of rules and regulations applicable to the aeronautical station operator; and
  - (d) knowledge of principles, use and limitations of telecommunication equipment in an aeronautical station.
  - (2) An applicant for an aeronautical station operator licence shall —
  - (a) receive an endorsement for the knowledge test from an authorised instructor who
    - (i) conducted the training on the knowledge areas, and
    - (ii) certifies that the applicant is prepared for the required knowledge test; and
  - (b) pass the required knowledge test.

Knowledge required for aeronautical station operator

licence

- **73.** An applicant for an aeronautical station operator licence shall have —
- (a) satisfactorily completed a course 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 month period immediately preceding application.
- 74. An applicant for an aeronautical station operator licence shall demonstrate or have demonstrated competence in
  - (a) operating the telecommunication equipment in use; and
  - (b) transmitting and receiving radiotelephony messages with efficiency and accuracy.
- **75.** (1) A holder of an aeronautical station operator licence may act as an operator in an aeronautical station.
- (2) Before exercising the privileges of the licence, the holder of an aeronautical station operator licence shall be familiar with all pertinent and current information regarding the types of equipment and operating procedures used at the aeronautical station.
- **76.** (1) An aeronautical station operator licence shall be valid for a period of five years.
- (2) The licence shall become invalid when an aeronautical station operator ceases to exercise the privileges of the licence for a period of six months and shall remain invalid until the aeronautical station operator's ability to exercise the privileges of the licence is re-established.
- (3) An aeronautical station operator licence that has not expired may be renewed for an additional five years if the holder presents to the Authority, one month before the expiry date, evidence that he or she has, within the past six months preceding the expiry date
  - (a) been actively engaged in the duties of an aeronautical station operator; or
  - (b) received refresher training acceptable to the Authority.

# PART X — Parachute Rigger Licence, Instructor Rating and Designated Examiner Certificate

77. (1) A person shall not pack, maintain, or alter any personnel carrying parachute intended for emergency use in connection with an aircraft of Botswana unless he or she holds an appropriate current licence and type rating issued under this Part.

- Parachute rigger licence
- (2) The Authority may issue the following parachute rigger licences under this Part
  - (a) a senior parachute rigger licence; and
  - (b) a master parachute rigger licence.
- **78.** (1) An application for a parachute rigger licence shall be made in Form B set out in the Schedule to these Regulations.
  - (2) A person shall be eligible for a parachute rigger licence, if he or she —
  - (a) is at least 18 years of age;
  - (b) is able to read, speak, write, and understand the English language; and
  - (c) complies with the requirements of this Part that apply to the licence and type rating he or she seeks.

Experience required for aeronautical station operator licence

Skills for aeronautical station operator licence

Privileges for aeronautical station operator licence

Duration and renewal of aeronautical station operator licence

Application for parachute rigger licence

Senior parachute rigger licence

- **79.** An applicant for a senior parachute rigger licence shall —
- (a) present evidence satisfactory to the Authority that he or she has packed at least 20 parachutes of each type for which he or she seeks rating, in accordance with the manufacturer's instructions and under the supervision of a licensed parachute rigger holding a rating for that type or a person holding an appropriate military rating;
- (b) pass a knowledge test, with respect to a parachute applicable to at least one type parachute appropriate to the type rating sought, on
  - (i) construction, packing, and maintenance, and
  - (ii) the manufacturer's instructions; and
- (c) pass a skills test showing the ability to pack and maintain at least one type of parachute appropriate to the type rating sought and meet the requirements for the relevant skills test.

Master parachute rigger licence

- **80.** (1) An applicant for a master parachute rigger licence shall meet the following requirements
  - (a) present evidence satisfactory to the Authority of at least three years of experience as a parachute rigger; and
  - (b) having satisfactorily packed at least 100 parachutes of each of two types appropriate to type ratings held, in accordance with the manufacturer's instructions —
    - (i) while a licensed and appropriately rated senior parachute rigger, or
    - (ii) while under the supervision of a licensed and appropriately rated parachute rigger or a person holding an appropriate military ratings.
- (2) Where the applicant is not the holder of a senior parachute rigger licence, the applicant shall pass a knowledge test with respect to parachutes appropriate to the type rating sought on their construction, packing, maintenance and manufacturer's instructions.

Skills for master parachute rigger licence

Type ratings for parachute rigger licence

- **81.** An applicant for a master parachute rigger licence shall pass a skills test and show the ability to pack and maintain two types of parachutes appropriate to the type ratings sought.
  - **82.** (1) The Authority may issue the following type ratings under this Part —
  - (a) seat rating;
  - (b) back rating;
  - (c) chest rating; and
  - (d) lap rating.
- (2) The holder of a senior parachute rigger licence who qualifies for a master parachute rigger licence shall be entitled to have placed on the master parachute rigger licence the ratings that were on the senior parachute rigger licence.

Additional type ratings for parachute rigger licence

- **83.** A person who holds a parachute rigger licence who applies for an additional type rating shall
  - (a) present evidence satisfactory to the Authority of having packed at least 20 parachutes of the type rating sought, in accordance with the manufacturer's instructions and under the supervision of a licensed parachute rigger holding a rating for that type or a person holding an appropriate military rating; and
  - (b) pass a skills test, to the satisfaction of the Authority, showing the ability to pack and maintain the type of parachute for which the applicant seeks a rating.

- **84.** (1) A person who holds senior parachute rigger licence may —
- (a) pack or maintain, except for major repair, any type of parachute for which he or she is rated; and
- (b) supervise any person packing any type of parachute for which he or she is rated.
- (2) A person who holds a master parachute rigger licence may —
- (a) pack, maintain, or alter any type of parachute for which he or she is rated: and
- (b) supervise any person packing, maintaining or altering any type of parachute for which he or she is rated.
- 85.  $\dot{A}$  licensed parachute rigger shall not exercise the privileges of the licence unless he or she has at least the following facilities and equipment available
  - (a) a smooth top table at least three feet wide by 40 feet long;
  - (b) suitable housing that is adequately heated, lighted, and ventilated for drying and airing parachutes;
  - (c) enough packing tools and other equipment to pack and maintain the types of parachutes serviced; and
  - (d) adequate housing facilities to perform applicable duties and to protect tools and equipment.
  - **86.** A person who holds a parachute rigger licence shall not —
  - (a) pack, maintain, or alter any parachute unless he or she is rated for that type;
  - (b) pack a parachute that is not safe for emergency use;
  - (c) pack a parachute that has not been thoroughly dried and aired;
  - (d) alter a parachute in a manner that is not specifically authorised by the Authority or the manufacturer;
  - (e) pack, maintain, or alter a parachute in any manner that deviates from procedures approved by the Authority or the manufacturer of the parachute; or
  - (f) exercise the privileges of the licence and type rating,

unless he or she understands the current manufacturer's instructions for the operation involved and has performed duties under the licence for at least 90 days within the preceding 12 months, or shown to the Authority his or her ability to perform those duties.

**87.** (1) A licensed parachute rigger shall keep a record of the packing, maintenance, and alteration of parachutes performed or supervision of those activities.

- (2) A licensed parachute rigger who packs a parachute shall —
- (a) enter the date and place of the packing on the parachute packing record attached to the parachute;
- (b) note any defects found during any inspection on the packing record; and
- (c) sign the record with his or her name and licence number.
- (3) The record required in subregulation (1) shall contain, with respect to each parachute worked on, a statement of
  - (a) its type and make;
  - (b) its serial number;
  - (c) the name and address of its owner or user;
  - (d) the kind and extent of the work performed;

Privileges for parachute rigger licence

Facilities and equipment for parachute rigger licence

Recent experience for parachute rigger licence

Records for parachute rigger licence

- (e) the date when and place where the work was performed; and
- (f) the results of any drop tests made with it.
- (4) A person who makes a record under subregulation (1) shall keep it for at least two years after the date of recording.
- **88.** (1) A holder of a parachute rigger licence shall have a seal with an identifying mark prescribed by the Authority, and a seal press.
- (2) A parachute rigger shall, after packing a parachute, seal the pack with his or her seal in accordance with the manufacturer's recommendation for that type of parachute.
  - **89.** (1) A parachute rigger licence shall be valid for a period of five years.
- (2) A licence shall become invalid when a parachute rigger ceases to exercise the privileges of the licence for a period of six months and shall remain invalid until the parachute rigger's ability to exercise the privileges of the licence is re-established.
- (3). A parachute rigger licence that has not expired may be renewed for an additional five years if the holder presents to the Authority evidence that he or she has, within the past six months preceding the expiry date
  - (a) been actively engaged in the duties of a parachute rigger; or
  - (b) received refresher training acceptable to the Authority.
- **90.** A person who holds a parachute rigger licence shall display it where he or she normally exercises the privileges of the licence and shall present it for inspection upon the request by the Authority.
- **91.** An applicant for parachute rigger instructor rating shall be at least 21 years of age.
- **92.** An applicant for a parachute rigger instructor rating shall meet the instructor requirements as may be specified by the Authority.
- **93.** An applicant for a parachute rigger instructor rating shall hold at least a current and valid parachute rigger licence and ratings applicable to the instructor rating sought, and have a minimum of three years experience as a parachute rigger.
- **94.** A holder of a parachute rigger instructor rating may give instruction to a parachute rigger licence applicant and endorse the applicant for a knowledge or skills test, as applicable.
- **95.** (1) A parachute rigger instructor rating shall be valid for a period of two years.
- (2) A parachute rigger instructor rating that has expired may be renewed for an additional two years if the holder presents to the Authority evidence that he or she has, within the past 12 months preceding the expiry date
  - (a) conducted at least six exercises in an approved training or course for a parachute rigger licence; or
  - (b) received refresher training acceptable to the Authority.
- **96** An applicant for a designated parachute rigger examiner certificate shall be at least 23 years of age.
  - **97.** An applicant for a designated parachute examiner certificate shall —
  - (a) show evidence of a high level of aeronautical knowledge in the relevant subject areas;
  - (b) have held a parachute rigger licence for at least five years prior to the designation;

Parachute seal

Duration and renewal of parachute rigger licence

Display of parachute rigger licence

Parachute rigger instructor rating

Knowledge required for parachute rigger instructor rating Experience required for parachute rigger instructor rating

Privileges for parachute rigger instructor rating

Duration and renewal of parachute rigger instructor rating

Parachute rigger examiner certificate

Eligibility for parachute rigger examiner certificate

- (c) have been actively exercising the privileges of the parachute rigger licence for the previous three years;
- (d) have a good record as a parachute rigger licence and a person engaged in the industry and community with a reputation for honesty and dependability;
- (e) have satisfactorily completed the designated parachute rigger examiner orientation program with the Authority;
- (f) have a fixed base of operations adequately equipped for all practical subject areas to return to service condition;
- (g) have at the fixed base of operation adequate equipment to test the tasks in each area of operation; and
- (h) have tools, equipment, current publications, and materials required to complete a project assignment as recommended by the parachute manufacturer or industry standards.
- **98.** An applicant for a parachute rigger examiner certificate shall have passed a pre-designation test on
  - (a) air law and regulations for parachute rigger personnel;
  - (b) packing and maintaining a wide variety of parachutes;
  - (c) alterations of parachutes in accordance with manufacture's and industry standards:
  - (d) proper use of seals for identification purposes; and
  - (e) proper record keeping requirements.
- **99.** (1) The Authority shall observe the applicant conducting a complete actual senior parachute or master parachute rigger certification using the approved equipment in a satisfactory manner.
- (2) The applicant shall complete all required paper work for the certification as required by the Authority.
- 100. (1) After designation, a parachute rigger examiner shall maintain currency by -
  - (a) attending initial and recurrent training conducted by the Authority; and
  - (b) maintaining a current and valid parachute rigger licence and applicable ratings.
  - (2) The designated parachute rigger examiner shall —
  - (a) conduct six skills tests during the 12 months period in order for the designation to remain current; and
  - (b) be observed by the Authority when conducting the skills test at least once each 12 months.
- **101.** (1) A designated parachute rigger examiner may conduct a skills test for the senior parachute rigger and master parachute rigger licence in accordance with approved STS standards.
- (2) The designated parachute rigger examiner may conduct or monitor any portion of a computerised knowledge test.
- **102.** (1) The designated parachute rigger examiner certificate shall be valid for 12 months.
- (2) The designated parachute rigger examiner certificate may be renewed by the Authority if the
  - (a) need for the designation remains valid;
  - (b) performance of the examiner has been satisfactory; or
  - (c) parachute rigger examiner has attended the parachute rigger examiner seminar conducted by the Authority in the previous 12 months period.

Knowledge required for parachute rigger examiner certificate

Skills test for parachute rigger examiner certificate

Recent experience for parachute rigger examiner certificate

Privileges for parachute rigger examiner certificate

Duration and renewal of parachute rigger examiner certificate

#### PART XI — Cabin Crew Licence

Eligibility requirements

- **103.** An applicant for a cabin crew licence shall —
- (a) be at least 18 years of age;
- (b) be able to read, speak and understand the English language sufficiently to adequately carry out the responsibilities of a cabin crew member;
- (c) have completed a training course approved by the Authority; and
- (d) have passed a knowledge test.

Specific requirements

- **104.** (1) The Authority may issue a cabin crew licence, where an applicant successfully completes
  - (a) an initial medical examination and an assessment done in accordance with this part; and
  - (b) an initial safety training course and an associated examination in as required under this Part.
- (2) A cabin crew licence issued under subregulation (1) shall be in Form H set out in the Schedule to these Regulations.
- (3) A person who holds a cabin crew licence shall carry the licence, when exercising the privileges of the licence, on the appropriate type of aircraft.
- **105.** (1) A training course and an associated examination or checking specified in this Part shall be
  - (a) conducted according to a programme approved by the Authority;
  - (b) provided by an operator, an Approved Training Organisation or the Authority; and
  - (c) performed by a person who is suitably qualified and experienced, as may be determined by the Authority.
- (2) An operator shall establish a detailed programme for a training course, in accordance with the requirements set by the Authority or an approved training organisation, to cover the duties and responsibilities performed by the cabin crew members.
- (3) The programme under subregulation (2) shall, in order to enable a cabin crew member to achieve the adequacy level of proficiency, include
  - (a) theoretical and practical instruction; and
  - (b) individual or collective practice, relevant to each training subject.
- (4) An operator shall conduct a proficiency check on a cabin crew member for all training received, except for crew resource management training.
- **106.** (1) An applicant for a cabin crew licence shall undergo an initial safety training course to
  - (a) familiarise himself or herself with the aviation environment; and
- (b) acquire the adequate general knowledge and basic proficiency required to perform cabin crew duties and responsibilities.
- (2) A programme of an initial safety training course shall include theoretical and practical training on
  - (a) the general theoretical knowledge on aviation, aviation regulations relevant to cabin crew and safety functions and responsibilities of cabin crew;
  - (b) communication;
  - (c) an introductory course to
    - (i) human factors in aviation, and
    - (ii) crew resource management, conducted by at least one cabin crew resource management instructor;

Training courses, examinations and checking

Initial safety training and examinations

- (d) passenger handling and cabin surveillance;
- (e) aero-medical aspects and first aid;
- (f) dangerous goods;
- (g) security;
- (h) fire and smoke training; and
- (i) survival training on the ground and in water.
- **107.** (1) A cabin crew member may extend the privileges of his or her cabin crew licence, as may be appropriate to the type of aircraft operated, if he or she undertakes —

checking

- (a) a training course to acquire the adequate proficiency to perform all cabin crew duties, relevant to the type of aircraft; and
- (b) an associated checking, covering all training subjects to demonstrate that he or she has attained the required level of proficiency.
- (2) A programme of the training course, for a cabin crew member, shall —
- (a) be based on the specific data provided for the relevant type of
- (b) include training and practice on a representative training device or on the actual aircraft; and
- (c) cover training elements that are aircraft type-specific, for
  - (i) the aircraft general description,
  - (ii) all safety equipment and systems installed,
  - (iii) normal and emergency procedures,
  - (iv) actual operation and opening of each type or variant of normal doors and emergency exits of the aircraft in normal and emergency modes by a cabin crew member, and demonstration by a cabin crew member of the operation on the other exits;
  - (v) fire and smoke training,
  - (vi) evacuation procedures including slide training where fitted,
  - (vii) pilot incapacitation, and
  - (viii) crew resource management.
- (3) A cabin crew member shall, in addition to the training required under subregulation (2), undertake a related operator's aircraft type training, as may be specified in this Part, before exercising the privileges of the cabin crew licence on an aircraft type to be operated.
- (4) An operator or person responsible for training a cabin crew member may combine elements of training which require individual practical participation with practical checks.
- **108.** (1) An operator shall ensure that a cabin crew member undergoes an appropriate aircraft type training before —
  - (a) a cabin crew member's first assignment to act as a member of the cabin crew of the particular aircraft type; or
  - (b) assignment on another aircraft type.
- (2) For purposes of subregulation (1) (b), a cabin crew member shall undergo an appropriate differences training on —
  - (a) a variant of an aircraft type currently operated; or
  - (b) currently operated aircraft types or variants with different safety equipment, safety equipment location and safety procedures.
- (3) A programme of the operator's aircraft type training and differences training shall —
  - (a) involve training and practice on a representative training device or on the actual aircraft;

