THE CIVIL AVIATION ACT
(CAP. ……………………..)

REGULATIONS
(Made under Section ……………………..)

THE CIVIL AVIATION (PERSONNEL LICENSING) REGULATIONS,…

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THE CIVIL AVIATION (PERSONNEL LICENSING) REGULATIONS, …

PART I  
PRELIMINARY PROVISIONS

Citation  
1. These Regulations may be cited as the Civil Aviation (Personnel Licensing) Regulations, …………..

Interpretation  
2. In these Regulations, unless the context requires otherwise:
   “accredited medical conclusion” means the conclusion reached by one or more medical experts acceptable to the Authority for the purposes of the case concerned, in consultation with other experts as necessary;
   “aeronautical experience” means pilot time obtained in an aircraft, approved synthetic flight trainer for meeting the training and flight time requirements of these Regulations;
   “aeroplane” means a 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;
   “Air Traffic Control Service” means a service provided for the purpose of:
       (a) preventing collisions:
           (i) between aircraft; and
           (ii) on the manoeuvring area, between aircraft and obstructions; and
       (b) expediting and maintaining an orderly flow of traffic;
   “Air Traffic Control unit” means a generic term meaning variously, area control centre, approach control unit or aerodrome control tower;
   “aircraft” means any machine that can derive support in the atmosphere from the reactions of the air other than the reactions of the air against the earth’s
“aircraft category” means classification of aircraft according to specified basic characteristics such as aeroplane, rotorcraft, glider and lighter-than-air and powered-lift aircraft;

“aircraft required to be with a co-pilot” means a type of aircraft that is required to be operated with a co-pilot as specified in the flight manual or air operator certificate;

“airship” means a power-driven lighter-than-air aircraft;

“aircraft type” means all aircraft of the same basic design;

“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 any 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 (AMO)” means an organisation approved to perform specific aircraft maintenance activities by the Authority 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;

“authorised instructor” means a person who—
(a) holds a valid ground instructor licence issued under these Regulations for conducting ground training;
(b) holds a current flight instructor rating issued under these Regulations for conducting ground training or flight training; or
(c) 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, …;

“Authority” means the [State] Civil Aviation Authority;

“aviation repair specialist (ARS)” means a person qualified to perform or supervise the maintenance, preventive maintenance, or alteration of aircraft, airframes, aircraft engines, propellers, appliances, components, and parts appropriate to the designated speciality area for which the aviation repair specialist is authorised but only in connection with employment by an AMO;

“balloon” means a non-power-driven lighter-than-air aircraft;

“commercial air transport operation” means an aircraft operation involving the transport of passengers, cargo or mail for remuneration or hire;

“competency” means a combination of skills, knowledge and attitudes required to perform a task to the prescribed standard;

“competency element” means an action that constitutes a task that has a triggering event and a terminating event that clearly defines its limits, and an observable outcome;

“competency unit” means a discrete function consisting of a number of competency
elements;

“credit” recognition of alternative means or prior qualifications;

“cabin crewmember” means a crewmember who performs in the interest of safety of passengers, duties assigned by the operator or the PIC of the aircraft, but who shall not act as a flight crewmember;

“Category II (CAT II) operations” means a precision instrument approach and landing with a decision height lower than 60m(200 Ft), but not lower than 30m (10 Ft), and a RVR not less than 350m;

“Category IIIA (CAT IIIA) operations” means a precision instrument approach and landing with:

(a) a decision height lower than 30m (100Ft) or no decision height; and
(b) a RVR not less than 200m;

“Category IIIB (CAT IIIB) operations” means a precision instrument approach and landing with:

(a) a decision height lower than 15m (50Ft) or no decision height; and
(b) a RVR less than 200m but not less than 50m;

“Category IIIC (CAT IIIC) operations means a precision instrument approach and landing with no decision height and no Runway Visual Range limitations;

“check pilot” means a pilot approved by the Authority who has the appropriate training, experience, and demonstrated ability to evaluate and certify to the knowledge and skills of pilots;

“Contracting State” means a State that is signatory to the Convention on International Civil Aviation (Chicago Convention);

“Co-pilot” means a licensed pilot serving in a piloting capacity other than as PIC, but excluding a pilot who is on board the aircraft for the sole purpose of receiving flight instruction;

“course” means a programme of instruction to obtain a license, rating, qualification, authorisation, or recurrency required under these Regulations;

“Crew Resource Management (CRM)” means a program designed to improve the safety of flight operations by optimising the safe, efficient, and effective use of human resources, hardware, and information through improved crew communication and co-ordination;

“critical engine” means the engine whose failure would most adversely affect the performance or handling qualities of an aircraft;

“cross country” means a flight between a point of departure and a point of arrival following a pre-planned route using standard navigation procedures;

“designated medical examiner” means a person qualified and licensed in the practice of medicine, designated by the Authority to conduct medical examinations of fitness of applicants and issue reports for the issue or renewal of the licences or certificates or ratings specified in the Civil Aviation (Personnel Licensing) Regulations;

“error” means an action or inaction by the flight crew that leads to deviations from organisational or flight crew intentions or expectations;

“error management” means the process of detecting and responding to errors with a
countermeasures that reduce or eliminate the consequences of errors, and mitigates the probability of further errors or undesired aircraft states;

“evaluator” means a person employed by a certified Approved Training Organisation who performs tests for licensing, added ratings, authorisations, and proficiency checks that are authorised by the certificate holder’s training specification, and who is authorised by the Authority to administer such checks and tests;

“examiner” means any 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;

“facility” means a physical plant, including land, buildings, and equipment, which provides the means for the performance of maintenance, preventive maintenance, or modifications of any article;

“flight crewmember” means a licensed crewmember charged with duties essential to the operation of an aircraft during flight duty period;

“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 time” means:

(a) for aeroplanes and 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 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;

(c) for airships 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 any 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 axis;

“heliport” means an aerodrome or defined area on a structure intended to be used wholly or in part for the arrival, departure, and surface movement of helicopters;

“human performance” means human capabilities and limitations which have an impact
on the safety and efficiency of aeronautical operations;

“inspection” means the examination of an aircraft or aircraft component to establish conformity with a standard approved by the Authority;

“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, 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;

“kg” means kilogrammes;

“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;

“LAME course” means a training course for maintenance licence ratings in airframe, powerplant and avionics;

“licensed aircraft maintenance engineer” means a person licenced by the Authority to perform defined maintenance upon aircraft or aircraft components;

“lighter-than-air aircraft” means any aircraft supported chiefly by its buoyancy in the air;

“likely” means with a probability of occurring that is unacceptable to the Medical Assessor;

“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 assessor” means a physician qualified and experienced in the practice of aviation medicine who evaluates medical reports submitted to the Authority by medical examiners;

“Medical Certificate (or Medical Assessment)” means the evidence issued by the Authority that the licence holder meets specific requirements of medical fitness;

“medical examiner” means a physician 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;

“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;

“NOTAM” means Notice to Airmen;

“pilot-in-command (PIC)” 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 time” means that time a person:
(a) serves as a required pilot;
(b) receives training from an authorised instructor in an aircraft, approved synthetic flight trainer; or
(c) gives training as an authorised instructor in an aircraft, approved synthetic flight trainer;

“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(s) 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;

“performance criteria” means a simple, evaluative statement on the required outcome of the competency element and a description of the criteria used to judge if the required level of performance has been achieved.”