Aircraft type specific training and

Operator's aircraft type training and differences training

- (b) comprise training in the operator's standard operating procedures for cabin crew members on first assignment of duties by the operator; and
- (c) cover, in addition to the aircraft type-specific training subjects specified in this Part, the following —
  - (i) description of the cabin configuration,
  - (ii) location, removal and use of all portable safety equipment carried on-board the aircraft type or variant,
  - (iii) the operator's normal and emergency procedures,
  - (iv) passenger briefing, safety demonstrations and crowd control;
  - (v) fire and smoke training using the operator's equipment;
  - (vi) the operator's evacuation procedures;
  - (vii) pilot incapacitation; and
  - (viii) the operator's crew resource management training.
- (4) A cabin crew member with no previous comparable experience shall complete appropriate familiarisation training on an aircraft type or a variant, under supervision, before being assigned by the operator as one of the minimum number of cabin crew required for the aircraft type or variant.
- **109.** (1) A cabin crew member who has not undertaken any flying duties for more than six months shall undergo refresher training on the aircraft type to be operated before being assigned duties by the operator.
- (2) A cabin crew member who has not undertaken flying duties on one particular aircraft type during the preceding six months shall, before being assigned on that aircraft type, complete
  - (a) an applicable refresher training in accordance with subregulation (3); or
  - (b) two refresher sectors, on the aircraft type, under appropriate supervision.
- (3) A programme for a refresher training under subregulation (2) shall cover, as a minimum for each aircraft type
  - (a) emergency procedures;
  - (b) evacuation procedures;
  - (c) actual operation and opening, by a cabin crew member, of each type or variant of normal and emergency exits in the normal and emergency modes;
  - (d) demonstration of the operation of all other exits; and
  - (e) location and handling of all safety and emergency equipment carried on the aircraft.
  - **110.** (1) A cabin crew member shall undergo, every 12 months —
  - (a) a recurrent training course to maintain the proficiency required to perform all cabin crew duties and responsibilities; and
  - (b) an associated testing covering all subjects of the training programme to demonstrate that he or she has maintained the required level of proficiency.
- (2) A programme of a recurrent training course required under subregulation (1) shall cover
  - (a) within the 12 months
    - (i) review and update of the relevant aviation regulations, crew resource management, incident and accident review and effects of surface contamination, and
    - (ii) for each aircraft type or variant to be operated, the type specific emergency and evacuation procedures and individual touch-drill for opening each type or variant of normal and emergency doors and exits for passenger evacuation; and

Operator's refresher training

Recurrent training and checking

- (b) within intervals not exceeding three years
  - (i) actual operation and opening in a representative training device or in the actual aircraft of each type or variant of normal and emergency exits, in the normal and emergency modes, and
  - (ii) training on the use of equipment and systems relevant to pilot incapacitation;
- **111.** (1) An operator shall assign —
- (a) at least one cabin crew member per a pair of floor level emergency exits, for the operation of an aircraft with a maximum passenger seating configuration of more than 19; or
- (b) one cabin crew member for every 50, or fraction of 50 passengers carried on the same deck of an aircraft; and
- (2) Where the operation requires more than with more than one cabin crew member, the operator shall nominate a cabin crew member responsible to the pilot-in-command.
- (3) The operator shall take into account the type and duration of operations, when determining the number and composition of the cabin crew.
- (4) Where more than one cabin crew member is required, the composition of the cabin crew shall comprise of a senior cabin crew member nominated by the operator.
- 112. (1) An operator may assign a cabin crew member duties on an aircraft, if he or she —
  - (a) is at least 18 years of age;
  - (b) has been assessed as physically and mentally fit to perform all assigned duties safely, in accordance with the requirements applicable to the type of operation;
  - (c) has successfully completed all training requirements under this Part; and
  - (d) has been checked as proficient to perform all assigned duties.
- (2) The operator shall ensure that all cabin crew members and their functions with regard to the flight and passenger safety —
  - (a) are easily identifiable to the passengers; and
  - (b) wear the operator's cabin crew uniform provided that such uniform is compatible with the safety functions of cabin crew and is clearly identifiable to the passengers.

## PART XII — Miscellaneous Provisions

- 113. (1) Where any provision of these Regulations is contravened in Penalties 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 regulation 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 all due diligence to prevent the contravention.
- (3) Any person who contravenes any provision to these Regulations commits an offence and shall be liable to the penalties specified under section 88 of the Act.

Number and composition of cabin crew

Conditions for assignment of cabin crew to duties

Transitional provisions

- 114. (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.

Savings

**115.** A valid licence, certificate, permit or authorisation issued or granted by the Authority before the commencement of these Regulations shall remain valid until it is expired or are revoked.

#### SCHEDULE Form A

(regulations 7 (1) and 30)

APPLICATION FOR AIRCRAFT MAINTENANCE ENGINEER INSTRUCTOR/EXAMINER RATING

	ALTERNION FOR MICERIA I WITH TENANCE ENGINEER INSTRUCTOREARMINER RATING
A.	THIS APPLICATIONS IS FOR:
4.	Tick/check the applicable box
	☐ Aircraft Maintenance Engineer Instructor
	☐ Aircraft Maintenance Engineer Examiner
5.	State purpose of application
	☐ Original Issuance ☐ Additional Rating ☐ Renewal ☐ Convernsion of foreign license
6.	Specify Rating sought (if applicable)
В.	APPLICANT INFORMATION
14.	Surname 15. Other Names
16.	Nationality 17. ID/Passport Number
18.	Place of Birth 19. Date of Birth (day-month-year)
20.	Mailing Address
21.	Telephone No. 22. E-mail
23.	Have you ever had na Instructor or Examiner No Licence Suspended or Revoked
	Yes (Explain on a separate sheet keying to appropriate item number
24.	Do you now or have ever held a CAAB Aircraft Maintenance
25.	Have you ever been denied to exercise privileges of an Aircraft
26.	If you answered "Yes" to item 12 above, state reason(s) for denial on a separate sheet.
C.	EMPLOYMENT INFORMATION
3.	For applicant for Instructor authority, provide particulars of the Approved Training Organisation (ATO) below:
F.	Name and physical G. ATO Number H. ATO Stamp showing Address of ATO ATO Name and Number
4.	For applicant for Examiner authority, please provide details of the current employer:
	NAME AND PHYSICAL ADDRESS OF COMPANY

5.	AIRCRAFT OR EQUIPM INSTRUCTION/EXAMIN CONDUCTED: (Continue on separate shee and attach any other suppo documentation)	NATION WILL BE	СН									
D.	RECORD OF EXPERIEN	CE										
		ing to license/rating app e sheet if necessary and		y other supp	porting do	cumenta	ntion)					
DA	TES: MONTH & YEAR	ATO/EMPLOYER A	ND LOC	CATION			ORK PERFO					
Froi	m To				(include	equipme	nt type worl	ked on)				
E.	RENEWAL OF INSTRUC	TOR OR EXAMINER	LICENS	R.								
	TE: Complete this Section or											
6.	License Number	my if applying for reme										
7.												
8.												
9.	I hereby certify that during	the period		to		I	have exerci	sed				
	the privileges of my Instruc	ctor/Examiner License I	Number:									
F.	APPLICANT'S DECLAR	ATION										
I, th	ne undersigned, hereby certify	y that:										
1.	I am aware that delegation withdrawn at any stage.	is at the sole discretion	of the Au	thority, is a	privilege	and not a	a right, and ı	may be				
2.	I am aware that I will be sul and re-designation,	bjected to annual oversig	th by the	CAAB for t	he purpos	e of maii	ntenance of	standards				
3.	I am aware that honesty an	d integrity are essential	pre-requi	sites for des	signation a	and the n	naintenance	thereof.				
COI	DE OF CONDUCT											
I un	nderstand that I am mandated	:-										
1.	To act professionally, with	integrity and with hone	sty;									
2.	To comply with all Regular	tions; and,										
3.	To be unbiased and fair in	my assessment.										
4.	Date	5.	Signatu	re of Applic	ant							

# FORM B (regulations 25 (1) and 78 (1))

			APPLICATION FO	OR AIR	MAN LI	CENCE	AND/0	OR RATING			
Α.	THIS APPLI	CAT	IONS IS FOR:								
1.	Tick/check t	he aj	oplicable box								
	□ A	ircra	ft Maintenance Engir	eer's Li			Parachute R	igger L	cense		
	$\Box$ A	viatio	on Repair Specialist I	icence				Senior		Master	
	A	irfra	me Rating				Seat		Chest		
	Pe	ower	plant					Back		Lap	
2.	Specify Ratir (if applicab		ught								
3.	State purpose	e of a	pplication								
	☐ Origina	al Issi	uance $\square$ A	Additiona	al Rating	g 🗆	Renev	val		ernsion of n license	
В.	APPLICANT	ΓINF	ORMATION								
1.	Surname				2.	Other N	Vames				
3.	Nationality				4.	ID/Pass	port N	umber			
5.	Place of Birth	h			6.	Date of	Birth (	day-month-yea	ar)		
7.	Mailing Addı	ress									
8.	Telephone No	0.			9.	E-mail					
10.			d na Instructor or Exa d or Revoked?	miner		No					
	Licence Susp	ocnac	d of Revoked:			Yes		in on a separat oriate item nun		keying to	
11.	Do you now	or ha	ve ever held a CAAB	Airman	License	e?			No [	□ Yes	
12.			en convicted for viola marijuana, and depre					nnces?	No [	Yes	
13.	If you answer	red "	Yes" to item 12 above	e, state d	ate of fi	nal conv	iction.				
C.	BASIS FOR	APPI	LICATION								
1.	This applicati	ion is	made on the basis of:								
	CIVIL EXPERIENC	CE C	MILITARY EXPERIENCE	□ GRA APPI	DUATE ROVED	COURS	se 🗆	LETTER OF I repairman (At			ίΟN
2.	For graduate	of ap	proved course, provid	e particu	lars of t	he school	below	:			
	A. NAME OF SCI		D LOCATION L			·		B. SCHOO NUMBE			

C.		RRICULUM FROM IICH GRADUATEI			<b>D.</b> 1	DATE								
E.	PRO	JDENT HAS MAD OGRESS AND IS R TAKE THE ORAL			OOL NAME NUMBER		CHOOL OFFICIAL'S SIGNATURE							
D.	REG	CORD OF EXPERI	ENCE											
	1.	List experience rel	ating to license/rating a	applied for. and attach ar	y other supporti	ng documentat	tion)							
DA	ΓES: Froi	MONTH & YEAR To	EMPLOYER AND LO	OCATION		RK PERFORM nent type work								
2.	Indi of p	achute Rigger Appli icate by type and nu parachutes packed		SEAT	CHI									
				ou. DEI	TOR RIGGER		KI RIGOZK							
Е.	REI	NEWAL OF LICEN	SE											
	NO	TE: Complete this S	Section only if applying	g for Renewa	al of a License									
	1.	License Number		4. Expiry	Date									
	2.	Date of last certification in accordance with the Civil Aviation Regulations												
	3.	Precise nature of duties since last application, stating type(s) or equipment and appropriate date.												
	4.	Are you conversant with the Botswana Civil Aviation Regulations?  Yes  No												
	5.		nt during the period y Airman License Nun	nber:	to		I have exercised							
F.	API	PLICANT'S DECL	ARATION											
	I he	reby declare that all	the information in this a	pplication and	d all attached doc	cumentation are	true in any respect.							
	1.	Date		2. Signat	ure of Applicant	t								
G.	FEE	ES												
	1.		cordance with the Civi	l Aviation (P	ersonell Licensi	ng) Regulation	is.							
	(a) (b) (c) (d) (e)	Application Issue of lice Renewal of Additional Conversion	ense license											
	2.	Payment method -	Please indicate metho	d of paymen	t below									
		□ Cash	[Please do not enclose cash in the application		Cheque	Bank deposit [CAAB Acco	t ount details below]							
	3.	CAAB Account De	etails – For additional ir	nformation pl	ease contact CA	AB Accounts (	Office at +3688200							
		Name of Account: Name of Bank: Branch Code:	Barclays Bank of	Botswana	]	Branch Name: Swift Code:	Barclays House BARCBWGX							

# FORM C (regulation 41 (1))

A	PPLICAT	ION FOR	ISSUE OF A	IR TRAF	FIC CONTRO	OLLER	LIC	CENCE		
SURNAME				NAME						
PASSPORT NUME	BER			DATE (	OF BIRTH					
NATIONALITY				PLACE OF BIRTH						
DATES OF MEDIC	CAL		FROM				ТО			
GENDER		MALE		FEMALE						
RATING			STATION	1	VALIDAT	TED BY	Y		DA	ATE
TELEPHONE NUI	MBER			EMAIL	ADDRESS					
Date of last compet	tency chec	ck		CAAB Authorised Examiner/Observer						
SIGNATURE OF A	APPLICA	NT	NAME II	N BLOCK	LETTERS			DATE		
			FOR OFFI	CIAL US	E ONLY					
Details checked by	:									
OFFICIAL'S SIGN	IATURE		NAME II	N BLOCK	LETTERS				DA	ATE
AMOUNT PAID	P	RECEII	T NUMBEF	2						

# FORM D (regulation 53)

APPLICATION FOR FLIGHT OPERATIONS OFFICER LICENCE											
SURNAME				NAME							
PASSPORT NUMBE	ER			DATE C	OF BIRTH						
NATIONALITY				PLACE	OF BIRTH						
DATES OF MEDICA	AL		FROM				ТО				
GENDER	GENDER MALE				FEMALE	E					
NAME AND ADDRE TRAINING ORGAN											
APPLICANT'S POS BOTSWANA	STAL AI	ODRESS IN									
RESIDENTIAL ADI	DRESS										
TELEPHONE NUM	BER			EMAIL	ADDRESS						
		•									
Type (s) of Aircraft	to be rat	ed on				Date o Trainir	f last Recu	ırrent			
SIGNATURE OF AF	PPLICA	NT	NAME IN	N BLOCK	LETTERS	_ II allilli	<u>ıg</u>	D	ATE		
			FOR OFFI	CIAL US	E ONLY						
Details checked by:											
OFFICIAL'S SIGNA	ATURE		NAME IN	N BLOCK	LETTERS			DATE			
AMOUNT PAID	P	RECEIPT	NUMBER								

## FORM E (regulation 60)

APP	LICATION	FOR FLIGH	T OPER	ATIONS	OFFICER INS	STRUCTO	OR RATING	3		
SURNAME										
PASSPORT NUM	BER			DATE	OF BIRTH					
NATIONALITY				PLACE	E OF BIRTH					
LICENCE TYPE				DATE	OF ISSUE					
LICENCE NUMB	ER			EXPIR	Y DATE					
GENDER		MALE			FEMALE	,				
NAME AND ADD TRAINING ORGA										
POSTAL ADDRE	SS									
APPLICANTS POSTAL ADDRESS IN BOTSWANA										
TELEPHONE NU	MBER			EMAII	ADDRESS					
STAMP SHOWIN ORGANISATION			J							
SIGNATURE OF	APPLICAN'	ΓΙ	NAME II	N BLOCI	K LETTERS		DATE			
		FC	D OEEL	CIAL HS	E ONI V					
FOR OFFICIAL USE ONLY :  Details checked by:										
OFFICIAL'S SIGNATURE NAME IN BLOCK LETTERS DATE										
AMOUNT PAID	P	RECEIPT N	IUMBEI	2						

## FORM F (regulation 65)

APPLICATION FOR FLIGHT OPERATIONS OFFICER EXAMINER CERTIFICATE																	
DETAILS OF APPLICANT	Γ				Company												
Surname					Fi	rst ]	Na	ames									
Date of Birth					Nationality												
Postal Address					Ph	one	e Ì	Number									
					Email Address												
Licence Number					Id	enti	ity	/Passport Nur	nber								
Have you previously been of	lenied to	exerci	ise the	FO	OE I	oriv	ile	eges?			Y	ES			No		
If YES, please state the reas																	
DETAILS OF COMPANY																	
Name of Company																	
Physical Address																	
DECLARATION BY APPLICANT																	
I, the undersigned, hereby c 4. I am aware that dele be withdrawn at any 5. I am aware that I w. standards and re-des 6. I am aware that hot thereof.  CODE OF CONDUCT I, understand that I am man 4. To act professionally 5. To comply with all I 6. To be unbiased and	gation is vistage. ill be sub- signation nesty and dated: y, with int Regulation	at the jected inter	ty and	nua are	l ove	ersiş	gh al j	t by the CAA	B fo	r the	pur	pose	of n	naiı	ntena	nce	of
SIGNATURE OF APPLICA	ANT		NAN	1E I	N BI	LOC	CF	K LETTERS			D	ATE	E				
FOR OFFICIAL USE ONL	Y																
Recommended						1	No	ot Recommend	ded								
Period of Validity	У	у	у		to		d	d	m	m	у	у	у	у			
PRIVILEGES/RESTRICTI	ONS						_										
OFFICIAL'S SIGNATURE	N BI	LO	CF	K LETTERS						Da	ATE						

# FORM G (regulation 71 (3))

A	APPLICAT	ΓΙΟΝ FOR A	ERONAUT	ICAL S	TATION OPE	RATOR	LICENCE	
SURNAME				NAME				
PASSPORT NUMI	BER			DATE OF BIRTH				
NATIONALITY				PLACI	E OF BIRTH			
LICENCE TYPE				DATE	OF ISSUE			
LICENCE NUMB	ER			EXPIR	Y DATE			
GENDER		MALE			FEMALE	Ξ.		
TELEPHONE NU	MBER			EMAII	LADDRESS			
SIGNATURE OF A	APPLICA	NT	NAME IN	BLOC.	K LETTERS		DATE	
			FOR OFFI	CIAL U	SE ONLY			
Details checked by	:							
OFFICIAL'S SIGN	NATURE	NAME I	N BLOCK I	LETTERS DATE				
				·				
AMOUNT PAID	Р	RECEIP	T NUMBER					

## FORM H (regulation 104 (2))

APPLICATION FOR CABIN CREW LICENCE													
SURNAME							NAM	ΙE					
PASSPORT NUMB	ER						DATI	E OF BIRT	Н				
NATIONALITY							PLACE OF BIRTH						
DATES OF MEDIC	CAL				FROM				TC	)			
GENDER			MALE					FEMALE					
NAME AND ADDI	MPLOYE:	R											
APPLICANT'S PO BOTSWANA	DDI	RESS IN											
RESIDENTIAL ADDRESS													
TELEPHONE NUM					EMAIL ADDRESS								
			TYPE	R	ATING (	& EN	IERGE	ENCY DRII	LL				
Type (s) of Aircraft	Dated of	las	t Evalua	tion	Date	of last Dit	ching		]	Date of last	fire Drill		
Date of last Recurre	ent Traini	ing						ne of CAAF ructor	3 Autho	orised			
SIGNATURE OF A	PPLICA	NT		1	NAME II	N BL	OCK I	LETTERS				DA	TE
				F	OR OFF	ICIA	L USE	ONLY					
Details checked by:													
OFFICIAL'S SIGN	1	NAME IN BLOCK LETTERS						DA	TE				
AMOUNT PAID P RECEIPT NUMBER													

MADE this 22nd day of January, 2013.