“pilot in command under supervision” means a copilot performing, under the supervision of the pilot-in-command, the duties and functions of a pilot-in-command, in accordance with the method of supervision acceptable to the Authority.

“power-lift” means a heavier-than-air aircraft capable of vertical take-off, vertical landing, and low speed flight that depends principally on engine-driven lift devices or engine thrust for the lift during these flight regimes and on non-rotating aerofoil(s) for lift during horizontal flight.”

“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 ft so as to enhance breathing and comfort of passengers and crew;

“problematic use of substances” means the use of one or more psychoactive substances by aviation personnel in a way that constitutes a direct hazard to the user or endangers the lives, health or welfare of others; and causes all worsens an occupational, social, mental or physical problem or disorder.

“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 for 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;

“psychoactive substance” means alcohol, opioids, cannabinoids, sedatives and
hypnotics, cocaine, other psychostimulants, hallucinogens, and volatile solvents, whereas coffee and tobacco are excluded;

“psychoactive substance” means alcohol, opioids, cannabinoids, sedatives and hypnotics, cocaine, other psychostimulants, hallucinogens, and volatile solvents, whereas coffee and tobacco are excluded;

“quality system” means documented organizational procedures and policies: internal audits of those policies and procedures: management review and recommendation for quality improvement.”

“rating” means an authorisation entered on or associated with a license or certificate and forming part thereof, stating special conditions, privileges or limitations pertaining to such license or certificate;

“repair” mean the restoration of an aircraft or aircraft component to a serviceable condition in conformity with an approved standard;

“rest period” means a period free of all restraint, duty or responsibility as specified by the Authority;

“rotorcraft” means a power-driven heavier-than-air aircraft supported in flight by the reactions of the air on one or more rotors;

“safety-sensitive personnel” means a person who might endanger aviation safety if they perform their duties and functions improperly including, but not limited to, crewmembers, aircraft maintenance personnel and air traffic controllers.

“significant” means to a degree or of a nature that is likely to jeopardize flight safety;

“solo flight” means a flight on which a student pilot of the aircraft is the sole occupant of the aircraft.

“solo flight time” means flight time during 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 AMO;

“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 aryldihydropyridines, 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 program or internal program 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 license applied for or held or as 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;

“synthetic flight trainer” means any one of the following three types of apparatus in which flight conditions are simulated on the ground:

(i) a synthetic flight trainer, which provides an accurate representation of the cockpit of a particular aircraft type to the extent that the mechanical, electrical, electronic, etc. aircraft systems control functions, the normal environment of flight crewmembers, and the performance and flight characteristics of that type of aircraft are realistically simulated;

(ii) a flight procedures trainer, which provides a realistic cockpit environment, and which simulates instrument responses, simple control functions of mechanical, electrical, electronic, etc. aircraft systems, and the performance and flight characteristics of aircraft of a particular class;

(iii) 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;

“threat” means events or errors that occur beyond the influence of flight crew, increase operational complexity and which must be managed to maintain the margin of safety;

“threat management” means the process of detecting and responding to the threats with countermeasures that reduce or eliminate the consequences of threats, and mitigate the probability of errors or undesired aircraft states;

“training programme” means a program that consists of course(s), courseware, facilities, flight training equipment, and personnel necessary to accomplish a specific training objective and may include a core curriculum and a specialty curriculum;

“training time” means the time spent receiving from an authorised instructor flight training, ground training, or simulated flight training in an approved synthetic flight trainer;

“Vmc” means minimum control speed with critical engine inoperative.

3. Those Regulations addressing persons licensed under any Part of these Regulations apply also to any person who engages in an operation governed by any Part of these Regulations without the appropriate licence, operations specifications, or similar document required as part of the certification.

PART II
LICENCES, CERTIFICATION, RATINGS AND AUTHORISATIONS

4. (1).- The Authority may issue the following licences and certificates under these Regulations:

(a) Pilot Licences, including:

(i) Student Pilot Licence;
(ii) Private Pilot Licence;
(iii) Commercial Pilot Licence;
(iv) Airline Transport Pilot Licence;
(v) Multi-crew Pilot Licence.
(b) Ground Instructor Licence;
(c) Flight Engineer Licence;
(d) Air Traffic Controller Licence;
(e) Aircraft Maintenance Engineer Licence;
(f) Flight Operations Officer Licence;
(g) Flight Radio Telephony Operator Licence; and
(h) Cabin Crewmember Certificate.

(2) Where the applicant does not meet the specific requirements for the issue
of the particular licence, he shall obtain a student pilot licence to enable him fulfil the
eligibility requirements for pilot licence issued under these Regulations.

(3) Personnel licences issued by the Authority shall conform to the
specifications prescribed in the First Schedule.

5. - (1) The Authority may issue the following ratings for pilots:
   (a) Category ratings in the following aircraft:
       (i) aeroplane;
       (ii) rotorcraft;
       (iii) glider;
       (iv) free balloon;
       (v) **powered-lift**; and
       (vi) airship of a volume of more than 4600 cubic metres.
   (b) Class ratings in the following aeroplanes:
       (i) single-engine, land;
       (ii) single-engine, sea;
       (iii) multi-engine, land; and
       (iv) multi-engine, sea;
   (c) Class ratings in the following rotorcraft:
       (i) helicopters; and
       (ii) gyroplane.
   (d) Class ratings in the following lighter-than-air aircraft:
       (i) airship; and
       (ii) free balloon.
   (e) Type ratings in the following aircraft:
       (i) aircraft certificated for at least two pilots.
       (ii) any aircraft considered necessary by the Authority;
       (iii) helicopters certificated for single-pilot operations and which have
            comparable handling, performance and other characteristics.
   (f) Instrument ratings in the following aircraft:
       (i) instrument – aeroplane;
       (ii) instrument – helicopter.
   (g) Night rating.
   (h) Flight instructor rating.
   (i) Ground instructor ratings:
       (i) basic;
       (ii) advanced;
       (iii) instrument.