NONOFO E. MOLEFHI, *Minister of Transport and Communications*.

### CIVIL AVIATION ACT (Cap. 71:01)

### CIVIL AVIATION (PERSONNEL LICENSING) (FLIGHT CREW) REGULATIONS, 2013

(Published on 22nd February, 2013)

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**SCHEDULE** 

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 —

#### PART I — Preliminary

Citation

**1.** These Regulations may be cited as the Civil Aviation (Personnel Licensing) (Flight Crew) Regulations, 2013.

Interpretation

- 2. In these Regulations 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 pilot time obtained in an aircraft or approved flight simulation training device for meeting the training and flight time requirements of these Regulations;
- "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, 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 Authority (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";
- "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;

- "complex aeroplane" means an aeroplane that has retractable landing gear, flaps, and a controllable pitch propeller; or in the case of a seaplane, flaps and a controllable pitch propeller;
- "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 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 an aeroplane or glider, 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;
- "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 time" means time in which cockpit instruments are used as the sole means for navigation and control;
- "ICAO Annex 1" means Annexure 1 to the Convention on International Civil Aviation:
- "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 fifteen minutes after sunset and fifteen 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;
- "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, cannabinoids, sedatives and hypnotics, cocaine, other psychostimulants, hallucinogens and volatile solvents, whereas coffee and tobacco are excluded;
- "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 of the aircraft 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 a State 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 requirements for licences and ratings

Licences

- **3.** The Authority may, where on application, an applicant satisfies the requirements of these Regulations issue the following types of pilot licences
  - (a) private pilot licence;
  - (b) commercial pilot licence;
  - (c) airline transport pilot licence;
  - (d) multi-crew pilot licence; and
  - (e) student pilot licence.

- **4.** (1) The Authority may, where an applicant satisfies the requirement of Ratings these Regulations, issue
  - (a) category ratings for
    - (i) an aeroplane,
    - (ii) a helicopter,
    - (iii) a glider,
    - (iv) an airship,
    - (v) free balloon, and
    - (vi) powered-lift;
  - (b) class ratings for
    - (i) a single-engine land aeroplane,
    - (ii) a multi-engine land aeroplane,
    - (iii) a hot air-balloon,
    - (iv) a gas-balloon,
    - (v) a helicopter certified for single pilot operations that has comparable handling, performance and other characteristics, or
    - (vi) any rating considered necessary by the Authority;
  - (c) type ratings for
    - (i) an aircraft certificated for operation with a minimum crew of at least two pilots,
    - (ii) each type of helicopter certificated for single pilot except where a class rating has been issued under subregulation (b), or
    - (iii) any aircraft considered necessary by the Authority;
  - (d) instrument ratings for
    - (i) an aeroplane, or
    - (ii) a helicopter; and
  - (e) ground or flight instructor ratings for the class, instrument, type and category of the appropriate aircraft according to the instruction to be taught.
- (2) The Authority may require additional knowledge for type or class ratings for high performance aeroplanes, if the applicant has not fulfilled the airline transport pilot licence knowledge requirements.
  - 5. An applicant shall be eligible for a licence or rating if —
  - (a) he or she is a fit and proper person;
  - (b) he or she has sufficient ability in reading, speaking and understanding the English language in order to carry out responsibilities of licence or rating applied for;
  - (c) he or she meets eligibility requirements appropriate for the licence or rating applied for; and
  - (d) the issue of the licence or rating is not contrary to aviation safety.

General requirements for licences and ratings Authorisations

- **6.** (1) The Authority may issue —
- (a) a student pilot authorisation where a student pilot licence has not been issued; and
- (b) an instructor authorisation for training in a flight simulation training device.
- (2) The Authority may issue the following authorisations to place on a pilot licence -
  - (a) a category II pilot authorisation; and
  - (b) a category III pilot authorisation.

Endorsements

- 7. An authorised instructor may make the following endorsement on a pilot licence
  - (a) a complex aerodrome endorsement;
  - (b) a high performance aeroplane endorsement; and
  - (c) a high altitude aircraft endorsement.

Medical certificates

**8.** An applicant for a student pilot licence, private pilot licence, designated examiner certificate, delegated examiner rating or flight instructor rating shall hold a medical certificate appropriate for the licence, rating or certificate applied for in order for such licence, rating or certificate to be valid.

Privileges under licence, etc

- **9.** (1) A holder of a licence, certificate, authorisation or rating shall not exercise privileges
  - (a) other than those granted by the licence, certificate, authorisation or rating; and
  - (b) granted by the licence or rating unless he or she maintains competency and satisfies the requirements in these Regulations for recent experience.
- (2) Maintenance of competency under subsection (1) (b) shall be indicated in the personal licence or record such as the logbook of the holder of the licence.

Age restrictions

- **10.** (1) A holder of a licence issued under these Regulations shall not act as a pilot-in-command or co-pilot of an aircraft engaged in commercial air transport if he or she has attained the age of 60 years except where
  - (a) the aircraft is equipped for dual pilot operation or equipped with dual controls; and
  - (b) the flight crew of the aircraft has an appropriately licensed pilot under the age of 60 years.
- (2) A holder of a licence issued under these Regulations shall not act as a pilot-in-command or co-pilot of an aircraft engaged in commercial air transport if he or she has attained the age of 65 years.

Language proficiency

- 11. (1) A holder of a pilot licence, air traffic controller licence or, flight radiotelephone operator licence shall demonstrate the ability to speak and understand the English language to the level specified in the language proficiency requirements for such licences.
- (2) A holder of a pilot licence specified in sub-regulation (1), who demonstrates English language proficiency below the expert level (Level 6), shall be formally evaluated at intervals in accordance with an individual's demonstrated language proficiency level as follows —
- (a) those demonstrating language proficiency at the operational level (Level 4) shall be evaluated once every three years;
  - (b) those demonstrating language proficiency at the extended level (Level 5) shall be evaluated once every six years; and
  - (c) those at expert level (Level 6) shall be exempt from further English language evaluation.

#### PART III — Recognition of military competency

12. A rated military or former military pilot who meets the requirements of these Regulations may apply on the basis of his or her military training for —

Application by military pilot

- (a) a commercial pilot licence or private pilot licence;
- (b) a rating in the category or class of aircraft for which he or she is qualified;
- (c) an instrument rating with the appropriate category rating for which he
  or she is qualified;
- (d) a type rating where appropriate; and
- (e) a flight instructor rating.
- 13. The Authority may issue the appropriate licence or rating to an applicant under regulation 12-

Military pilot

- (a) where the applicant has been on active flight status within the past 12 months preceding the application, and the applicant passes a knowledge test on the following subjects
  - (i) air law,
  - (ii) aeronautical weather codes,
  - (iii) flight performance and planning,
  - (iv) human performance; or
- (b) where the applicant has not been active on flight status within the past 12 months preceding the application, and the applicant passes both the knowledge and skills test.
- **14.** The Authority may issue a senior parachute rigger licence to an applicant under regulation 12, if he or she —

Military parachute rigger

- (a) passes a knowledge test; and
- (b) produces satisfactory documentary evidence and the Authority is satisfied that the applicant
  - (i) is a member or civilian employee of an armed force in Botswana, or
  - (ii) is a civilian employee of a regular armed force of a foreign Contracting State, and
  - (iii) has been discharged or released from the armed force within 12 months before making the application;
- (c) is serving or has served as a parachute rigger of an armed force within 12 months of making an application; and
- (d) has the experience required under these Regulations.

#### PART IV — Validation, conversion and authorisations of foreign licences

**15.** (1) The Authority may issue a validation certificate to a pilot who holds a licence or certificate from a foreign Contracting State, issued in accordance with ICAO Annex 1, if the Authority is satisfied that the applicant —

Validation of foreign pilot licence

- (a) is eligible to the licence or rating sought; and
- (b) fulfils the requirements of these Regulations.
- (2) A person who holds a current and valid pilot licence issued by a foreign Contracting State may apply for a validation certificate of such licence for use on an aircraft registered in Botswana.

Application for validation of foreign pilot licence

- **16.** (1) An application for a validation certificate shall be made to the Authority in Form A set out in the Schedule to these Regulations and shall include
  - (a) the foreign licence or certificate and evidence of the required experience;
  - (b) a certified copy of a medical certificate issued under these Regulations or a certified copy of a current medical certificate issued by the foreign Contracting State which issued the applicant's licence; and
  - (c) evidence of language proficiency in the English language with the language proficiency of at least level 4.
- (2) Where the pilot's English language proficiency is below level 4, the validation shall be limited for use on Botswana registered aircraft for use within Botswana.
- (3) The Authority shall, before issuing a validation certificate, verify the authenticity of the -
  - (a) foreign licence or certificate,
  - (b) rating or authorisation on the foreign licence; and
  - (c) medical certificate,

with the foreign Contracting State that issued the licence.

- (4) The Authority shall validate a rating or authorisation on a foreign licence or certificate when validating the licence.
- (5) A person applying for a validation certificate with private pilot licence, commercial pilot licence, or airline transport pilot licence privileges shall —
- (a) demonstrate to the satisfaction of the Authority, knowledge relevant to the licence to be validated of
  - (i) air law,
  - (ii) meteorology,
  - (iii) operational procedures, and
  - (iv) radiotelephony; and
- (b) complete a skills test relevant to the licence and ratings to be validated in accordance with the privileges of the licence.
- **17.** (1) The Authority may issue a validation certificate valid for a period of 12 months:

Provided that the period of validity shall not extend beyond the period of validity of the foreign licence, ratings or authorisations and medical certificate.

- (2) The validation certificate shall be in the form and manner prescribed by the Authority in Form B set out in the Schedule to these Regulations.
- **18.** (1) A person who holds a current and valid foreign pilot licence with privileges may apply for a conversion of that licence and be issued with a pilot licence by the Authority for use on aircraft registered in Botswana subject to having saisfied the following requirements
  - (a) the applicant shall present evidence and demonstrate to the Authority English language proficiency skills as specified in regulation 16 (1) (c);
  - (b) the applicant shall obtain the appropriate medical certificate;
  - (c) the applicant shall demonstrate, to the satisfaction of the Authority, knowledge of air law;
  - (d) the applicant shall undergo a skills test with a delegated flight examiner; and
  - (e) the applicant shall provide evidence of appropriate flight hours.

Issue of Validation Certificate

Conversion of foreign pilot licence

- (2) The Authority shall verify the authenticity of the licence, rating or authorisation and the medical certificate with the foreign Contracting State that issued the licence prior to converting the licence.
- (3) Where the applicant under subregulation (1) holds a commercial pilot licence or airline transport licence with the appropriate medical certificate, issued by a foreign Contracting State, the Authority may convert the applicant's licence to the appropriate licence and rating issued in Botswana if he or she
  - (a) holds a current validation certificate issued under regulation 17;
  - (b) has completed 500 flight hours in Botswana registered aircraft which are operated by an operator established in Botswana exercising privileges granted by the validation certificate;
  - (c) presents to the Authority the foreign licence and evidence of the 500 flight hours by presenting record such as the logbook; and
  - (d) holds or has obtained a medical certificate under these Regulations appropriate to the licence to be converted.
- (4) Ratings listed on a foreign pilot licence that have been validated in accordance with regulation 16 may be placed on a converted licence.
- **19.** (1) The requirements stated in regulation 16 shall not apply where an aircraft registered in Botswana is leased to, chartered by or interchanged by an operator of foreign Contracting State:

Provided that during the term of the lease the operator has accepted responsibility for the technical and operational supervision of the aircraft.

(2) The Authority may validate a licence of a cabin crew member of a foreign Contracting State:

Provided that —

- (a) the privileges of the validation certificate are restricted for use during the lease, charter or interchange period and nominated aircraft; and
- (b) the specified operations of the nominated aircraft during the lease, charter, or interchange period do not involve a Botswana operator directly or indirectly through a lease or other commercial arrangements.
- **20.** (1) Notwithstanding the requirements under this Part, the Authority may temporarily validate a licence issued by a Contracting State, including an instructor rating or examiner authorisation issued by that state, where there is need to fulfil specific tasks of limited duration and the holder of the licence
  - (a) possesses an appropriate licence, medical certificate, type ratings and instructor or examiner qualifications valid in the foreign Contracting State which issued the licence;
  - (b) is employed by an aircraft manufacturer or Approved Training Organisation performing training on behalf of the aircraft manufacturer who is located outside Botswana; and
  - (c) is limited to performing flight instruction and testing for initial issue of type ratings, the supervision of initial line flying by the pilots of an operator in Botswana, delivery or ferry flights, initial line flying, flight demonstrations or test flights.
- (2) The holder of a temporarily validated licence shall, when conducting or supervising line flying, be subject to the relevant requirements as provided for in these Regulations.

Validation of leased, chartered aircraft, etc.

Temporary validation of manufacturer pilot licence

#### PART V — Training and testing requirements

Record of training and aeronautical experience

Training by Approved Training

Organisation

- **21.** A person shall keep any document or record of —
- (a) any training and experience acquired to meet requirements for a licence, rating, endorsement or authorisation during training; and
- (b) any evidence showing the maintainance of aeronautical experience in a manner that is acceptable to the Authority.
- 22. (1) In order to meet training requirements under this Part, a person shall undertake training for aviation personnel conducted by an Approved Training Organisation.
- (2) Where training is conducted by an Approved Training Organisation under special curricula approved by the Authority, the Authority may reduce the experience requirements or provide alternate means of compliance with experience requirements for certain licences and ratings specified by the Authority.
- (3) The Authority shall ensure that the training requirements for aviation personnel that are not trained by an Approved Training Organisation are at least at the level of competency that is equal to minimum requirements for the training provided by an Approved Training Organisation.

Use of flight 23. (1) A person shall not receive credit for use of a flight simulation training simulation device during training or testing under this Part unless the flight simulation training device training device is approved by the Authority for —

- (a) the training, testing or checking for which it is used;
- (b) a specific manoeuvre, procedure, or crew member function that is being performed; and
- (c) a representation of the specific category and class of aircraft, type of aircraft, particular variation within the type of aircraft or set of aircraft for certain flight training devices.
- (2) A flight simulation training device shall have the technology for basic flight instruments as those of the aircraft used by the operator:

Provided that —

- (a) operators that have electronic or glass displays shall use a flight simulation training device that has electronic or glass display;
- (b) operators that have standard instruments shall use a flight simulation training device that has standard instruments; and
- (c) operators shall not conduct differences training on a variant flight simulation training device that has electronic glass displays for an aircraft that has standard instruments.
- (3 The Authority may approve a device, other than a flight simulation training device, for a specific training or testing purpose.
- (4) Where a flight crew member is to receive credit for using a flight simulation training device to perform training, testing, and checking, the Authority shall approve the use of such device, if it is satisfied that the device is appropriate to the task.

Time and place for knowledge and skills tests

- **24.** (1) The Authority shall prescribe places and times for knowledge and skills tests and checks specified under these Regulations.
- (2) The knowledge test shall be conducted in writing and in the format prescribed by the Authority.

- (3) Where a knowledge test is for an instructor rating or additional rating within the same aircraft category, the test may be performed orally.
- (4) Where appropriate, a candidate may, in addition to written knowledge test, be questioned orally during the skills test.
- (5) The tests shall be conducted by persons authorised and designated by the Authority.
- **25.** (1) An applicant for a knowledge or skills test shall, at the time of application, have
  - (a) the necessary endorsement that shows that the applicant meets the training or experience requirements appropriate for the licence, rating or authorisation sought and is qualified to take the test as specified in this Part;
  - (b) written authorisation from the Authority to take or retake the test; and
  - (c) proper identification in the form of a Government-issued identification document which contains the applicant's
    - (i) photograph,
    - (ii) signature,
    - (iii) date of birth, and
    - (iv) actual residential address, where it is different from the applicant's mailing address.
- (2) The applicant shall meet the age requirements, specified in these Regulations for the licence sought, before the expiration date of the knowledge test report.
  - (3) The applicant shall, before attempting the skills test for a licence or rating —
  - (a) have passed the required knowledge test within 24 months before the month the applicant successfully completes the skills test; or
  - (b) where the applicant applies for an airline transport pilot licence
    - (i) have passed airline transport pilot licence knowledge test, within a period of seven years before successfully completing the airline transport pilot licence skills test, and
    - (ii) have been continuously employed as a flight crew member at the time of the airline transport pilot licence skills test.
- (4) Where the applicant is required to provide an aircraft for a skills test, the applicant shall ensure that the aircraft -
  - (a) has an aircraft airworthiness certificate;
  - (b) has no operating limitations that prohibit the tasks required for the skills test;
  - (c) is of the same category, class and type, if applicable, as the aircraft for which a licence or rating sought; and
  - (d) has fully functioning controls.
  - (5) The Authority shall specify minimum passing grades.
- **26.** (1) Where an applicant fails to pass a test under this Part, he or she may apply to retake the test after he or she has received
  - (a) any necessary additional training from an authorised instructor; and
  - (b) an endorsement from an authorised instructor, who conducted the additional training, that the applicant is qualified to retake the test.

Prerequisite and passing grades

Retesting after failure

Reliance on

training and

another State

Requirements

for instructor

training

testing of

- (2) The applicant shall not retake the test more than three times within a period of six months.
- (3) An applicant for a flight instructor rating with an aeroplane category rating or glider category rating who has failed a skills test due to deficiencies in instructional proficiency on stall awareness, spin entry, spins, or spin recovery shall
  - (a) comply with the requirement of subregulation (1) before retaking the test;
  - (b) when retaking the test, use an aircraft that is of the appropriate aircraft category for the rating and certified for the spins; and
  - (c) demonstrate satisfactory instructional proficiency on stall awareness, spin entry, spins and spin recovery to an examiner during the test.
- **27.** (1) The Authority may rely on the training or testing system administered by another foreign Contracting State as the basis for its own approved training curriculum, including the administration of written and skills test requirements for pilot licences:

Provided that the Authority has an agreement to do so with the foreign Contracting State whose training and testing system is being used.

- (2) Where an applicant wishes to undertake training or testing administered by a foreign Contracting State, the applicant shall apply for and receive written approval of the Authority before he or she undertakes the training or testing.
- **28.** An applicant for an instructor's rating shall, in addition to the requirements in this Part, have
  - (a) received and logged training on the fundamentals of instructing from an authorised instructor; and
  - (b) passed a knowledge test on the following areas of instructing
    - (i) techniques of applied instruction,
    - (ii) assessment of student performance on subjects in which ground instruction is given,
    - (iii) learning process,
    - (iv) elements of effective teaching,
    - (v) student evaluation and testing,
    - (vi) training philosophies,
    - (vii) training programme development,
    - (viii) lesson planning,
    - (ix) classroom instructional techniques,
    - (x) use of training aids including flight simulation training device, where appropriate,
    - (xi) analysis and correction of student errors,
    - (xii) human performance relevant to flight instruction,
    - (xiii) hazards involved in simulating system failures and malfunctions in the aircraft, and
    - (xiv) principles of threat and error management.

Exemption of instructors, etc.

- **29.** The following applicants shall be exempt from the requirements in regulation 28
  - (a) a holder of an instructor rating issued under this Part who has already passed the knowledge test in the areas of instructing;
  - (b) a holder of a current teacher's certificate issued by a national or local authority that authorises the person to teach at secondary education level or higher; and
  - a person who provides evidence of an equivalent level of experience acceptable to the Authority.

**30.** (1) The Authority may designate private individuals to act as representatives of the Authority in examining, inspecting, and testing persons and aircrafts for purposes of issuing pilot and aircraft licences, ratings and certificates.

Designated examiner's certificate

(2) The Authority shall issue, under subregulation (1), a certificate of designated authority and an identification card specifying the kind of designation for which the examiner is qualified and the duration of the certificate.

### PART VI — Suspension and revocation of licence, rating, authorisation or certificate

**31.** (1) The Authority may suspend a licence, rating, authorisation or certificate where it discovers facts indicating either lack of competence or qualification, and may require the holder of the licence, rating, authorisation or certificate to retake all or part of the knowledge or practical test required for that licence.

Suspension of licence, rating, authorisation or certificate

- (2) The Authority shall issue a warning notice to the holder of a licence, rating, authorisation or certificate stating the available facts and information relating to such incompetency or disqualification and shall offer the holder of the licence, rating, authorisation or certificate an opportunity to be heard.
- (3) Where the Authority decides to suspend a licence, rating, authorisation or certificate, it shall issue a notification order stating the reasons for the suspension.
- **32.** Where a licence, rating, authorisation or certificate has been suspended in accordance with regulation 31, the holder shall immediately cease to exercise privileges of that licence or certificate and surrender, within 14 days of receiving the notification order, all licences or validation certificates to the Authority.

Surrender of licence

**33.** Where a suspension is limited to one or more ratings mentioned in the licence or validation certificate, the Authority shall issue the affected person with a new licence or certificate omitting all ratings which are subject to the suspension.

Limited suspension

**34.** (1) The Authority may lift a suspension —

(a) if the holder of the suspended licence or certificate has taken and passed the knowledge or practical tests required for that licence, rating, or authorisation; or

Lifting suspension

- (b) if the holder of the suspended licence or certificate has gained the required additional experience.
- (2) Where a suspension is lifted under subregulation (1), the Authority shall issue a new licence or validation licence.
- **35.** (1) The Authority shall revoke a licence, rating, authorisation or certificate
  - (a) if the holder is no longer competent to exercise the privileges mentioned in the licence, rating, authorisation or certificate;
  - (b) if the holder fails to meet appropriate medical standards as may be shown in the results of a medical examination or test; or
  - (c) if the holder of a suspended licence fails to meet the requirements under regulation 34.

Revocation of licence, rating, authorisation or certificate

- (2) Where the Authority decides to revoke a licence, certificate, rating, or authorisation, it shall issue a notification order stating the reasons for the revocation.
- (3) A person whose licence has been revoked shall surrender the licence or certificate to the Authority within 14 days of receiving the notification order.

#### PART VII — Crediting of flight time for pilots

Credit for solo or dual instruction flight time for pilot-incommand

**36.** A student pilot or 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 to the issue of a higher grade of pilot licence.

Credit for acting as copilot in single pilot aircraft

- **37.** (1) A holder of a pilot licence, when acting as a co-pilot at a pilot station of an aircraft certificated for operation by a single pilot but required in Botswana to be operated with a co-pilot, shall be entitled to be credited with not more than 50 percent of the co-pilot flight time required for a higher grade of the pilot licence.
- (2) Where the aircraft is equipped to be operated by a co-pilot and the aircraft is operated in a multi-crew operation, the Authority may authorise that flight time to be credited in full towards the total flight time required.
- **38.** A holder of a pilot licence, when acting as a co-pilot, shall be entitled to be credited in full with this flight time towards the total time required for a higher grade of pilot licence.

Credit for acting as copilot in aircraft operated with co-pilot

**39.** A holder of a pilot licence, when acting as pilot-in-command under supervision, 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.

Credit for pilot-incommand under supervision

**40.** (1) A holder of a pilot licence issued under this Part shall not act as a pilot-in-command in single pilot operations on a civil aircraft registered in Botswana for commercial air transport operations, if the person has attained the age of 60 years.

Limitations of privileges on pilot over 60 years

(2) Where an aircraft registered for commercial air transport operations in Botswana requires more than one pilot, one pilot may be up to 65 years of age provided that the other pilot is less than 60 years of age.

Recent experience and currency requirements **41.** A holder of a pilot licence shall not operate an aircraft carrying passengers as pilot-in-command or co-pilot unless he or she has carried out at least three take-offs and three landings as pilot-flying in an aircraft of the same type, class or variant of a type or a flight simulation training device of the aircraft type or class to be used, in the preceding 90 days.

Limitations on night passenger aircraft **42.** A holder of a pilot licence shall not act as pilot-in-command of an aircraft carrying passengers at night if his or her pilot licence does not include an instrument rating.

**43.** A holder of a pilot licence shall not operate an aircraft under instrument flight rules or in weather conditions less than the minimum prescribed for visual flight rules, unless within the preceding six months -

Limitations due to weather conditions

Recording of flight time

- (a) the pilot had an instrument proficiency check on the manoeuvres; or
- (b) the pilot has logged six hours instrument flight time including at least three hours in flight in the category of aircraft and has carried out six instrument approaches in either actual or simulated conditions.
- **44.** A holder of a pilot licence shall document and record the following time in a manner acceptable to the Authority —
- (a) the training and experience used to meet the requirements for a licence, rating and authorisation; and
  - (b) the experience required to show recent flight experience.

#### PART VIII — Category ratings

**45.** The Authority shall endorse the category rating of an aircraft on a pilot's licence in accordance with these Regulations.

Aircraft category rating

**46.** An applicant for a pilot licence shall, after successfully meeting all requirements for the issuance of a licence, receive from the Authority, the appropriate licence with an aircraft category rating.

Issue of category rating

**47.** (1) A holder of a pilot licence seeking an additional category rating shall —

Issue of additional category rating

- (a) meet the requirements of this Part appropriate to the privileges for the category rating sought;
- (b) have an endorsement in his or her logbook or training record from an authorised instructor that the applicant is competent in the required aeronautical knowledge and flight instruction areas;
- (c) pass the required knowledge test; and
- (d) pass the required skills test for the aircraft category, and where applicable class and type rating sought.
- (2) The Authority shall, on issuing an additional category rating, endorse the rating on the pilot's licence and indicate the level of licensing privileges at which the category rating is granted.
- **48.** A holder of a category rating may act as a pilot on the category of aircraft specified in the rating.
- **49.** The duration, renewal or re-issue of the category rating shall coincide with the requirements for the duration, renewal or re-issue of the licence and where applicable class or type rating contained in this Part.

Privileges of category rating

Duration of category rating

#### PART IX — Class ratings

- **50.** The Authority shall endorse the class of an aircraft, where applicable, on a pilot's licence as a rating.
- **51.** An applicant for a pilot's licence shall, after successfully meeting all requirements for the issuance of a licence, receive from the Authority the appropriate licence with the aircraft category, class and, where applicable, type rating endorsed on the licence as an initial class rating.

Aircraft class rating

Issue of class rating

Issue of additional class rating

- **52.** (1) A holder of a pilot licence seeking an additional class rating shall —
- (a) meet the requirements of this Part appropriate to the privileges for the class rating sought;
- (b) have an endorsement in his or her logbook or training record from an authorised instructor that the applican is competent in the required aeronautical knowledge and flight instruction areas;
- (c) pass the required knowledge test unless the applicant holds a class rating within the same category of aircraft, at the same level of pilot licence; and
- (d) pass the required skills test for the aircraft class ratin sought.
- (2) The Authority shall, on issuing an additional class rating, endorse the rating on the pilot's licence and indicate the level of licensing privileges at which the class rating is granted.

Privileges for class rating

**53.** A holder of a class rating may act as a pilot on the class of aircraft specified in the rating.

Duration of class rating

Renewal of

class rating

single-engine

- **54.** A class rating shall be valid for —
- (a) in the case of a multi-engine class rating, 12 months; and
- (b) in the case of a single-engine class rating, balloon gas or balloon hot air rating, two years.

**55.** A pilot shall renew a single-engine class rating, balloon gas or balloon hot air rating, if -

- (a) within two years, he or she completes a proficiency check on areas of operation listed in the skills test that is applicable to the licence, category and class rating being renewed; and
- (b) he or she completes 12 hours flight time within the one year preceding the expiry date.

Renewal of multi-engine class rating

Proficiency

expired class

check for

rating

- **56.** A pilot shall renew a multi-engine class rating, if he or she —
- (a) within the preceding 12 months, completes a proficiency check on the subjects listed in the skills test that is applicable to the licence, category and class rating being renewed; and
- (b) completes 10 route sectors within the three months preceding the expiry date.

**57.** (1) Where applicable, the proficiency test shall include —

- (a) instrument procedures and instrument approach; and
- (b) landing procedures under normal, abnormal andemergency conditions including simulated engine failure.
- (2) Where a pilot takes the proficiency check, required in this regulation, in the month before or the month after it is due, the pilot shall be considered to have taken it in the month in which it was due for the purpose of computing when the next proficiency check is due.

Proficiency check for class rating

- **58.** (1)Where the proficiency test is conducted after the class rating has expired, an applicant shall
  - (a) have received a refresher training from an authorised instructor and an endorsement that the applicant is prepared for the required skills test; and
  - (b) pass the required skills test for the applicable aircraft category and class.
- (2) Where applicable, the skills test shall include instrument procedures, including instrument approach and landing procedures under normal, abnormal or emergency conditions, and simulated engine failure.

#### PART X - Type rating

**59.** The Authority shall, where applicable, endorse the type of aircraft on a pilot's licence as a rating, including any limitations.

Aircraft type rating

**60.** (1) A pilot seeking an aircraft type rating to be endorsed on his or her pilot licence shall —

Requirements for type rating

- (a) hold or concurrently obtain an instrument rating that is appropriate to the aircraft category, class or type rating sought;
- (b) have an endorsement in his or her logbook or training record from an authorised instructor that the applicant has been found competent in the required aeronautical knowledge and flight instruction areas;
- (c) pass the required skills test at the relevant level, applying crew resources management concepts applicable to the aircraft category, class and type rating being sought; and
- (d) perform the skills test under instrument flight rules;
- (2) Where the aircraft used for the skills test is not capable of the instrument manoeuvres and procedures required for the skills test, the applicant may
  - (a) obtain a type rating limited to "VFR only", and
  - (b) remove the "VFR only" limitation for each aircraft type where the applicant demonstrates compliance with the airline transport pilot licence skills test under instrument conditions.
- (3) An applicant seeking a private or commercial licence in an aircraft that requires a type rating shall complete the applicable portions of either the private pilot licence or commercial pilot licence skills test in conjunction with the airline transport pilot licence skills test.
- **61.** (1) Subject to compliance with the requirements specified in this Part, a holder of a type rating my act as a pilot on the type of aircraft specified in the rating.

Privileges of type rating

- (2) When a type rating is issued, limiting the privileges to act as co-pilot or limiting the privileges to act as pilot only during the cruise phase of the flight, the Authority shall endorse such limitation on the rating.
  - **62.** (1) A type rating shall be valid for a period of 12 months.
  - (2) A pilot shall renew a type rating, if he or she —
  - (a) within the preceding 12 months, completes a proficiency check in the areas of operation listed in the skills test for the appropriate category, type and where applicable, class of the aircraft; and
  - (b) completes 10 route sectors within the three months preceding the expiry date.
- (3) Where a pilot takes the proficiency check required in this regulation in the month before or after the month in which it is due, the pilot shall be considered to have taken it in the month it was due for the purpose of computing the due date for the next proficiency check.
- **63.** Where the type rating has expired, the applicant shall
  - (a) have received refresher training from an authorised instructor and an endorsement that the applicant is prepared for the required skills test; and
  - (b) pass the required skills test for the appropriate category, type and where applicable, class of aircraft.

Duration and renewal of type rating

Re-issue of type rating

#### PART XI — Category II and III Authorisation

Issue of category II and III pilot authorisation

Requirements for category II and III authorisation

- **64.** The Authority shall issue a category II or category III pilot authorisation, in writing, as part of an applicant's instrument rating, to accompany the pilot's licence, when the pilot meets the requirements contained in this Part.
- **65.** (1) A person not flying for an air operator certificate, shall not act as pilot of an aircraft during category II or III operations unless that person holds a category II or III pilot authorisation for that category, class or type of aircraft.
  - (2) An applicant for category II or III pilot authorisation shall —
  - (a) hold a pilot licence with an instrument rating or an airline transport pilot licence; and
  - (b) hold a category and class or type rating for the aircraft for which the authorisation is being sought.