(2) When the holder of a pilot licence seeks a licence for an additional
category of aircraft, the Authority may endorse the original licence with the new
category rating in accordance with sub regulation (1) and any other requirements
prescribed in these Regulations appropriate to the privileges for which the category
rating is sought.

(3) Category ratings shall not be endorsed on a licence when the category is included in the title of the licence itself.

(4) Any additional category rating endorsed on a pilot licence shall indicate the level of licensing privileges at which the category rating is granted.

(5) The Authority may place the category, class or type rating on a pilot licence when issuing that licence, provided the rating reflects the appropriate category, class, or type of aircraft used to demonstrate skill and knowledge for its issue and the aircraft type is registered in [State].

(6) The Authority may issue the following ratings for flight engineers:
   (a) reciprocating engine powered including type rating;
   (b) turbo propeller powered including type rating; and
   (c) turbojet powered including type rating.

(7) The Authority may issue the following ratings for air traffic controllers:
   (a) aerodrome control;
   (b) approach control;
   (c) approach radar control;
   (d) approach precision radar control;
   (e) area control; and
   (f) area radar control.

(8)(a) The Authority may issue the following categories without type ratings for Aircraft Maintenance Engineer Licence:
   (i) Category ‘A’ – Aeroplane;
   (ii) Category ‘C’ - Piston engines;
   (iii) Category ‘C’ - Gas Turbine engines;
   (iv) Category ‘A’ and ‘C’ - Piston Engined Rotorcraft;
   (v) Category ‘A’ and ‘C’ - Turbine Engined Rotorcraft;
   (vi) Category ‘A’ and ‘C’ - Piston Engined Airship;
   (vii) Category ‘A’ and ‘C’ - Turbine Engined Airship;
   (viii) Category ‘X’ - Electrical;
   (ix) Category ‘X’ - Instruments;
   (x) Category ‘X’ - Automatic Pilots -Aeroplanes;
   (xi) Category ‘X’ - Automatic Pilots -rotorcraft;
   (xii) Category ‘X’ - Compass Compensation and Adjustments;
   (xiii) Category R – Radio

(9) The Authority may issue the following type ratings for Aircraft Maintenance Engineer Licence in the following categories but excluding aeroplanes of 13,610 kg (30,000 lb) maximum take off mass (MTOM) or greater for which maintenance has to be carried out and certified under company approval:
   (a) Category ‘A’ aeroplanes;
      (i) composite material aeroplanes not exceeding 5700 kg MTOM;
      (ii) wooden and combined wood and metal aeroplanes: an aeroplane where the primary structures is manufactured from wood or combinations of wood and metal;
      (iii) unpressurized aeroplanes not exceeding 2730 kg MTOM;
(iv) Pressurized aeroplanes not exceeding 2730 kg MTOM;
(v) unpressurised aeroplanes not exceeding 5700 kg MTOM;
(vi) pressurized aeroplanes not exceeding 5700 kg MTOW;
(vii) unpressurised aeroplanes exceeding 5700 kg MTOM; or
(viii) pressurised aeroplanes exceeding 5700 kg MTOM;

(b) Category ‘C’ Engines;
(i) diesel Engines in Aeroplanes;
(ii) Piston Engines in Aeroplanes excluding diesel engines;
(iii) gas-turbine engines in Aeroplanes not exceeding 22.25 Kilo Newton (5000lbf) static thrust including where so endorsed the associated auxiliary power unit (APU) installations;
(iv) gas-turbine engines in Aeroplanes exceeding 22.25 KN (5000lbf) static thrust including where so endorsed the associated auxiliary power unit (APU) installations; or
(v) Propeller turbine engines in aeroplanes including where so endorsed the associated APU installations;

(c) Category “A” and “C” Rotorcraft:
(i) piston-engined rotorcraft;
(ii) turbine-engined rotorcraft not exceeding 2730 kg MTOM; or
(iii) turbine-engined rotorcraft above 2730 kg MTOM but below 5700 kg MTOM.

(d) Category “A” and “C” Airship:
(i) piston-engined airship; or
(ii) turbine-engined airship.

(e) Category “X” – Electrical:
(i) aircraft in which the main generation system output is direct current (dc), including alternators having self contained rectifier system, and in which secondary alternators having an individual power rating not exceeding 1.5 KVA may be fitted;
(ii) aircraft in which the main generation system output is dc and which have installed “frequency wild” alternators with an individual power rating exceeding 1.5KVA for auxiliary services;
(iii) aircraft in which the main generation system output is “frequency wild” alternating current (ac) and dc power is supplied from Transformer Rectifier Units; and
(iv) aircraft in which the main generation system output is constant speed drive units, or variable speed constant frequency (VSCF) generator/converter systems, and direct current (dc) power is supplied from transformer rectifier units;

(f) Category “X” – Instruments:
(i) general aircraft instrument systems but excluding instruments installed on any aircraft which has installed a Flight Director System;
(ii) flight Director Systems with air driven gyroscopes (attitudes);
(iii) flight Director Systems with electrical driven gyroscopes (attitudes);

(g) Category “X” –Automatic Pilots (Aeroplanes):
(i) Non-Radio-Coupled Automatic Pilots;
(ii) Radio-Coupled Automatic Pilots;

(h) Category “X” – Automatic Pilots (Rotorcraft):
   (i) Non Radio-Coupled Automatic Pilots;
   (ii) Radio-Coupled Automatic Pilots;

(i) Category “X” – Compass: Compass compensation and adjustment;

(j) Category “R” – Radio;
   (i) airborne communication and airborne navigation systems;
   (ii) airborne radar systems.

6. -(1) The Authority may issue the following authorisations under these Regulations:
   (a) Category II operations;
   (b) Category III operations;
   (c) flight examiner;
   (d) flight engineer Instructor;
   (e) type rating instructor;
   (f) cabin crewmember instructor;
   (g) medical examiner; and
   (h) aviation repair specialist (ARS)

(2) The Authority may issue the following classes for aviation repair specialists authorisation:
   (a) propellers;
   (b) computer;
   (c) instrument;
   (d) accessory;
   (e) component;
   (f) welding;
   (g) non-destructive testing; and
   (h) any other authorization as determined by the Authority.

7. -(1) A holder of a pilot licence, air traffic controller licence, flight engineer licence, flight radiotelephone operator licence shall demonstrate the ability to speak and understand English language to the level specified in the language proficiency requirements in the Second Schedule to these Regulations.

(2) The licensed personnel specified in sub-regulation (1) who demonstrate proficiency below the Expert Level (Level 6) shall be formally evaluated at intervals in accordance with an individual’s demonstrated proficiency level as follows:
   (a) those demonstrating language proficiency at the Operational Level (Level 4) shall be evaluated once every three years; and
   (b) those demonstrating language proficiency at the Extended Level (Level 5) shall be evaluated once every six years.

8. -The Authority shall issue licences with a specific expiry date except as specifically provided by these Regulations.

(2) Except for an aviation repair specialist authorisation, all authorisations and ratings issued under these Regulations shall be valid for the term issued by the Authority but in any case not more than twelve months.

(3) An aviation repair specialist authorisation issued on the basis of employment with a specified employer, shall be valid for the term of employment of the aviation repair specialist with that employer.
(4) A Student Pilot Licence (SPL) shall be valid:
(a) for a holder who is less than forty years of age, from the date the licence is issued or renewed by the Authority for a period of the remainder of the twenty four months validity of the holder’s Medical Certificate; or
(b) for a holder who is forty years of age or more, from the date the licence is issued or renewed by the Authority for a period of the remainder of the twelve months validity of the holder’s Medical Certificate.

(5) A Private Pilot Licence (PPL) with an aeroplane or rotorcraft or glider category rating shall be valid:
(a) for a holder who is less than forty years of age, from the date the licence is issued or renewed by the Authority for a period of the remainder of the twenty four months validity of the holder’s Medical Certificate; or
(b) for a holder who is forty years of age or more, from the date the licence is issued or renewed by the Authority for a period of the remainder of the twelve months validity of the holder’s Medical Certificate.

(6) A Commercial Pilot Licence (CPL) with an aeroplane or rotorcraft category rating shall be valid:
(a) for a holder who is less than forty years of age, from the date the licence is issued or renewed by the Authority for a period of the remainder of the twelve months validity of the holder’s Medical Certificate; or
(b) for a holder who is forty years of age or more, from the date the licence is issued or renewed by the Authority for a period of the remainder of the twelve months validity of the holder’s Medical Certificate.

(7) An Airline Transport Pilot Licence (ATPL) with an aeroplane or rotorcraft category rating shall be valid:
(a) for a holder who is less than forty years of age, from the date the licence is issued or renewed by the Authority, for a period of the remainder of the twelve month validity of the holder’s Medical Certificate; or
(b) for a holder who is forty years of age or more, from the date the licence is issued or renewed by the Authority for a period of the remainder of the six months validity of the holder’s Medical Certificate.

(8) An instrument rating is valid for a period of twelve months from the date of the initial or renewal flight test.

(9) A night rating is valid for a period of twelve months from the date of the initial issue or renewal of the rating.

(10) A Flight Engineer Licence is valid from the date the licence is issued or renewed by the Authority for a period of the remainder of the twelve month validity of the holder’s Medical Certificate.

(11) A Flight Radio Telephony Operator Licence is valid for a period of twenty four months from the date of issue or renewal.

(12) A Flight Operation Officer Licence is valid for a period of twenty four months from the date of issue or renewal.

(13) A Cabin Crewmember Certificate is valid for twelve months from the date of issue or renewal.

(14) Aircraft Maintenance Engineer Licence is valid for a period of twenty four months from the date of issue or renewal.

(15) A Flight Instructor Rating is valid for a period of twelve months from the date of the instructor flight test or renewal.

(16) A Ground Instructor Licence is valid for a period of twenty four months from the date of issue or renewal.

(17) An Air Traffic Controller Licence shall, in the case of a holder who is:
Validity of licences.

9. -(1) A holder of a licence shall not exercise the privileges granted by that licence, or by related ratings, unless the holder maintains competency and meets the requirements for recent experience established by the Authority.
   (2) The Authority shall ensure that other Contracting States are able to confirm the validity of the licence.
   (3) The maintenance of competency of flight crewmembers engaged in commercial air transport operations may be satisfactorily established by demonstration of skill during proficiency flight checks completed in accordance with these Regulations.
   (4) Maintenance of competency may be satisfactorily recorded in the operator’s records and in the flight crewmember’s personal logbook.
   (5) A flight crewmember may, in lieu of maintaining competency in an aircraft, demonstrate continuing competency in synthetic flight training devices approved by the Authority.
   (6) A report of medical fitness obtained in accordance with these Regulations shall be submitted to the Authority at intervals of not more than:
      (a) twenty four months for the Private Pilot Licence (PPL) for aeroplane;
      (b) twenty four months for the PPL for helicopter or gyroplane;
      (c) twenty four months for the PPL for airship or balloon;
      (d) twenty four months for the PPL for glider;
      (e) twelve months for the Commercial Pilot Licence (CPL) for aeroplane;
      (f) twelve months for the CPL for helicopter or gyroplane;
      (g) twelve months for the CPL for airship or balloon;
      (h) twelve months for the Airline Transport Pilot Licence (ATPL) for aeroplane;
      (i) twelve months for the Multi-crew Pilot Licence (MPL) for aeroplane;
      (j) twelve months for the ATPL for helicopter;
      (k) twelve months for the flight engineer licence;
      (l) twenty four months for the air traffic controller licence; and
      (m) twelve months for the cabin crew certificate.
   (7) When a holder of ATPL for aeroplane and helicopter has passed his fortieth birthday, the twelve-month interval period specified in sub-regulation (6) shall be reduced to six months.
   (8) When the holders have passed their fortieth birthday, the twenty four month interval specified in sub-regulation (6) for the PPL for aeroplane, helicopter, gyroplane, glider, airship, balloon and air traffic controller licence shall be reduced to twelve months and the twelve month interval specified in sub-regulation (6) for the CPL: aeroplane, helicopter, gyroplane, airship and balloon shall be reduced to six months
   (9) A licence or certificate issued by the Authority shall not be valid unless the holder of the licence or certificate has signed his name on the licence or certificate in ink with the holder’s ordinary signature.

Decrease in
medical fitness exercise the privileges of his licence and related ratings at any time when the holder is aware of any decrease in his medical fitness which might render the holder unable to safely and properly exercise these privileges.

(2) A licence holder shall inform the Authority of confirmed pregnancy or any decrease in medical fitness of duration of more than 20 days or which requires continued treatment with prescribed medication or which requires hospital treatment.

(3) The Authority shall suspend the medical certificate of a licence holder during any period in which the Authority becomes aware that the licence holder’s medical fitness has, from any cause, decreased to an extent that would have prevented the issue or renewal of the licence holder’s Medical Certificate.