Experience for category II and III authorisation

- **66.** The applicant for a category II or III pilot authorisation shall have at least
  - (a) 50 hours of night flight time as pilot-in-command;
  - (b) 75 hours of instrument time under actual or simulated instrument conditions; and
  - (c) 250 hours of cross-country flight time as pilot-in-command.
- **67.** The applicant for a category II or III pilot authorisation shall have completed the flight instruction on the relevant areas of operation.

Flight instruction for category II and III authorisation

Skills test for category II and III authorisation **68.** The applicant for a category II or III pilot authorisation shall pass a skills test including the relevant areas of operation.

Duration and renewal of category II and III authorisation

- **69.** (1) A category II or III authorisation shall be valid for a period of six months.
- (2) A pilot may renew category II or III pilot authorisation, if he or she completes a proficiency check in the relevant areas of operation.

Re-issue of category II and III authorisation

- **70.** Where the category II or the category III pilot authorisation has expired and an applicant wishes, the applicant shall
  - (a) have received a refresher training from an authorised instructor with an endorsement that the applicant is prepared for the required skills test; and
  - (b) pass the required skills test on the specified subjects.

Complex aeroplane endorsement

- **71.** A pilot shall not act as pilot-in-command of a complex aeroplane unless he or she has
  - (a) received and logged ground and flight training from an authorised instructor in a complex aeroplane or flight simulation training device that is representative of a complex aeroplane and has been found proficient in the operation and systems of the aeroplane; and
  - (b) received a one-time endorsement in the pilot's logbook from an authorised instructor who certifies that the pilot is proficient to operate a high performance aeroplane.

- **72.** A pilot shall not act as pilot-in-command of a high performance aeroplane unless he or she has
  - (a) received and logged ground and flight training from an authorised instructor in a high performance aeroplane or flight simulation training device that is representative of a high performance aeroplane and has been found proficient in the operation and systems of the aeroplane; and
  - (b) received a one-time endorsement in the pilot's logbook from an authorised instructor who certifies that that person is proficient to operate a complex aeroplane.
- **73.** (1) A pilot shall not act as a pilot-in-command of a pressurised aircraft capable of operating at high altitudes, unless he or she has
  - (a) received and logged ground training from an authorised instructor and received an endorsement in the logbook from the instructor certifying that he or she has satisfactorily accomplished ground training in the following subjects
    - (i) high altitude aerodynamics and meteorology,
    - (ii) respiration,
    - (iii) effects symptoms and causes of hypoxia and any other high-altitude sickness,
    - (iv) duration of consciousness without supplemental oxygen,
    - (v) effects of prolonged usage of supplemental oxygen,
    - (vii) causes and effects of gas expansion and gas bubble formation,
    - (viii) physical phenomena and incidents of decompression, and
    - (ix) any other physical aspects of high-altitude flight; and
  - (b) received and logged flight training from an authorised instructor and received an endorsement in the logbook from the instructor certifying that the pilot has satisfactorily accomplished flight training in an aircraft or in a flight simulation training device that is representative of a pressurised aircraft, in the following subjects
    - (i) normal cruise flight operations while operating above 25,000 feet MSI.
    - (ii) proper emergency procedures for simulated rapid decompression without actually depressurising the aircraft, and
    - (iii) emergency descent procedures.
- (2) For purposes of this regulation "a pressurised aircraft capable of operating at high altitudes" means an aircraft that has a service ceiling or maximum operating altitude, whichever is lower, above 25,000 MSL.

#### PART XII — Student pilot licence

- **74.** (1) A person shall not act as a student pilot unless he or she is issued with a student pilot licence by the Authority in accordance with these Regulations.
  - (2) A person shall not be qualified to be a student pilot unless he or she —
  - (a) is at least 16 years of age;
  - (b) satisfies the English language proficiency requirement under regulation 11;
  - (c) satisfies any other requirement provided for under this Part.

High performance aeroplane endorsement

High altitude aircraft endorsement

Student pilot licence

Application for student pilot licence

- **75.** (1) An application for a student pilot licence shall be made to the Authority in Form C set out in the Schedule to these Regulations and shall include
  - (a) details of the category of the aircraft to be flown; and
  - (b) a report on the knowledge of airspace rules and procedures for the aerodrome where the student will perform solo flights.
- (2) The application shall be accompanied by a fee, as may be determined by the Authority.

Issue of student pilot licence

**76.** The Authority shall issue a student pilot licence in Form D set out in the Schedule, where it is satisfied that the applicant meets the requirements provided for in these Regulations.

Pre-solo flight for student pilot

- 77. A student pilot shall, before conducting a solo flight -
- (a) receive and log flight training for the manoeuvres and procedures applicable to the aircraft category that the student trains in; and
- (b) demonstrate satisfactory proficiency and safety, as judged by an authorised instructor, on the manoeuvres and procedures for the appropriate category, and class of aircraft, where applicable.

Solo flight for student pilot

- **78.** A student pilot shall not fly solo unless —
- (a) the student holds at least a class 2 medical certificate; and
- (b) the student is authorised to do so by a chief flight instructor.

Duration of student pilot licence

**79.** A student pilot licence shall be valid for two years unless revoked or suspended.

#### PART XIII — Private pilot licence

Private pilot licence

- **80.** (1) A person shall not act as a private pilot unless he or she is issued with a private pilot licence by the Authority in accordance with these Regulations.
  - (2) A person shall not be qualified to be a private pilot unless he or she
    - (a) is at least 17 years of age;
    - (b) is at least 16 years of age, if the licence is for a balloon or a glider;
    - (c) satisfies the English language proficiency requirement under regulation 11: and
    - (d) satisfies any other requirement provided for under this Part.

Application for private pilot licence

- **81.** An application for a private pilot licence shall be made to the Authority in Form E set out in the Schedule to these Regulations and shall include
  - (a) a certified copy of a current class 2 medical certificate;
  - (b) a report from an authorised instructor who trained the applicant, which indicates that the applicant is prepared for the required knowledge test and required practical test;
  - (c) any document indicating that the applicant meets the aeronautical requirements of the aircraft category applied for; and
  - (d) any other document as the Authority may require.

Experience required for private pilot licence

- **82.** (1) A person who applies for a private pilot licence with an aeroplane category rating shall
  - (a) complete in relation to a single engine class rating
    - (i) a total flight time of at least 40 hours completed during a course or approved training as a pilot of aeroplanes, five hours of which may have been completed in a flight simulation training device, or

- (ii) a total flight time of at least 10 hours under the supervision of a authorised flight instructor, which shall include five hours of solo cross-country flight time with at least one cross-country flight totalling not less than 270 kilometres where full stop landin at two different aerodromes is made:
- (b) complete in relation to a multi-engine class rating
  - (i) a total flight time of at least 10 hours under the supervision of an authorised flight instructor in the relevant category, or
  - (ii) a practical skills test on a multi-engine aircraft;
- (c) not fly as a pilot-in-command of an aeroplane carrying passengers unless within the preceding 90 days he or she has made at least three take-offs and three landings as the sole manipulator of the controls of an aeroplane of the same type or class; and
- (d) not fly at night unless he or she has received appropriate dual instruction in aircraft within the category of aircraft in night flying.
- (2) A person who applies for a private pilot licence with a helicopter category rating, shall complete
  - (a) not less than 40 hours of flight time as pilot of a helicopter which may include a total of five hours in a flight simulation training device; or
  - (b) a total flight time of at least 10 hours 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 180 kilometres where full stop landing is made at two different aerodromes.
- (3) A person who applies for a private pilot licence with an airship category rating shall complete a total flight time of at least 25 hours during a course or training as a pilot of an airship, which
  - (a) includes three hours of solo cross country flight training in an airship with at least one cross country flight totalling not less than 270 kilometres;
  - (b) includes three hours of instrument time; and
  - (c) includes five hours as a pilot of an airship under the supervision of a pilot-in-command.
- (4) A person who applies for a private pilot licence with a balloon category rating shall complete at least 16 hours of flight time as a pilot of a balloon including at least eight hours launches and landings, one of which shall be solo
- (5) A person who applies for a private pilot licence with a glider category rating shall complete at least six hours of flight time as a pilot of a glider including at least two hours performing solo launches and landings.
- (6) A person who applies for a private pilot licence with a glider category rating shall receive dual instruction in glider from an authorised instructor.
- (7) A person who applies for a private pilot licence shall have operational experience in -
  - (a) the management of threats and errors; and
  - (b) pre-flight operations, including mass and balance determination for aeroplane, helicopter, powered-lift, airship, balloon or glider inspection and serving.

Flight instruction for private pilot licence

- **83.** (1) A person who applies for a private pilot licence with an aeroplane category rating shall receive and log at least 20 hours of dual instruction from an authorised instructor
  - (a) which may include five hours completed in a flight simulation training device; and
  - (b) which shall include five hours solo cross country flight time with at least one cross country flight totalling at least
- 270 kilometres or 150 nautical miles with full stop landings at two different aerodromes.
- (2) A person who applies for a private pilot licence with a helicopter category rating shall receive and log at least 20 hours of dual instruction from an authorised instructor
  - (a) which may include five hours completed in a flight simulation training device; and
  - (b) which shall include five hours solo cross country flight time with at least one cross country flight totalling at least 180 kilometres or 100 nautical miles in the course of two different points.
- (3) A person who applies for a private pilot licence with a powered-lift category rating shall receive and log at least 20 hours of dual instruction from an authorised instructor.
- (4) A person who applies for a private pilot licence with an airship category rating shall receive and log at least 20 hours of dual instruction from an authorised instructor.
- (5) Aperson who applies for a private pilot licence with a balloon category rating shall receive dual instruction in free balloons from an authorised instructor.
- (6) A person who applies for a private pilot licence shall have operational experience in -
  - (a) the management of threats and errors;
  - (b) pre-flight operations, including mass and balance determination, aeroplane, and inspection or serving in a helicopter, powered-lift, airship, balloon or glider;
  - (c) aerodromes and traffic pattern operations, collision avoidance precautions and procedures;
  - (d) the control of the relevant aircraft by external visual reference;
  - (e) the control of flight at critical high airspeeds and recognition and recovery from spiral dives;
  - (f) normal and cross wind take offs and landings;
  - (g) in case of a helicopter, recovery at the incipient stage from settling with power, recovery techniques from low-rotor within the normal range of the engine where applicable;
  - (h) cross country flying using visual reference, dead reckoning, and where available radio navigation aids including a flight of at least one hour;
  - (i) emergency operations, including simulated helicopter equipment malfunctions, autorotative approach and landing;
  - (j) operations to, from and transmitting controlled aerodromes;
  - (k) compliance with air traffic services procedures, radiotelephony procedures and phraseology;
  - (l) communications procedures and phraseology; and
  - (m) any other operational requirement as may be required by the Authority.

**84.** The Authority shall issue a private pilot licence in Form D set out in the Schedule to these Regulations, where it is satisfied that the applicant satisfies the requirements of these Regulations.

Issue of private pilot licence

**85.** The Authority may issue a private pilot licence to an applicant, subject to —

Conditions of issue of private pilot licence

(a) the condition that the holder of a private pilot licence shall not act as a pilot-in-command or co-pilot of an aircraft which operates or carries passengers or property for compensation or hire; or

**86.** A private pilot licence shall be valid for five years from the date of

Duration of private pilot licence

(b) any other condition that the Authority may impose.

#### PART XIV — Commercial pilot licence

**87.** (1)A person shall not act as a commercial pilot unless he or she is issued with a commercial pilot licence by the Authority in accordance with these Regulations.

Commercial pilot licence

- (2) A person shall not be qualified to be a commercial pilot unless he or she —
- (a) is at least 18 years of age;

issue, unless suspended or revoked.

- (b) satisfies the English language proficiency requirement under regulation 11; and
- (c) satisfies any other requirement provided for under this Part.
- **88.** An application for a commercial pilot licence shall be made to the Authority in Form F set out in the Schedule to these Regulations and shall include —

Application for commercial pilot licence

- (a) a certified copy of a current class 1 medical certificate;
- (b) a certified copy of a current private pilot licence;
- (c) a report, from an authorised instructor who trained the applicant, which indicates that the applicant is prepared for the required knowledge test and required practical test;
- (d) any document indicating that the applicant meets the aeronautical requirements of the aircraft category applied for; and
- (e) any other document as the Authority may require.
- **89.** (1) A person who applies for a commercial pilot licence with an aeroplane category rating shall complete a total flight time of at least 200 hours flight time as a pilot in an aeroplane, which shall include —

Experience required for commercial pilot licence

- (a) 10 hours experience as pilot under instruction in a flight training simulation device approved by the Authority;
- (b) 100 hours as a pilot-in-command for a flight of at least 540 kilometres in the course of which full stop landings at two different aerodromes are made; or
- (c) 10 hours of night flight time, where applicable.
- (2) A person who applies for a commercial pilot licence with a helicopter category rating shall complete a total flight time of at least 150 hours during a course provided by an Approved Training Organisation or training as a pilot in a helicopter, or at least 100 flight time as a pilot-in-command, which shall include
  - (a) 10 hours completed in a flight simulation training device;
  - (b) 10 hours as a pilot-in-command for a flight of at least 540 km in the course of which full stop landings at two different aerodromes are made; and
  - (c) five hours of night flight time where applicable.

- (3) A person who applies for a commercial pilot licence with a powered-lift category rating shall complete a total flight time of at least 150 hours during a course or training as a pilot of a powered lift aircraft, or at least 200 flight time as a pilot in a powered lift aircraft, which shall include
  - (a) the number of flight times to be determined by the Authority, as a pilot under instruction in a flight simulation training device;
  - (b) 100 hours as a pilot-in-command for a flight of at least 540 kilometres in the course of which full stop landings at two different aerodromes are made; and
  - (c) five hours of night flight time where applicable.
- (4) A person who applies for a commercial pilot licence with an airship category rating shall complete at least 200 hours of flight time as a pilot in an airship, which shall include
  - (a) 30 hours as a pilot-in-command under supervision in an airship;
  - (b) 10 hours as a pilot in a cross country flight; or
  - (c) 10 hours of night flight time where applicable.
- (5) A person who applies for a commercial pilot licence with a balloon category rating shall complete 35 hours flight time as a pilot, and
  - (a) in the case of a free balloon rating, the flight time as a pilot shall include
    - (i) 10 hours of flight training in a free balloon, and
    - (ii) two flights in a free balloon as the pilot-in-command;
  - (b) in the case of a gas balloon rating, the flight time as a pilot shall include
    - two training flights of two hours each in a gas balloon on the areas of operations appropriate to a gas balloon within 60 days before the application for the rating,
    - (ii) two flights as the pilot-in-command, and
    - (iii) one flight involving a controlled ascent to 5,000 feet above the launch site; and
  - (c) in the case of a hot air balloon rating, the flight time as a pilot shall include —
    - three training flights of one hour each in a balloon with an airborne heater on the areas of operations appropriate to a balloon with an airborne heater within 60 days before the application for the rating,
    - (ii) two solo flights in a balloon with an airborne heater, and
    - (iii) one flight involving a controlled ascent to 3,000 feet above the launch site.
- (6) A person who applies for a commercial pilot licence for a glider category rating shall complete 25 hours flight time as a pilot in a glider with at least 100 flights as a pilot-in-command, which includes
  - (a) three hours of flight training in glider; or
  - (b) two hours of solo flight in a glider.
  - **90.** (1) A person who applies for a private pilot licence —
  - (a) with an aeroplane category rating shall receive and log at least 20 hours of dual instruction from an authorised instructor which shall include five hours completed in a flight simulation training device;
  - (b) with a helicopter category rating shall receive and log at least 30 hours of dual instruction from an authorised instructor;
  - (c) with a power lift category rating shall receive and log at least 20 hours of dual instruction from an authorised instructor; and
  - (d) with an airship category rating, balloon category rating or glider category rating shall receive and log dual instruction from an authorised instructor.

Flight instruction for commercial pilot licence

- (2) A person who applies for a commercial pilot licence shall have operational experience in -
  - (a) the management of threats and errors;
  - (b) pre-flight operations including mass and balance determination, aircraft inspection and servicing;
  - (c) aerodrome and traffic pattern operations, collision avoidance precautions and procedures;
  - (d) the control of the aeroplane or helicopter by external visual reference;
  - (e) flight at critically slow airspeeds, recognition of and recovery from, incipient and full stalls;
  - (f) flight with asymmetrical power for multi-engine class or type ratings where applicable;
  - (g) recovery at the incipient stage from settling with power, recovery techniques from low-rotor rpm within the normal range of engine rpm where applicable;
  - (h) ground manoeuvring and run-ups, hovering, normal take-offs and landings, out of wind and sloping ground, steep approaches where applicable;
  - (i) take-offs and landings with minimum necessary power, maximum performance take-off and landing techniques, restricted site operations, quick stops;
  - (j) basic flight manoeuvres and recovery from unusual altitudes by reference solely to basic flight instruments;
  - (k) cross country flying using visual reference, dead reckoning and radio navigation aids, diversion procedures;
  - (*l*) abnormal and emergency procedures, including simulated helicopter equipment malfunctions, autorotative approach and landing; and
  - (*m*) operations to, from and transmitting controlled aerodromes, compliance with air traffic services procedures, radiotelephony procedures and phraseology.
- **91.** The Authority shall issue a commercial pilot licence in Form D set out in the Schedule to these Regulations, where it is satisfied that the applicant meets the requirements of these Regulations.