(4) The suspension referenced in sub-regulation (3) shall continue until the end of the period of the decrease in medical fitness, or until the expiration of the medical certificate, whichever comes first.

(5) A licence holder shall not exercise the privileges of his licence and related ratings during any period in which the holder’s medical fitness has, from any cause, decreased to an extent that would have prevented the issue or renewal of the licence holder’s Medical Certificate.

11. - (1) The prescribed re-examination of a licence holder operating in an area distant from designated medical examination facilities may be deferred at the discretion of the Authority, provided that such deferment shall only be made as an exception and shall not exceed:

(a) a single period of six months in the case of a flight crewmember of an aircraft engaged in non-commercial operations;

(b) two consecutive periods each of three months in the case of a flight crewmember of an aircraft engaged in commercial operations, provided that in each case, a favourable medical report is obtained after examination by a medical examiner designated by the contracting state in which the applicant is situated; or

(c) in the case of a private pilot, a single period not exceeding twelve months where the medical examination is carried out by an examiner designated by the Contracting State in which the applicant is situated.

(2) For a deferral granted under sub-regulation (1) (b) and (c), a report of the medical examination shall be sent to the Authority for the licence to be renewed.

12. The period of validity of a medical certificate may be extended at the discretion of the Authority, up to 45 days.

13. -(1) Subject to sub-regulation (2) and (3) a person shall not act as a pilot in command (PIC) of an aircraft engaged in international commercial air transport operations if that person has attained his 60th birthday.

(2) A person shall not act as a PIC or co-pilot of a multi-crew aircraft engaged in international commercial air transport operations when he has attained his 65th birthday and the other pilot has attained his 60th birthday.

(3) A person shall not act as a PIC or co-pilot of an aircraft of maximum certificated take-off mass of over 5,700 kg, engaged in commercial air transport operations within the [State] if that person has attained his 65th birthday.

(4) A holder of a pilot licence who has attained the age of 65 years shall not act as a pilot of an aircraft engaged in commercial air transport operations.
A holder of a pilot licence who has attained the age of 65 years shall operate only under the privileges of a Private Pilot Licence (PPL).

PART III
VALIDATION AND CONVERSION OF FOREIGN FLIGHT CREW LICENCES AND RECOGNITION OF MILITARY QUALIFICATIONS

14. -(1) A person who holds a current pilot licence or flight engineer licence issued by another Contracting State may apply for and may be issued a validation certificate with the appropriate ratings, if the applicant:

(a) is not under an order of revocation or suspension by the country that issued the licence;
(b) holds a licence that does not contain an endorsement stating that the applicant has not met all of the standards of ICAO for that licence;
(c) does not currently hold a pilot licence issued by the Authority;
(d) holds a current Medical Certificate issued by the contracting state that issued the licence;
(e) demonstrates the ability to read, speak, write, and understand the English language in accordance with the language proficiency requirements contained in the Second Schedule to these Regulations; and
(f) except as the Authority may decide otherwise passes air law, flight rules and procedures examinations.

(2) The Authority may not place upon a certificate of validation privileges beyond those granted by a foreign licence.

(3) A person who receives a certificate of validation under this regulation shall:

(a) be limited to the privileges placed on the certificate;
(b) be subject to the limitations and restrictions on the certificate and foreign licence when exercising the privileges of that certificate in an aircraft registered in [State]; and
(c) not exercise the privileges of the certificate when the person’s foreign licence has been revoked or suspended.

(4) An applicant for a certificate of validation shall use only one foreign licence as a basis for obtaining a certificate of validation.

(5) An applicant for a certificate of validation under this regulation shall provide to the authority a foreign licence and Medical Certificate in the English language or accompanied by an English language translation that has been signed by an official or representative of the foreign aviation authority that issued the foreign licence.

(6) The Authority shall place upon a certificate of validation the foreign licence number and country of issue.

(7) The Authority may render valid a licence issued by a foreign Contracting State for use in private flights subject to passing a flight check out on the relevant class rating.

(8) Subject to sub regulation (2), the certificate of validation issued by the Authority shall be valid for a maximum period of three months in the case of operations conducted by an AOC holder.

(9) The Authority shall verify the authenticity of the foreign pilot licence or flight engineer licence and any ratings listed on those certificates before issuing a validation certificate or any ratings on such validation certificate.
15. (1) Except for a rated military or former military pilot or flight engineer who has been removed from flying status for lack of proficiency, or because of disciplinary action involving aircraft operations, a rated military or former military pilot or flight engineer who meets the requirements of this regulation may apply, on the basis of the pilot’s or flight engineer’s military training, for—
   (a) Private Pilot licence (PPL), Commercial Pilot Licence (CPL) or Flight Engineer Licence;
   (b) an aircraft rating in the category and class of aircraft for which that military pilot or flight engineer is qualified;
   (c) an instrument rating with the appropriate aircraft rating for which that military pilot is qualified; and
   (d) a type rating, if appropriate.

(2) Subject to regulations 16 and 18 the Authority may issue to a rated military or former military pilot or flight engineer an aircraft category, class, or type rating to a flight crew if that flight crew presents documentary evidence that shows satisfactory accomplishment of:
   (a) a military pilot and instrument proficiency check of the [State] in the aircraft type he is rated within twelve months preceding the date of application;
   (b) at least ten hours of pilot in command time in that aircraft category, class, or type, if applicable, within the twelve months preceding the date of application;
   (c) a military flight engineer proficiency check in the aircraft type the flight engineer is rated within twelve months preceding the date of application; and
   (d) at least ten hours of flight time in the aircraft type the flight engineer is rated within twelve months preceding the date of application.

(3) A rated military pilot or former rated military pilot may apply for an aeroplane or helicopter instrument rating to be added to the pilot’s CPL if the pilot has, within the twelve month preceding the date of application:
   (a) passed an instrument proficiency check by the military in the aircraft category and class for the instrument rating sought; and
   (b) received authorisation from the military to conduct instrument flight rules (IFR) flights on airways in that aircraft category and class for the instrument rating sought.

(4) The Authority shall issue an aircraft type rating only for aircraft types that the Authority has certified for civil operations and are registered in [State].

(5) The Authority may accept the following documents as satisfactory evidence of military pilot or flight engineer status:
   (a) an official identification card issued to the pilot or flight engineer by a military force to demonstrate service in the military;
   (b) an original or a copy of a certificate of discharge or release from the military;
   (c) at least one of the following:
      (i) an order of military flight status as a military pilot or flight engineer; or
      (ii) an order showing that the applicant graduated from a pilot or flight engineer school and received a rating as a military pilot or flight engineer.
   (d) a certified military logbook or form showing military pilot and flight engineer status and a summary to demonstrate flight time in military
aircraft;  
(e) an official record of a military designation as pilot in command; or  
(f) an official record of satisfactory accomplishment of an instrument  
proficiency check within the twelve months before the date of the  
application.