**92.** A holder of a commercial pilot licence may —

- (a) exercise all privileges of the holder of a private pilot licence in the appropriate aircraft category;
- (b) act as pilot-in-command in an aircraft used to provide air transport service, within the appropriate aircraft category
  - (i) certificated for single-pilot operations, or
  - (ii) required to be operated with a co-pilot; and
- (c) act as a pilot in an airship under instrument flight rules.
- **93.** A commercial pilot licence shall valid for five years, from the date of issue, unless suspended or revoked.

Issue of commercial pilot licence

Privileges of commercial pilot licence

Duration of commercial pilot licence

## PART XV — Multi-crew pilot licence

Multi-crew pilot licence

- 94. (1) A person shall not act as a multi-crew pilot unless he or she is issued with a multi-crew pilot licence by the Authority in accordance with these Regulations.
- (2) A person shall not be qualified to be a multi-crew pilot unless he or she is at least 18 years of age.

Application for multi-crew pilot licence

- 95. An application for a multi-crew pilot licence shall be made to the Authority in Form G set out in the Schedule to these Regulations and shall include —
  - (a) a certified copy of a current class 1 medical certificate;
  - (b) a report, from an authorised instructor who trained the applicant, which indicates that the applicant is prepared for the required knowledge test and required practical test; and
  - (c) any other document that the Authority may require.

Experience required for multi-crew pilot licence

- **96.** (1) A person who applies for a multi-crew pilot licence shall receive and log ground training from an authorised instructor in an approved training course on the subjects appropriate to the privileges granted to the holder of a multi-crew pilot licence.
- (2) A person who applies for a multi-crew pilot licence shall complete at least 240 hours as a pilot.
- 97. The Authority shall issue a multi-crew pilot licence in Form D set out in the Schedule to these Regulations, where it is satisfied that the applicant satisfied the requirements of these Regulations.
- **98.** A multi-crew pilot licence shall be valid for five years from the date of issue, unless suspended or revoked.

Duration of multi-crew pilot licence

pilot licence

Issue of multi-crew

### PART XVI — Airline transport pilot licence

Airline transport pilot licence

- **99.** (1) A person shall not act as an airline transport pilot unless he or she is issued with an airline transport pilot licence by the Authority in accordance with these Regulations.
- (2) A person shall not be qualified to be a airline transport pilot unless he or she -
  - (a) is at least 21 years of age; and
  - (b) satisfies the language proficiency requirement under regulation 11.

Application for airline transport pilot licence

- **100.** An application for an airline transport pilot licence shall be made to the Authority in Form H set out in the Schedule to these Regulations and shall include -
  - (a) a current class 1 medical certificate;
  - (b) a commercial pilot licence and an instrument rating; and
  - (c) any other document that the Authority may require.
- **101.** (1) A person may apply for an airline transport pilot licence with an aeroplane category rating if he or she has completed a total flight time of at least 1500 hours during a course or training as pilot in an aeroplane, or at least 250 flight time as a pilot in an aeroplane, including —
  - (a) 30 hours as a pilot-in-command under supervision in an airship; and
  - (b) 10 hours as a pilot in a cross country flight.

Experience required for airline transport pilot licence

- (2) The applicant under subregulation (1) shall have received an endorsement for the knowledge test from an authorised instructor who conducted the training on the knowledge subjects, certifying that the person is prepared for the required knowledge test.
- **102.** An applicant for an airline transport pilot licence shall have completed the experience and flight instruction requirements appropriate to the aircraft category applied for.

Flight instruction for airline transport pilot licence

**103.** The Authority shall issue an airline transport pilot licence in Form D set out in the Schedule to these Regulations, where it is satisfied that the applicant meets the requirements of these Regulations.

Issue of airline transport pilot licence

**104.** A holder of an airline transport pilot licence may —

Privileges of airline transport licence

- (a) exercise all the privileges of the holder of a private pilot licence and commercial pilot licence within the same category and class of aircraft;
- (b) in the case of an aeroplane and powered-lift, exercise the privileges of the holder of an instrument rating; and
- (c) act as a pilot-in-command or co-pilot in commercial air transport in an aircraft within the appropriate category and class where applicable.
- **105.** An airline transport pilot licence shall be valid for five years unless revoked or suspended.

Duration of airline transport pilot licence

## PART XVII — Instrument rating

- **106.** (1) A person shall not qualify for an instrument rating unless he or she —
- (a) is at least 18 years of age; and
- (b) holds either a class 1 or 2 medical certificate appropriate for the level of licence held.
- (2) 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.
- **107.** An applicant for an instrument rating shall receive and log ground training from an authorised instructor on
  - (a) air law, rules and regulations relevant to flight under instrument flight rules related to air traffic service practices and procedures;
  - (b) aircraft general knowledge for the aircraft category being sought, which shall include
    - (i) the use, limitation and serviceability of avionics, the use of electronic devices and instruments necessary for the control and navigation of aeroplanes under instrument flight rules and in instrument meteorological conditions, the use and limitations of autopilot, and
    - (ii) knowledge of compasses, turning and acceleration errors, gyroscopic instruments, operational limits and precession effects, practices and procedures in the event of malfunctions of various flight instruments:

Instrument rating

Knowledge required for instrument rating

- (c) flight performance and planning for the aircraft category being sought, which shall include
  - (i) pre-flight preparations and checks appropriate to flight under instrument flight rules, and
  - (ii) operational flight planning, preparation and filing of air traffic services flight plans under instrument flight rules, and altimeter setting procedures;
- (d) human performance for the aircraft category being sought, which shall include —
  - (i) human performance relevant to instrument flight in the aircraft, and
  - (ii) principles of threat and error management;
- (e) meteorology for the aircraft category being sought, which shall include
  - (i) the application of aeronautical meteorology, interpretation and use of reports, charts and forecasts, codes and abbreviations, use of, and procedures for obtaining, meteorological information and altimetry,
  - (ii) knowledge of the causes, recognition and effects of icing, frontal zone penetration procedures, hazardous weather avoidance, and
  - (iii) in the case of helicopter and powered-lift, effects of rotor icing;
- (f) navigation, which shall include -
  - (i) practical air navigation using radio navigation aids, and
  - (ii) use, accuracy and reliability of navigation systems used in departure, en-route, approach and landing phases of flight identification of radio navigation aids;
- (g) operation procedures for the aircraft category being sought, which shall include —
  - (i) application of threat and error management to operational principles,
  - (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) knowledge of precautionary and emergency procedures, safety practices associated with flight under instrument flight rules, obstacle clearance criteria; and
- (h) radiotelephony, which shall include
  - (i) communication procedures and phraseology as applied to aircraft operations under instrument flight rules, action to be taken in case of communication failure, and
  - (ii) any other requirement as the Authority may specify.
- **108.** An applicant for an instrument rating shall have received an endorsement for the knowledge test from an authorised instructor who
  - (a) conducts the training on the knowledge subjects; and
  - (b) certifies that the person is prepared for the required knowledge test.
- **109.** (1) An applicant for an instrument rating shall have completed the experience for flight instruction requirements appropriate to the aircraft category.
  - (2) An applicant shall have completed at least -
- (a) 50 hours of cross-country flight time as pilot-in-command of an aircraft in categories acceptable to the Authority of which not less than 10 hours shall be in the aircraft category being sought; and
- (b) 40 hours of instrument time in aircraft of which not more than 20 hours, or 30 hours where a flight simulation is used, may be instrument ground time, which shall be under the supervision of an authorised instructor.

Knowledge testing for instrument rating

Experience required for instrument rating

- **110.** (1) A holder of an instrument rating may act as a pilot an aircraft of the appropriate category under instrument flight rules.
- (2) The holder of the rating shall have complied with the appropriate requirements before exercising the privileges on multi-engine aircraft.
- **111.** (1) The applicant for an instrument rating shall have not less than 10 hours of the instrument flight time while receiving and logging dual instruction in aircraft from an authorised flight instructor.
- (2) The instructor shall ensure that the applicant has operational experience in pre-flight procedures, including the use of the flight manual or equivalent document, and appropriate air traffic services documents in the preparation of an instrument flight rules flight plan to the level of performance required for the holder of an instrument rating, which includes
  - (a) pre-flight inspection, use of checklists, taxiing and pre-take-off checks;
  - (b) procedures and manoeuvres for instrument flight rules operation under normal, abnormal and emergency conditions covering at least
    - (i) transition to instrument flight on take-off,
    - (ii) standard instrument departures and arrivals,
    - (iii) en-route instrument flight rules procedures and navigation,
    - (iv) holding procedures,
    - (v) instrument approaches to specified minima,
    - (vi) missed approach procedures, and
    - (vii) landings from instrument approaches; and
  - (c) flight manoeuvres and particular flight characteristics.
- (3) Where the privileges of the instrument rating are to be exercised on multi-engine aircraft, the applicant shall have received dual instrument flight instruction in such an aircraft from an authorised flight instructor.
- (4) The instructor shall ensure that the applicant has operational experience in the operation of the aircraft solely by reference to instruments with one engine inoperative or simulated inoperative.
  - 112. (1) An instrument rating shall be valid for a period of 12 months.
- (2) An applicant for the renewal of a single-engine instrument rating shall within the preceding 12 months, complete a proficiency check on the relevant subjects.
- (3) Where a pilot takes the proficiency check required under subregulation (2) in the month before or the month after the month in which it is due, the pilot shall be considered to have taken it in the month in which it was due, for the purpose of computing when the next proficiency check is due.
- (4) An applicant who satisfies the requirements of this regulation shall be re-issued with an instrument rating.

PART XVIII — Flight instructor rating and flight instructor authorisation

- 113. A person shall not conduct the business of a flight instructor unless he or she is issued with a flight instructor rating in accordance with these Regulations.
- **114.** (1) An application for a flight instructor rating shall be made to the Authority in Form I set out in the Schedule to these Regulations.

Privileges of instrument rating

Flight instruction for instrument rating

Duration and renewal of instrument rating

Flight instructor rating

Application for flight instructor rating

- (2) An applicant for a flight instructor rating shall —
- (a) have a class 1 medical certificate; and
- (b) hold a licence with the relevant aircraft category, class and type rating, that is appropriate to the flight instructor rating sought, as follows
  - (i) for an instructor rating in the aeroplane category, the applicant shall hold either a commercial pilot licence or airline transport pilot licence with any instrument rating and any appropriate class or type rating,
  - (ii) for an instructor rating in the helicopter category, the applicant shall hold either a commercial pilot licence or an airline transport pilot licence with any instrument rating with an applicable, class or type rating,
  - (iii) for an instructor rating in the powered-lift category, the applicant shall hold either a commercial pilot licence or airline transport pilot licence with any instrument rating and any applicable class or type rating,
  - (iv) for an instructor rating in the balloon category, glider category or airship category, the applicant shall hold the applicable commercial pilot licence with any applicable ratings, and
- (v) for an instrument rating category, the applicant shall hold an instrument rating in the appropriate aircraft category.
- 115. (1) An applicant for a flight instructor rating shall receive and log training from an authorised instructor and pass a flight instructor knowledge test on -
  - (a) the aeronautical knowledge areas for a student, private and commercial pilot licence applicable to the aircraft category for which flight instructor privileges are sought; and
  - (b) the aeronautical knowledge areas for the instrument rating applicable to the category for which instrument flight instructor privileges are sought.
- (2) The applicant shall meet the requirements for fundamentals of knowledge instruction.
- **116.** An applicant for a flight instructor rating shall
  - (a) receive flight instructions from an authorised instructor in flight instructional techniques, including demonstration, student practices, recognition and correction of common student errors; and
  - (b) have practised instructional techniques in the relevant flight manoeuvres and procedures.
- **117.** An applicant shall
  - (a) receive a logbook endorsement from an authorised instructor to indicate that the applicant is proficient in the relevant areas of operation, appropriate to the flight instructor rating sought; and
  - (b) pass the required skills test that is appropriate to the flight instructor licence sought on the areas of operation.

Knowledge required for flight instructor rating

Instructions for flight instructor rating

Skills test for flight instructor rating **118.** (1) A flight instructor may, within the limitations of his or her pilot licence and ratings, give training and endorsements that are required for, and relate to —

Privileges and limitations

- (a) a student pilot authorisation;
- (b) a pilot licence;
- (c) a flight instructor rating;
- (d) a ground instructor rating;
- (e) an aircraft category rating;
- (f) an aircraft class rating;
- (g) an instrument rating;
- (h) a proficiency check or recent experience requirement;
- (i) a knowledge test; and
- (j) a skills test.
- (2) A flight instructor may not conduct more than eight hours of flight training in any 24 consecutive hours, and shall be subject to any limitations in hours of training.
  - **119.** (1) A flight instructor rating shall be valid for two years.
- (2) A flight instructor rating that has not expired may be renewed for an additional two years if the holder -
  - (a) passes a skills test for renewal of the flight instructor rating, or an additional rating; or
  - (b) presents to the Authority
    - (i) a record of training students that shows that during the preceding two years the flight instructor has endorsed at least five students for a skills test for a licence or rating, and at least 80 percent of those students passed that test on the first attempt,
    - (ii) a record that shows that within the preceding two years the flight instructor has provided service as a company pilot, chief flight instructor, company pilot, or flight instructor in an operation, or in a position involving the regular evaluation of pilots, or
    - (iii) a graduation certificate showing that the pilot has successfully completed an approved flight instructor refresher course consisting of ground training or flight training, or both, within the 90 days preceding the expiration month of his or her flight instructor rating.
- (2) Where a flight instructor accomplishes the renewal requirements within 90 days preceding the expiration month of his or her flight instructor rating —
- (a) the Authority shall consider that the flight instructoraccomplished the renewal requirement in the month due; and
  - (b) the Authority shall renew the current flight instructor rating for an additional two years from its expiration date.
  - (3) A flight instructor may accomplish the skills test required by this regulation in an approved course conducted by an Approved Training Organisation.

Duration and renewal of flight instructor rating Re-issue of flight instructor rating

Flight instructor records

- **120.** Where a flight instructor rating has expired, the applicant may apply for a re-issue of the rating if he or she
  - (a) has received refresher training from an authorisedinstructor with an endorsement that the person is prepared for the required skills test; and
  - (b) passes the prescribed skills test.
  - **121.** A flight instructor shall —
  - (a) sign the logbook of each student to whom that instructor has given flight training or ground training;
  - (b) maintain a record in a logbook or separate document that contains the following —
    - the name of each person whose logbook or student pilot licence that instructor has endorsed for solo flight privileges, and the date of the endorsement, and
    - (ii) the name of each person that instructor has endorsed for a knowledge test or skills test, and a record of the kind of test, the date, and the results; and
  - (c) retain the records required by this regulation for at least three years.
  - **122.** (1) A flight instructor shall not endorse a —
  - (a) student pilot's licence or logbook for solo flight privileges, unless that flight instructor has
    - (i) given the student the flight training required for solo flight privileges,
    - (ii) determined that the student is prepared to conduct the flight safely under known circumstances, subject to any limitations listed in the student's logbook that the instructor considers necessary for the safety of the flight,
    - (iii) given the student pilot training in the make and model of aircraft or a similar make and model of aircraft in which the solo flight is to be flown, and
    - (iv) endorsed the student pilot's logbook for the specific make and model aircraft to be flown;
  - (b) student pilot's licence and logbook for a solo cross country flight, unless that flight instructor has determined that
    - (i) the student's flight preparation, planning, equipment, and proposed procedures are adequate for the proposed flight under the existing conditions and within any limitations listed in the logbook that the instructor considers necessary for the safety of the flight, and
    - (ii) the student has the appropriate solo cross country endorsement for the make and model of aircraft to be flown;
  - student pilot's licence and logbook for a solo flight in a class B airspace area or at an airport within class B airspace unless that flight instructor has —
    - (i) given that student ground and flight training in that class B airspace or at that airport, and
    - (ii) determined that the student is proficient to operate the aircraft safely;
  - (d) logbook of a pilot for a flight review, unless that instructor has conducted a review of that pilot in accordance with the appropriate requirements; or
  - (e) logbook of a pilot for an instrument proficiency check, unless that instructor has tested that pilot in accordance with the appropriate requirements.

Limitations on endorsements

- (2) A flight instructor shall not make any self-endorsement for a licence, rating, flight review, authorisation, operating privilege, skills test, or knowledge test.
- **123.** A flight instructor may not give training required for the issuance of a licence or rating in a multi-engine aeroplane or a helicopter, unless that flight instructor has at least five flight hours of pilot in command time in the specific make and model of multi-engine aeroplane or helicopter, as appropriate.