Conversion of  
[State]  
Military Pilots  
Qualification.

16.   -(1) A person who holds a current [State] Military pilot Category A,  
B, C and D qualification may apply and be issued with a [State] Private Pilot Licence  
(PPL) or Commercial Pilot Licence (CPL) with the appropriate ratings, if that person:

(a) has a licence which is not under an order of revocation or suspension;  
(b) meets the minimum flying experience under these Regulations;  
(c) holds a valid Medical Certificate issued by [State] Military; and  
(d) demonstrates the ability to read, speak, write, and understand the English  
language in accordance with the language proficiency requirements  
contained in the First Schedule to these Regulations.  

(2) An applicant for a pilot licence under this regulation shall submit to the  
Authority his personal military flying log book or any other equivalent document that  
has been certified by the base commander.  

(3) The applicant shall be required to have met the applicable aeronautical  
experience requirements for the licence or rating sought.  

(4) In addition to the requirements of sub-regulations(1), (2) and (3) the  
applicant shall be required to pass:  
(a) for CPL:  

(i) an examination for the Class 1 Medical Certificate;  
(ii) the composite paper comprising of air law, meteorology, aircraft  
general knowledge, flight planning, radio aids, navigation, flight  
performance and planning, human performance, operational  
procedures, principles of flight; and  
(iii) the initial instrument rating flight test if the rating is to be included in  
the licence.  
(b) for PPL:  

(i) an examination for the Class 2 Medical Certificate;  
(ii) the composite paper comprising of air law, Meteorology, Aircraft  
Performance and Planning, Human Performance, Operational  
Procedures, Principles of flight and radiotelephony knowledge and  
Meteorology;

(5) An applicant for a CPL shall not be eligible for grant of a licence unless  
there is included in the aircraft rating for either pilot-in-command or co-pilot  
respectively.  

(6) The Authority may consider a military type rating qualification for the  
purpose of conversion of CPL if:  
(a) the aircraft type is endorsed and certified in the applicants military  
personal logbook;  
(b) the pilot is current on the aircraft type and  
(c) the type of aircraft is registered in [State].  

(7) An applicant for conversion who fails the knowledge test in three  
consecutive attempts shall be disqualified for further testing until a period of one
month has elapsed from the date on which the last test was made.

(8) The Authority shall prescribe the minimum passing grade for the knowledge test.

(9) The applicant shall be required to have passed the composite paper for conversion of a [State] military pilot qualification within a period of six months preceding the date of the application for the licence.

17.  -(1) A person who holds a current pilot licence issued by another Contracting State may apply and be issued an equivalent licence with the appropriate ratings, if the applicant:
   (a) has a licence which is not under an order of revocation or suspension by the country that issued the licence;
   (b) meets all the ICAO standards for that licence;
   (c) holds a valid Medical Certificate issued by the contracting State that issued the licence; and
   (d) demonstrates the ability to read, speak, write, and understand the English language in accordance with the language proficiency requirements contained in the Second Schedule to these Regulations.

(2) An applicant for a pilot licence under this regulation shall submit his licence and Medical Certificate in the English language or accompanied by an English language translation that has been signed by an official or representative of the foreign authority that issued the licence.

(3) The applicant shall meet the applicable aeronautical experience requirements.

(4) In addition to the requirements of sub-regulations(1), (2) and (3), the applicant is required to pass:
   (a) for Airline Air Transport Licence (ATPL) or Multi-crew Pilot Licence (MPL);
      (i) the Class I Medical Certificate;
      (ii) the composite paper comprising of air law, Meteorology, Aircraft General Knowledge, Flight Planning, Radio Aids, Navigation, Flight Performance and Planning, Human Performance, Operational Procedures, Principles of flight and radiotelephony knowledge; and
      (iii) an initial instrument rating flight test;
   (b) for Commercial Pilot Licence (CPL);
      (i) an examination for the Class 1 Medical Certificate;
      (ii) the composite paper comprising of air law, Meteorology, Aircraft General Knowledge, Flight Planning, Radio Aids, Navigation, Flight Performance and Planning, Human Performance, Operational Procedures, Principles of Flight and Radiotelephony knowledge; and
      (iii) the initial instrument rating flight test if the rating is to be included in the licence;
   (c) for Private Pilot Licence (PPL);
      (i) an examination for the Class 2 Medical Certificate;
      (ii) the composite paper comprising of air law, Meteorology, Aircraft General Knowledge, Flight Planning, Radio Aids, Navigation, Flight Performance and Planning, Human Performance, Operational Procedures, Principles of Flight and
Radiotelephony knowledge and Meteorology;
(d) for lighter-than-air: as in (b) or (c) as appropriate except for Medical Certificate where in this case it is Class 2.
(5) An applicant for a CPL or ATPL or MPL shall not be eligible for grant of a licence unless there is included in the licence an aircraft type rating for either pilot-in-command or co-pilot respectively.
(5) The Authority may transfer a type rating from a foreign licence for the purpose of conversion of CPL or ATPL or MPL provided:
(a) the aircraft type is endorsed on a foreign licence;
(b) the pilot is current on the aircraft type; and
(c) the type of aircraft is registered in [State].
(7) An applicant for conversion who fails the knowledge test in three consecutive attempts shall be disqualified for further testing until a period of one month has elapsed from the date on which the last test was made.
(8) The Authority shall prescribe the minimum passing grade for the knowledge test.
(9) The applicant shall be required to have passed the composite paper for conversion of a foreign licence within a period of six months preceding the date of the application for the licence.
(10) The Authority shall verify the authenticity of the foreign licence, ratings and authorisations presented for conversion with the state of issuance.

18. (1) A person who holds a current flight engineer licence issued by another Contracting State may apply and be issued with an equivalent licence with the appropriate ratings, if that person:
(a) has a licence which is not under an order of revocation or suspension by the country that issued the licence;
(b) holds a licence which meets all the ICAO standards for that licence;
(c) holds a valid Medical Certificate Class 1 issued by the Contracting State that issued the licence; and
(d) demonstrates the ability to read, speak, write, and understand the English language in accordance with the language proficiency requirements contained in the First Schedule to these Regulations;
(2) An applicant for a flight engineer licence pursuant to this regulation shall submit the licence and Medical Certificate in the English language or accompanied by an English language translation that has been signed by an official or representative of the foreign authority that issued that licence.
(3) The applicant shall meet the applicable aeronautical experience requirements.
(4) In addition to the requirements of sub-regulations(1), (2) and (3) the applicant shall be required to pass:
(a) an examination for the Medical Certificate Class 1; and
(b) the composite paper comprising of [State] air law, Meteorology, Aircraft General Knowledge, Flight Performance and Planning, Human Performance, Operational Procedures, Principles of Flight and Radiotelephony.
(5) The Authority may transfer a type rating from a foreign licence for the purpose of conversion of flight engineer licence if:
(a) the aircraft type is endorsed on a foreign licence;
(b) the flight engineer is current on the aircraft type; and
(c) the type of aircraft is registered in [State].

6. The applicant for conversion who fails the knowledge test in three consecutive attempts shall be disqualified for further testing until a period of one month has elapsed from the date on which the last test was made.

7. The Authority shall prescribe the minimum passing grade for the knowledge test.

8. The applicant shall be required to have passed the composite paper for conversion of a foreign licence within a period of six months preceding the date of the application for the licence.

9. The Authority shall verify the authenticity of the foreign licence, ratings and authorisations presented for conversion with the State of issuance.

PART IV
VALIDATION, CONVERSION OF FOREIGN AIRCRAFT MAINTENANCE ENGINEER LICENCES AND RATINGS AND RECOGNITION OF ENGINEER MILITARY QUALIFICATIONS

19. (1) A person who holds a current and valid Aircraft Maintenance Engineer Licence (AMEL) issued by another Contracting State may apply for and may be issued a certificate of validation with the appropriate rating, if the applicant:

(a) holds a licence which is not under an order of revocation or suspension by the country that issued the licence;
(b) holds a licence that does not contain an endorsement stating that the applicant has not met all of the standards of ICAO for that licence;
(c) does not currently hold a licence issued by the Authority; and
(d) demonstrates the ability to read, speak, write, and understand the English language in accordance with the language proficiency requirements contained in the Second Schedule to these Regulations;

(4) The Authority may place upon a certificate of validation privileges not beyond those granted by a foreign licence.

(3) A person who receives a certificate of validation under this Regulation shall:
(a) be limited to the privileges placed on the certificate;
(b) be subject to the limitations and restrictions on the certificate and the foreign AMEL when exercising the privileges of that certificate on an aircraft registered in [State]; and
(c) not exercise the privileges of the certificate when the person’s foreign licence has been revoked or suspended.

(4) An applicant for a certificate of validation shall present to the Authority the foreign licence and evidence of the experience required by presenting a valid record.

(5) The certificate of validation shall be valid for a maximum of 6 months, provided the foreign licence or in the case of a continuing licence, the rating remains valid.

(6) An applicant for a certificate of validation shall, unless decided otherwise by the Authority:
(a) complete a skill test for the relevant ratings in the licence to be validated,
relevant to the privileges of the licence held -
(b) demonstrate to the satisfaction of the Authority the knowledge, relevant to
the licence to be validated, of air law; and
(c) demonstrate to the satisfaction of the Authority the knowledge, relevant to
the licence to be validated of:
   (i) relevant aircraft maintenance principles; and
   (ii) human performance.
(7) The Authority shall verify the authenticity of the foreign licence, ratings
and authorisations presented for validation with the state of issuance.

20. -(1) A person who holds a current Aircraft Maintenance Engineer Licence (AMEL) issued by another Contracting State may apply and be issued an
equivalent licence with the appropriate ratings, if the applicant:
   (a) has a licence which is not under an order of revocation or suspension by
      the country that issued the licence;
   (b) holds a licence which meets all the ICAO standards for that licence.
(2) An applicant for an AMEL under this regulation shall submit the licence
in the English language or accompanied by an English language translation that has
been signed by an official or representative of the foreign authority that issued the
licence.
(3) The applicant shall meet the applicable aeronautical experience
requirements specified under these Regulations.
(4) In addition to the requirements of sub-regulations (1), (2) and (3) the
applicant shall pass a knowledge test in:
   (a) air law; and
   (b) a composite paper comprising of subjects required for initial issue of a
category and rating sought
(5) The Authority may transfer a type rating from a foreign licence for the
purpose of conversion of AMEL if:
   (a) the aircraft type is endorsed on a foreign licence;
   (b) that applicant is current on the aircraft type; and
   (c) the type of aircraft is registered in [State].
(6) An applicant for conversion who fails the knowledge test shall be
disqualified for further testing until after a proven practical experience of one month is
gained.
(7) The Authority shall prescribe the minimum passing grade for the
knowledge test.
(8) The applicant shall be required to have passed the air law and composite
paper for conversion of a foreign licence within a period of six months preceding the
date of the application for the licence.
(9) The Authority shall verify the authenticity of the foreign licence, ratings
and authorisations presented for conversion with the state of issue.

21. -(1) A military aircraft maintenance personnel may apply to the
Authority for issue of Aircraft Maintenance Engineer Licence (AMEL) without type
rating on the basis of his or her military qualifications.
(2) The application shall be accompanied by:
(a) a certificate of discharge from military service;
(b) evidence of experience of six years in aircraft maintenance of which six months of recency experience must have been acquired within the twelve months preceding the application; and
(c) a certificate, diploma or such other document showing proof of training in aircraft maintenance.
(3) If the Authority is satisfied that the applicant meets the conditions in sub-regulations (2), the Authority shall require the applicant to demonstrate the knowledge and skill requirements for AMEL stipulated in these Regulations.

PART V
GENERAL REQUIREMENTS: TESTING AND TRAINING FOR PILOT LICENCES, RATINGS AND AUTHORISATIONS

22. -(1) An applicant for a knowledge test shall have:
(a) received an endorsement from an authorised instructor certifying that the applicant has accomplished a ground-training required by these Regulations for the licence or rating sought and is prepared for the knowledge test; and
(b) proper identification at the time of taking the test that includes the applicant’s:
   (i) photograph;
   (ii) name;
   (iii) signature;
   (iv) date of birth, which shows that the applicant meets or will meet the age requirements of these Regulations for the licence sought before the expiry date of the applicant’s knowledge test report; and
   (v) mailing address.

(2) The Authority shall specify the minimum passing grade for the knowledge test.
(3) The validity of the knowledge test results for an applicant for a pilot licence shall be as follows:
(a) for Private Pilot Licence (PPL) - six months after passing the test;
(b) for Commercial Pilot Licence (CPL) - eighteen months after passing the test; and
(c) for Airline Transport Pilot licence (ATPL) - five years after passing the test;
(d) For Multi-crew Pilot Licence (MPL) – five years after passing the test.