Training in multi-engine aeroplane or helicopter

- **124.** A flight instructor shall not provide instruction to another pilot who has never held a flight instructor rating, unless that flight instructor –
  - (a) has held a current and valid ground or flight instructor rating for at least two years and has given at least 40 hours of ground training; or
  - (b) holds a current ground or flight instructor rating and has given at least 100 hours of ground training in a course which has been approved by the Authority; and
  - (c) meets the eligibility requirements
    - (i) for training in preparation for an aeroplane or helicopter rating, and has given at least 200 hours of flight training as a flight instructor, and
    - (ii) for training in preparation for a glider rating, has given at least 80 hours of flight training as a flight instructor.
- **125.** A flight instructor may not give training in category II or category III operations unless the flight instructor has been trained and tested in category II or category III operations, as applicable.

**126.** A current and former holder of a professional pilot licence who has instructional experience may apply for an authorisation to provide flight instruction in a flight simulation training device, if the applicant has at least 24 months experience as instructor in simulation trainers.

**127.** A holder of a flight instructor authorisation may carry out flight simulation training instruction for the issue of a class or type rating in the appropriate category of aircraft.

**128.** A flight instructor authorisation for flight simulation training shall be valid for a period of 24 months.

## PART XIX — Ground instructor rating

- **129.** (1) A person shall not act as a ground instructor unless he or she is issued with a ground instructor rating in accordance with these Regulations.
- (2) A person shall not be qualified to be a ground instructor unless he or she is at least 18 years of age.
- **130.** (1) An application for a ground instructor rating shall be made to the Authority in Form I set out in the Schedule to these Regulations.
- (2) An applicant for a ground instructor rating shall receive and log training from an authorised instructor and pass a knowledge test on the following aeronautical knowledge areas appropriate to the aircraft
  - (a) for a basic rating, the knowledge for a student and private pilot licence;
  - (b) for an advanced rating, the student, private, commercial and airline transport pilot knowledge areas; and
  - (c) for an instrument rating, the knowledge for the instrument rating.

Training first-time flight instructor

Category II and category III flight instructions

Application for flight instructor authorisation

Privileges of flight instructor authorisation

Duration of flight instructor authorisation

Ground instructor rating

Application for ground instructor rating

Privileges for ground instructor rating

- **131.** (1) A holder of a ground instructor rating with a basic rating may provide -
  - (a) ground training in the aeronautical knowledge areas required for the issuance of a student pilot authorisation or private pilot licence or associated ratings;
  - (b) ground training required for a private pilot flight review; and
  - (c) a recommendation for a knowledge test required for the issuance of a private pilot licence.
- (2) A holder of a ground instructor rating with an advanced rating may provide —
  - (a) ground training in the aeronautical knowledge areas required for the issuance of any licence or rating;
  - (b) ground training required for any flight review; and
  - (c) a recommendation for a knowledge test required for the issuance of any licence.
  - (3) A holder of an instrument ground instructor rating may provide —
  - (a) ground training in the aeronautical knowledge areas required for the issuance of an instrument rating;
  - (b) ground training required for an instrument proficiency check; and
  - (c) a recommendation for a knowledge test required for the issuance of an instrument rating.
- **132.** A holder of a ground instructor rating may not perform the duties of a ground instructor unless, within the preceding 12 months —
  - (a) the person has served for at least three months as a ground instructor; or
- (b) the person has received an endorsement from an authorised ground or flight instructor certifying that the person has demonstrated satisfactory proficiency with the standards prescribed in this part for the authorisation and rating.

## PART XX — Designated pilot examiner certificate

examiner certificate

- **133.** (1) A person shall not act as a designated pilot examiner unless he or she is issued with a designated pilot examiner certificate, by the Authority, in accordance with these Regulations.
- (2) A person shall not be qualified to be a designated pilot examiner unless he or she -
  - (a) is at least 21 years of age; and
  - (b) holds a class 1 medical certificate.

**134.** An application for a designated pilot examiner certificate shall be made to the Authority in Form J set out in the Schedule to these Regulations and shall include -

- (a) the licence and class or type rating applicable to the examining authority sought; and
- (b) any other document that the Authority may require.

**135.** (1) A person who applies for a private pilot designated examiner certificate with an aeroplane category rating shall have —

- (a) a valid commercial pilot licence;
- (b) an appropriate class rating and instrument rating;
- (c) a flight instructor rating for the examining authority sought or shall have served as a check pilot or been in a comparable position in an Approved Training Organisation;

Designated pilot

Recent experience

for ground

instructor

rating

Application for designated pilot examiner certificate

Experience required for private pilot examiner certificate

- (d) 2,000 hours as pilot-in-command which shall include at least
  - (i) 1,000 hours in an aeroplane, 300 hours of which shall be accrued within the previous year,
  - (ii) 300 hours in the class of airplane for which the designation is sought, and
  - (ii) 100 hours in an aeroplane at night; and
- (e) 200 hours as flight instructor in an aeroplane, which includes at least 100 hours of flight instruction given in the class of an aeroplane appropriate to the designation sought.
- (2) A person who applies for a private pilot designated examiner certificate with a helicopter category rating shall have
  - (a) a valid commercial pilot licence for helicopters;
  - (b) an appropriate class rating and instrument rating;
  - (c) 1,000 hours as pilot-in-command, which shall include at least
    - (i) 500 hours in a helicopter, 100 hours of which shall be accrued within the previous year, and
    - (ii) 250 hours in a helicopter appropriate for the designation sought; an
  - (d) 200 hours as a flight instructor in helicopters.
- (3) A person who applies for a private pilot designated examiner certificate with a powered-lift category rating shall have
  - (a) a commercial pilot licence and a flight instructor rating for powered lift;
  - (b) 2,000 hours as a pilot-in-command which shall include at least
    - (i) 1000 hours in a powered-lift, 300 hours of which shall be accrued within the last year, and
    - (ii) 100 hours in a powered-lift at night; and
  - (c) 500 hours as a flight instructor in a powered-lift.
- (4) A person who applies for a private pilot designated examiner certificate with an airship category rating shall have
  - (a) a commercial pilot licence and flight instructor rating for airship category with an appropriate class rating;
  - (b) 1,000 hours as a pilot-in-command, which shall include at least
    - 500 hours in an airship, 200 hours of which shall be accrued within the last year, and
    - (ii) 50 hours in an airship at night; and
  - (c) 100 hours as a flight instructor in an airship.
- (5) A person who applies for a private pilot designated examiner certificate with a balloon category rating shall have
  - (a) a commercial pilot licence for balloon category rating, and an appropriate class rating; and
  - (b) 200 hours as pilot-in-command, which shall include at least
    - (i) 100 hours of which shall be accrued within the previous year, and
    - (ii) 10 flights in a balloon for at least 30 minutes duration each; and
  - (c) 50 hours as a flight instructor in a balloon.

- (6) A person who applies for a private pilot designated examiner certificate with a glider category rating shall have
  - (a) a commercial pilot licence and flight instructor rating for a glider;
  - (b) 500 hours as pilot-in-command, which shall include at least
    - (i) 200 hours in a glider, 10 hours of which shall be accrued within the past year,
    - (ii) 10 hours in a glider, and
    - (iii) 10 hours in a glider within the previous year, that include at least 10 flights in a glider; and
  - (c) 100 hours as a flight instructor in glider.

Experience required for commercial pilot examiner certificate

- **136.** (1) A person who applies for a commercial pilot designated examiner certificate and instrument rating with an aeroplane category rating shall have
  - (a) a commercial pilot licence with an appropriate class rating and instrument rating;
  - (b) 2,000 hours as pilot-in-command, which shall include at least
    - (i) 1,000 hours in an aeroplane, 300 hours of which shall be accrued within the previous year,
    - (ii) 500 hours in the class of aeroplane for which the designation is sought,
    - (iii) 100 hours at night in an aeroplane,
    - (iv) 100 hours of instrument flight time in actual or simulated conditions,
    - (v) 300 hours in large or turbine powered aeroplane in order to conduct skills tests in large or turbine aeroplane, and
    - (vi) 25 hours for each additional type of large aeroplane for which designation to conduct skills test in a large or turbine powered aeroplane is sought; and
  - (c) 500 hours as a flight instructor in an aeroplane, which shall include at least —
    - (i) 100 hours of flight instruction given in the class of aeroplane applicable to the designation sought, and
    - (ii) 250 hours of instrument flight instruction of which 200 were given in an aeroplane.
- (2) A person who applies for a commercial pilot designated examiner certificate with a helicopter category rating shall have
  - (a) a commercial pilot licence with a helicopter category rating;
  - (b) a valid flight instructor rating for a helicopter, an appropriate class rating and instrument rating; and
  - (c) 2000 hours as pilot-in-command, which shall include at least
    - (i) 500 hours in a helicopter of which 100 hours were accrued within the previous year,
    - (ii) 250 hours as a flight instructor in a helicopter, which shall include —
      - (aa) 100 hours of flight instruction in helicopters,
      - (bb) 50 hours of instrument flight instruction in helicopters, or
    - (iii) 100 hours of instrument flight time in actual or simulated conditions.

- (3) A person who applies for a commercial pilot designated examiner certificate with a powered-lift category rating shall have
  - (a) a commercial pilot licence with a powered-lift category rating;
  - (b) a valid flight instructor rating for powered-lift, an appropriate class rating and instrument rating;
  - (c) 2000 hours as pilot-in-command which include at least
    - (i) 1000 hours in a powered-lift of which 300 hours were accrued within the past year,
    - (ii) 100 hours in a powered-lift at night, or
    - (iii) 100 hours of instrument flight time in actual or simulated conditions,
    - (iv) in the case of a skills test in large or turbine-engine powered-lift
      - (aa) 300 hours in large or turbine engine powered-lift, of which 50 hours shall be in the type of powered-lift for the designation sought, and
      - (bb) 25 hours for each additional type of large aeroplane; and
  - (d) 500 hours as a flight instructor in a powered-lift including at least 250 hours of instrument flight instruction, of which 200 hours shall have been given in powered-lifts.
- (4) A person who applies for a commercial pilot designated examiner certificate with an airship category rating shall have
  - (a) a commercial pilot licence with an airship category rating;
  - (b) a valid flight instructor rating for an airship, an appropriate class rating and instrument rating;
  - (c) 500 hours in airships, of which
    - (i) 200 hours shall have been accrued within the past year, and
    - (ii) 50 hours in an airship at night; and
  - (d) 100 hours as a flight instructor in an airship.
- (5) A person who applies for a commercial pilot designated examiner certificate with a balloon category rating shall have
  - (a) a commercial pilot licence in the balloon category and applicable class rating;
  - (b) a valid flight instructor rating for a balloon category and appropriate class rating;
  - (c) 200 hours as pilot-in-command, which shall include at least
    - (i) 100 hours in a balloon, and
    - (ii) 20 hours in a balloon in the class, for which the designation is sought within the past year, including 10 flights in balloon of at least 30 minutes duration each; and
  - (d) 50 hours, of which 10 hours shall have been accrued in the past year, as a flight instructor in a balloon in the class for which the designation is sought.
- (6) A person who applies for a commercial pilot designated examiner certificate with a glider category rating shall have
  - (a) a commercial pilot licence glider category rating;
  - (b) a valid flight instructor rating with a glider category;
  - (c) 500 hours as pilot-in-command which include at least
    - (i) 250 hours in a glider,
    - (ii) 20 hours in a glider in the class, for which the designation is sought within the past year, including 50 flights in glider; and
  - (d) 200 hours as a flight instructor, including 100 hours of flight instruction given in a glider.

Experience required for airline transport pilot examiner certificate

- **137.** (1) A person who applies for an airline transport pilot designated examiner certificate with an aeroplane category rating shall have
  - (a) a valid flight instructor rating, an appropriate class rating and an instrument rating;
  - (b) 2000 hours as pilot-in-command, which shall include at least
    - (i) 1,500 hours in an aeroplane, 300 hours of which shall be accrued within the last year,
    - (ii) 500 hours in the class of aeroplane for which the designation is sought,
    - (iii) 100 hours at night in an aeroplane,
    - (iv) 200 hours in a complex aeroplane,
    - (v) 100 hours of instrument flight time in actual or simulated conditions,
    - (vi) for authority to conduct skills test in large or turbine-powered aeroplanes, 300 hours in large or turbine-powered aeroplanes, of which 50 hours are in the type of aeroplane for which designation is sought, and
    - (vii) for authority to conduct skills test in large or turbine-powered aeroplanes, 25 hours of each additional type of large aeroplane for the designation sought; and
  - (c) 500 hours as a flight instructor in aeroplanes which include at least
    - 100 hours of flight instruction in the class of aeroplane applicable to the designation sought,
    - (ii) 250 hours of instrument flight instruction of which 200 hours were given in an aeroplane, and
    - (iii) 150 hours of flight instruction given for commercial pilot licence with an aeroplane category, airline transport pilot licence or instrument rating for an aeroplane.
- (2) A person who applies for an airline transport pilot designated examiner certificate with a helicopter category rating shall have
  - (a) a valid flight instructor rating, an appropriate class rating and an instrument rating;
  - (b) 2,000 hours as pilot-in-command, which shall include at least
    - (i) 1,200 hours in an helicopter, 100 hours of which shall be accrued within the past year, and
    - (ii) 250 hours in the class of aeroplane for which the designation is sought,
    - (iii) 100 hours of instrument flight time in actual or simulated conditions,
    - (iv) in the case of a skills test in a large helicopter
      - (aa) 100 hours in a large helicopter, of which 50 hours shall be in the type of helicopter for the designation sought, and
    - (bb) 25 hours for each additional type of large helicopter; and
  - (c) 250 hours as a flight instructor in helicopters, including at least
    - (i) 100 hours of flight instruction given in helicopters, and
    - (ii) 50 hours of instrument instruction in helicopters.

- (3) A person who applies for an airline transport designated pilot examiner certificate with a powered lift category rating shall have
  - (a) a valid flight instructor rating, an appropriate class rating and instrument rating; and
  - (b) 2,000 hours as pilot-in-command, which shall include at least
    - (i) 1,500 hours in a powered-lift, 300 hours of which shall be accrued within the past year,
    - (ii) 100 hours at night in a powered-lift,
    - (iii) 100 hours of instrument flight time in actual or simulated conditions,
    - (iv) in the case of a skills test in large or turbine-engine powered-lift
      - (aa) 300 hours in large or turbine engine powered-lift, of which 50 hours shall be in the type of powered-lift for the designation sought, and
    - (bb) 25 hours for each additional type of large aeroplane; and
  - (c) 500 hours as a flight instructor in powered-lifts, including at least
    - (i) 250 hours of flight instruction given in powered-lifts, of which 200 hours shall have been given in powered-lifts, and
    - (ii) 150 hours of flight instruction given for commercial pilot licence with a powered-lift category, airline transport pilot licence with a powered-lift categoryor an instrument rating for a powered-lift.
- **138.** A person who applies for a flight instructor designated examiner certificate shall
  - (a) meet the requirements for a commercial pilot designated examiner or a commercial instrument rating examiner designation which is appropriate for the category and class of aircraft; and
  - (b) hold a commercial pilot examiner or commercial instrument rating designation for at least a year prior to designation as a flight instructor examiner.
- **139.** An applicant for a designated pilot examiner certificate shall pass a pre-designation knowledge test in the areas appropriate to the category of aircraft for which designation is sought.
- **140.** An applicant for a designated pilot examiner certificate shall pass a skills test conducted by an inspector of the Authority who holds a current and valid licence in the appropriate category, and where applicable, class and type ratings, in the relevant areas of operation.
- **141.** After designation, a designated pilot examiner shall maintain currency by
  - (a) attending initial and recurrent training provided by the Authority; and
  - (b) maintaining a current and valid
    - pilot licence, and where applicable, class or type ratings appropriate to the designation,
    - (ii) flight instructor rating and ratings applicable to the designation, and
    - (iii) class 1 medical certificate.

Experience required for flight instructor examiner certificate

Knowledge required for designated pilot examiner certificate

Skills test for designated pilot examiner certificate

Recent experience for designated pilot examiner certificate

142. A holder of an examiner's designation may conduct skills tests and proficiency checks for licences and ratings as listed on the designated pilot examiner's certificate and identification card.

Privileges for designated certificate

- **143.** (1) A designated pilot's examiner certificate shall be valid for a period of three years.
- (2) The designated pilot's examiner certificate shall be renewed at the discretion of the Authority.
- (3) An applicant for renewal of a designated pilot examiner certificate shall pass the appropriate skills test, determined by the Authority, on the areas of operation.
- **144.** When the Authority deems it necessary for a designated pilot examiner to receive additional designations, the designated pilot examiner —
  - (a) shall meet all the requirements in this Part for the designation; and
  - (b) need not take an additional knowledge test provided that the designation is within the same aircraft category.
- **145.** (1) Where any provision of these Regulations is contravened in relation to an aircraft, the operator of that aircraft and the pilot-in-command 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 or her consent or connivance and that he or she exercised all due diligence to prevent the contravention.
- (3) Any person who contravenes any provision to these Regulations commits an offence and shall be liable to the penalties specified under section 88 of the
- **146.** (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.
- **147.** All valid licences, certificates, permits or authorisation issued or granted by the Authority before the commencement of these Regulations shall remain valid until they expire or are revoked. **SCHEDULE**

pilot examiner

Duration and renewal of designated pilot examiner certificate

Additional designations

Penalties

Transitional provisions

Savings

## FORM A (regulation 16 (1))

APPLI	CATIO	FOR V	ALII	DATION	/CC	ONVERS	ION C	F F(	DREIGN I	ICENCE		
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NATIONALITY					PLACE OF BIRTH							
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# FORM B (regulation 17 (2))

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(a)	and a va	rtificate is valid subject to medical fitness alid Licence until The holder bytype of aircraft registered						
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(b)	This cer	rtificate is to be carried with the original						
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	VII	Signature of Holder:						
	IX	Stamp and Signature Of Issuing Authority:						

# FORM C (regulation 75 (1))

	APPLICATION FOR STUDENT PILOT LICENCE							
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NATIONALITY				PI	LACE OF BI	RTH		
DATES OF MEDICAL			FRO	OM			ТО	
GENDER	MALE				FEMALE	E		
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PHYSICAL ADDRESS								
APPLICANTS POSTAL AND RESIDENTIAL ADDRESS IN BOTSWANA								
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## FORM D (regulation 76, 84, 91, 97 and 103)

#### PLEASE NOTE

IX.

The holder of this licence is authorised to exercise the privileges of this licence, ratings and certificates as indicated.

This licence is only valid if accompanied by a relevant valid medical certificate and the applicable flight test.

The holder must sign this licence in the space provided immediately on receipt thereof.

Please notify any change of address immediately to Civil Aviation Authority of Botswana.

Please quote your licence number on all correspondence and/ or telephonic enquiries.

Date of Issue:		
Time of Issue:		
Issued By:		
Licence No:		

#### PILOT LICENCES

I BOTSWANA CIVIL AVIATION AUTHORITY OF BOTSWANA VIII BOTSWANA CIVIL AVIATION AUTHORITY п PILOT LICENCE -Pilot Pilot Aeroplane/Helicopter ш Licence Number: Last Name: First Names: Signature of Holder:\_\_\_\_\_ VII For the Civil VII Aviation Authority This licence complies with ICAO standards Date of Issue: Date of Issue: Time of Issue: Time of Issue: Issued By: Issued By: Licence No: Licence No: Page 1 Page 2 п Licence Title, Date of initial issue, Country code State of Issue: Validity: IX Licence Expiry Date: m Licence Number: XII Radiotelephony privileges. Last Name: First Names: R/T Licence Type: Expiry Date: Date of Birth: Place of Birth: XIV XIII Remarks: Stamp of Issuing Authority: XI v Address: VI Nationality: VIII Issuing Authority: XI Stamp and Signature Of Issuing Authority Date of Issue: Date of Issue: Time of Issue: Time of Issue: Issued By: Issued By: Licence No: Licence No: Page 3 Page 4

# FORM E (regulation 81)

APPLICATION FOR STUDENT PILOT LICENCE								
SURNAME					NAME			
PASSPORT/ID NUMI	BER				DATE OF BIRTH	Τ		
					PLACE OF BIRTI	I		
LICENCE NUMBER		•			NATIONALITY			
DATES OF MEDICA	L	FROM					ТО	
GENDER	MALE				FEMALE			•
NAME AND ADDRESS OF AVIATION TRAINING ORGANISATION								
POSTAL ADDRESS								
APPLICANTS POSTAL ADDRESS IN BOTSWANA								
TELEPHONE NUMB	BER	ER			EMAIL ADDRESS			
AEROPLANCE HELICOPTER								
INITIAL LICENCE APPLICANT'S INITIAL LICENCE EXPERIENCE						ΛI	DDI ICANI	D1C
				INIIA	LLICENCE		PPLICANT XPERIENO	
Applicant must be at le	EXPER	IENCE			nt must be at least 17	EX	KPERIEN	
	EXPER	IENCE		Applica		EX	KPERIEN	
Applicant must be at le	east 17 years	of age		Applicar 40 Hour	nt must be at least 17	EX year	rs of age	
Applicant must be at least 40 Hours Total Time	east 17 years of solo cross cou	of age		Applicar 40 Hour Minimu	nt must be at least 17	year oss c	rs of age	
Applicant must be at least 40 Hours Total Time  Minimum of 5 Hours s	east 17 years of solo cross cours SOLO	of age	nt's fl	Applicate 40 Hour Minimus Minimus	nt must be at least 17 s Total Time m of 5 Hours solo cr m of 10 Hours SOLO	year oss c	rs of age	
Applicant must be at least 40 Hours Total Time  Minimum of 5 Hours:  Minimum of 10 Hours	east 17 years of solo cross cours SOLO	of age  ntry  d applicar		Applicate 40 Hour Minimus Minimus	nt must be at least 17 s Total Time m of 5 Hours solo cr m of 10 Hours SOLO must be submitted	year oss c	rs of age	
Applicant must be at le 40 Hours Total Time Minimum of 5 Hours Minimum of 10 Hours A certified copy of th	east 17 years of solo cross cours SOLO	of age  ntry  d applicar		Applicate 40 Hour Minimum Mini	nt must be at least 17 s Total Time m of 5 Hours solo cr m of 10 Hours SOLO must be submitted	year oss c	rs of age	
Applicant must be at le 40 Hours Total Time Minimum of 5 Hours Minimum of 10 Hours A certified copy of th	east 17 years of solo cross cours SOLO	of age  ntry  d applicar	ME IN	Applicate 40 Hour Minimum Mini	nt must be at least 17 s Total Time m of 5 Hours solo cr m of 10 Hours SOLO must be submitted TTERS	year oss c	rs of age	
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Applicant must be at least 10 Hours Total Time  Minimum of 5 Hours:  Minimum of 10 Hours  A certified copy of th  SIGNATURE OF AP	east 17 years of solo cross cours SOLO the summarize PPLICANT	ntry d applican NAM	ME IN	Applicate 40 Hour Minimum Mini	nt must be at least 17 s Total Time m of 5 Hours solo cr m of 10 Hours SOLO must be submitted TTERS	year oss c	rs of age country  DATE	

# FORM F (regulation 88)

APPLICATION FOR COMMERCIAL PILOT LICENCE (A&H)										
SURNAME						N/	AME			
PASSPORT NUMBER	R					DA	ATE OF BIRTH			
NATIONALITY						PL	ACE OF BIRTH	[		
LICENCE TYPE						DATE OF ISSUE				
DATES OF MEDICA	L		FROM					İ	ТО	
GENDER	M.	ALE					FEMALE			
NAME AND ADDRE			ION							
APPLICANTS POSTAL ADDRESS IN BOTSWANA										
TELEPHONE NUME	BER				EN	EMAIL ADDRESS				
AEROPLANCE	AEROPLANCE				E	HELICOPTER				
INITIAL LICENCE				LICANT'S INITIAL LICENCE ERIENCE			APPLICANT'S EXPERIENCE			
Applicant must be at least 17 years of age	ast				Applicant must be at least 17 years of age			ast		
40 Hours Total Time					40 Hours Total Time					
Minimum of 5 Hours so	olo cross	s country	у				um of 5 Hours so ountry	olo		
Minimum of 10 Hours	SOLO				Mii SO:		um of 10 Hours			
A certified copy of the	summ	arized a	applican	t's flying logbo	ok m	ıust	be submitted		•	
SIGNATURE OF AP	PLICA	NT		NAME IN BL	OCK	K LI	ETTERS		DATE	
FOR OFFICIAL USE ONLY:										
Details checked by:										
OFFICIAL'S SIGNATURE NAME				ME IN BLOC	K LI	LETTERS			DATE	
AMOUNT PAID	P	]	RECEI	PT NUMBER						

# FORM G (regulation 95)

	APPLICATION FOR MULTI-CREW PILOT LICENCE									
SURNAME					NAME					
PASSPORT NUMBE	ER .				DATE OF BIRTH					
NATIONALITY					PLACE OF BIRTH	ł				
LICENCE TYPE					DATE OF ISSUE					
LICENCE NUMBER	2				EXPIRY DATE					
DATES OF MEDICA	AL.		FROM				ТО			
GENDER	MALE				FEMALE					
NAME AND ADDRESS OF AVIATION TRAINING ORGANISATION										
POSTAL ADDRESS										
APPLICANTS POSTA BOTSWANA	AL ADDRESS	IN								
TELEPHONE NUM	BER		EMAIL ADDRESS							
STAMP SHOWING ORGANISATION A										
SIGNATURE OF A	PPLICANT	NAN	ME IN BLOCK	LE	TTERS		DATE			
					·					
		FO	R OFFICIAL	USE	E ONLY:					
Details checked by:										
OFFICIAL'S SIGNATURE NAI			ME IN BLOC	DATE						
AMOUNT PAID	P	RECEIPT NUMBER								

# FORM H (regulation 100)

APPLICA	ATION FOR I	NITIAL A	AIRLINE TRAI	NSPORT PILOT LICI	ENCE	E (A&H)		
SURNAME				NAME				
PASSPORT NUMBE	R			DATE OF BIRTH				
NATIONALITY				PLACE OF BIRT	Н			
LICENCE TYPE				DATE OF ISSUE	T			
LICENCE NUMBER	1			EXPIRY DATE				
DATES OF MEDICA	<b>A</b> L		FROM	-		ТО		
GENDER	MALE			FEMALE			-	
NAME AND ADDRESS OF AVIATION TRAINING ORGANISATION								
POSTAL ADDRESS								
APPLICANTS POSTA BOTSWANA	AL ADDRESS	IN						
TELEPHONE NUM	BER		EMAIL ADDRESS					
STAMP SHOWING ORGANISATION A								
SIGNATURE OF A	PPLICANT	NAN	ME IN BLOCK	LETTERS		DATE		
FOR OFFICIAL USE ONLY:								
Details checked by:								
OFFICIAL'S SIGNATURE NA			ME IN BLOCI		DATE			
AMOUNT PAID	P	RECEI	T NUMBER		· ·			

# FORM I (regulation 114 and 130)

Al	PPLICATION	FOR FL	IGHT/GROUN	D INSTRUCTO	R RATING	j		
SURNAME				NAME				
PASSPORT NUMBE	R			DATE OF E	BIRTH			
NATIONALITY	NATIONALITY			PLACE OF	BIRTH			
LICENCE TYPE				DATE OF I	SSUE			
LICENCE NUMBER				EXPIRY DA	ATE			
DATES OF MEDICA	L		FROM	FROM TO				
GENDER	MALE			FEMA	LE			
NAME AND ADDRESS OF AVIATION TRAINING ORGANISATION								
POSTAL ADDRESS								
APPLICANTS POSTA BOTSWANA	L ADDRESS	IN						
TELEPHONE NUME	BER		•	EMAIL ADDR	ESS			
STAMP SHOWING ORGANISATION A								
SIGNATURE OF AI	PPLICANT	NAN	ME IN BLOCK	LETTERS		DATE		
FOR OFFICIAL USE ONLY:								
Details checked by:								
OFFICIAL'S SIGNA	ATURE	NA	ME IN BLOCI	LETTERS		DATE		
AMOUNT PAID	P	RECEIF	T NUMBER					

## FORM J (regulation 134)

APPLICATI	APPLICATION FOR DESIGNATED PILOT EXAMINER CERTIFICATE						
DETAILS OF APPLICANT			Company				
Surname			First Name				
Date of Birth			Nationality				
Postal Address			Phone number				
			Email Address				
Licence Number			Identity/Passport Number				
Have you previously been de	nied to exercise the D	FE p	rivileges?	YES		NO	
If YES, please state the reason	on for denial:			•			
DETAILS OF COMPANY							
Name of Company							
Physical Address							
Aircraft type(s) on which tests will be conducted							
Have you previously been de	enied to exercise the D	FE p	rivileges?	YES		NO	
If YES, please state the reaso	on for denial:						
DETAILS OF COMPANY							
Name of Company							
Physical Address							
Aircraft type(s) on which tes	ts will be conducted	-					
FLYING EXPERIENCE							
	Aeroplane		Н	elicopte	•		
Total Hours			Total Hours				
Multi - Engine			Multi - Engine				
Instrument Flying			Instrument Flying				
Total Flying Instruction			Total Flying Instruction				

#### DECLARATION BY APPLICANT

- I, the undersigned, hereby certify that:-
  - 1. I am aware that delegation is at the sole discretion of the Authority, is a privilege and not a right, and may be withdrawn at any stage.
  - 2. I am aware that I will be subjected to annual oversight by the CAAB for the purpose of maintenance of standards and re-designation
  - 3. I am aware that honesty and integrity are essential prerequisites for designation and the maintenance thereof.

#### CODE OF CONDUCT

- I, understand that I am mandated:-
  - 1. To act professionally, with integrity and with honesty;
  - 2. To comply with all Regulations; and
  - 3. To be unbiased and fair in my assessment.

SIGNATURE OF APPLICANT	NAME IN BLOCK LETTERS	DATE

MADE this 22nd day of January, 2013

NONOFO E. MOLEFHI, Minister of Transport and Communications.

## CIVIL AVIATION ACT (Cap. 71:01)

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

(Published on 22nd February, 2013)

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- 16. Authorisation to conduct instruction
- 17. Crediting of flight time
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- 27. Experience
- 28. Flight instruction

## D – Specific requirements for powered-lift category

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- 30. Flight instruction

## E – Specific requirements for airship category

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- 39. Flight instruction

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- 40. Experience
- 41. Flight instruction

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SCHEDULE 2

SCHEDULE 3

**SCHUDULE 4** 

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 —
  - (i) 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 pilotin-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.

privileges of pilots aged over 60 years

Limitation of

#### 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 —

- (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

- **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 single-pilot 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.
- **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 and pilot not flying an actual or simulated flight.
  - (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.
- (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

- **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 —

- (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
  - (i) 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

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.

- **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.

- (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

- **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
  - (i) 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/m<sup>2</sup>).
- (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.
- **126.** (1) Subject to subregulations (2) and (3), a medical certificate shall 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
  - 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	Inmited to simple routine exchanges.		Performs at	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 helow	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			cence	e Number:								
(4) Date of Birth:	Age	e:	(5) Sex:	(6) Applic Initial:			newal:	ewal: (9) Type of licence app				olied	l fo	or:		
(7) Place and Country of Birth:	appli	(10) Class of medical certificate applied for:			(11) Occupation											
(12) Permanent Address:		(13) Post	13) Postal Address (if different)		'	(8) Nationality: (14) Employer:				(17) Total flight time Hours:						
Telephone: Mobile No: E-mail:			Mobile No:		(15) Last medical exam: Date: Place:			(18) Flight time hours since last medical:								
(16) GP Name and Address:					(1	(19) Aircraft presently flown (e.g. ATR 42, C172)							(2)			
Telephone:					(2	20) Type of flying intended:										
(22) Have you ever had an aviation r				ded	(2	1) P	resent	flying	g acti	vity:						
or revoked by any licensing authority No Yes Details:	y? II Date		SS WITH AME Place:		Si	Single pilot: multi pilot: multi pilot:										
(23) Any aircraft accident or reported No Yes Details:	d inci Date		last medical: Place:		(2		Do you ntake			ohol	State	e ave	erage	wee	ekl	y
(25) Do you smoke tobacco?  Never: No Yes No Yes No If YES, state drug, dose, date started and why  State type, amount & no. of years:						М	Y	Y	Y	Y						
question. Elaborate Yes answers in the	(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	s N	0			Yes	No	)							Yes	N	łо
101. Frequent or severe Headaches		110. Sug	ar/Albumin in Uri	ine	Ц	1	119. N	Malari	a/oth	er t	ropio	cal d	iseas	е		
102. Dizziness, fainting or unconsciousness		111. Epi	lepsy/Fits			]	120. <i>A</i>	Any fa pileps					abete	s,		
103. Eye trouble		112. Ner	vous trouble of an	y sort	Ц	_ 1	121. F	Heart o	lisea	se					_	
104. Hay fever		113. Mo	tion Sickness requ	iring drugs		122. Have you ever been refused a flying licence				ı						
105. Asthma, lung disease			dical rejection from itary service	n or for		]	123. F	amily Tigh b								
106. Heart trouble			ve you ever been nitted to Hospital			]	124. N	Mental	l Illne	ess						
107. High/low blood pressure		116. Any	other illness			1	125. <i>A</i>	Allergy	y/astl	ıma/	/ecze	ma				
108. Stomach trouble		117. Hea	ıd injury			]	126. F	Female nenstr		ly: C	Jyna	ecol	ogica	ıl,		
109. Kidney Stone/Blood in urine		118. Alc	ohol/drug/substan	ce abuse		1	127. <i>A</i>	Are yo	u pre	gna	nt?					
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)																
Date		Jignatuli	o or repricant		J	15110	acuic 0	1 / 11VII	⊒ ( <b>∀</b> ¥.	111103	.oj					

## 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	<b>A</b> 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 offe	ence
137 (4) (a) 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) (d) P 15 000 P 30 000 P 50 000	
137 (4) (e) P 25 000 P 40 000 P 60 000	
137 (4) (f) 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) (j) P 15,000.00 P 30,000.00 P 80,000.00	
137 (4) (k) 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.