23. -(1) To be eligible for a practical test, an applicant shall meet all applicable requirements for the licence or rating sought.
(2) If an applicant for a practical test does not:
(a) complete all increments of a practical test for a licence or rating in one day, that applicant shall complete all remaining increments of the test not more than sixty days after that date; and
(b) satisfactorily complete all increments of the practical test for a licence or a rating within sixty days after beginning the test, that applicant shall retake the entire practical test, including those increments satisfactorily
completed.

(3) Except as provided in sub-regulation (4), to be eligible for a practical test for a licence or rating issued under these Regulations, an applicant for a practical test shall:

(a) pass the required knowledge test for the type rating within six months preceding the month the applicant completes the practical test;
(b) present the knowledge test report at the time of application for the practical test, if a knowledge test is required;
(c) have satisfactorily accomplished the required training and obtained the aeronautical experience prescribed by these Regulations for the licence or rating sought;
(d) meet the prescribed age requirement of these Regulations for the issue of the licence or rating sought; and
(e) have an endorsement in the applicant’s logbook or training record that has been signed by an authorised instructor who certifies that the applicant:

(i) has received and logged training time within sixty days preceding the date of application in preparation for the practical test;
(ii) is prepared for the required practical test; and
(iii) has demonstrated satisfactory knowledge of the subject areas in which the applicant was deficient on the knowledge test.

(4) An applicant for an Airline Transport Pilot Licence may take the practical test for that licence within two years of the expiration of a knowledge test, provided the applicant:

(a) has been continuously employed as a flight crewmember by an Air Operator Certificate (AOC) holder from the time the knowledge test expired; and
(b) has satisfactorily accomplished that AOC holder’s approved:

(i) pilot-in-command aircraft qualification training programme that is appropriate to the licence; and
(ii) qualification training requirements appropriate to the licence and rating sought.

Practical tests: general requirements for flight crew

24. -(1) The ability of an applicant for a practical test to hold a pilot licence or rating shall be determined based upon the applicant’s ability to safely, during a practical test:

(a) perform the tasks specified in the areas of operation for the licence or rating sought within the prescribed standards;
(b) demonstrate mastery of the aircraft with the successful outcome of each task regarding-

(i) Private Pilot Licence and Commercial Pilot Licence licence tests; and
(ii) Airline Transport Pilot Licence and aircraft type rating tests;
(c) demonstrate sound judgement; and
(d) demonstrate single-pilot competence if the aircraft is type certified for single-pilot operations.

(2) An applicant who fails any area of operation shall have failed the practical test and is not eligible for a licence or rating sought.

(3) The examiner or the applicant may discontinue a practical test at any time:
(a) when the applicant fails one or more of the areas of operation; or
(b) due to inclement weather conditions, aircraft airworthiness concerns or any other safety-of-flight concern.

(4) If a practical test is discontinued, the Authority may give the applicant credit for those areas of operation already passed, but only if the applicant:
(a) passes the remainder of the practical test within the sixty-day period after the date the practical test was begun;
(b) presents to the examiner for the retest the original test report or the discontinuance form prescribed by the Authority as appropriate; and
(c) satisfactorily accomplishes any additional training needed and obtains the appropriate instructor endorsements, if additional training is required.

(5) The validity of the practical test results for applicants for a pilot licence and type rating shall be six months after passing the test.

Practical tests: required aircraft and equipment.

25. -(1) Except when permitted to accomplish the entire flight increment of the practical test in an approved synthetic flight trainer, an applicant for a licence or rating issued under these Regulations shall provide an aircraft registered in [State] for each required test that:
(i) is of the category, class, and type, if applicable, applicable to the licence or rating sought; and
(ii) has a certificate of airworthiness.

(2) An applicant for a practical test shall use an aircraft that has:
(a) the equipment for each area of operation required for the practical test;
(b) no prescribed operating limitations that prohibit the aircraft’s use in any of the areas of operation required for the practical test;
(c) except as provided in sub-regulation (5), at least two pilot stations with adequate visibility for each person to operate the aircraft safely; and
(d) cockpit and outside visibility adequate to evaluate the performance of the applicant when an additional jump seat is provided for the examiner.

(3) An applicant for a practical test shall use an aircraft, other than a lighter-than-air aircraft, that has engine power controls and flight controls that are easily reached and operable in a conventional manner by both pilots, unless the examiner determines that the practical test can be conducted safely in the aircraft without the controls being easily reached.

(4) An applicant for a practical test that involves manoeuvring an aircraft solely by reference to instruments shall provide an aircraft with:
(a) an equipment that permits the applicant to pass the areas of operation that apply to the rating sought; and
(b) a device that prevents the applicant from having visual reference outside the aircraft, but does not prevent the examiner from having visual reference outside the aircraft, and is otherwise acceptable to the Authority.

(5) An applicant may complete a practical test in an aircraft having a single set of controls, if:
(a) the examiner agrees to conduct the test;
(b) the test does not involve a demonstration of instrument skills; and
(c) the proficiency of the applicant can be observed by an examiner who is in a position to observe the applicant.

Retesting after

26. -(1) An applicant for a knowledge or practical test who fails that test
failure may reapply for the test only after the applicant has received:

(a) the necessary training from an authorised instructor who has determined that the applicant is proficient to pass the test; and

(b) an endorsement from an authorised instructor who gave the applicant the additional training.

(2) An applicant for a flight instructor licence with an aeroplane category rating or, for a flight instructor licence with a glider category rating, who has failed the practical test due to deficiencies in instructional proficiency on stall awareness, spin entry, spins, or spin recovery shall:

(a) comply with the requirements of sub-regulation (1) before being retested;

(b) bring to the retest an aircraft that is of the appropriate aircraft category for the rating sought and is certified for spins; and

(c) demonstrate satisfactory instructional proficiency on stall awareness, spin entry, spins, and spin recovery to an examiner during the retest.

Records of training time

27. -(1) A person shall document and record the following time in a manner acceptable to the Authority:

(a) training and aeronautical experience used to meet the requirements for a licence, rating, qualification, or authorisation of these Regulations; and

(b) the aeronautical experience required to show recent flight experience requirements of these Regulations.

(2) For the purposes of meeting the requirements of these Regulations, a person shall enter the following information for each flight or lesson logged:

(a) general

(i) date;

(ii) total flight time;

(iii) location where the aircraft departed and arrived, or for lessons in an approved synthetic flight trainer, the location where the lesson occurred;

(iv) type and identification of aircraft or approved synthetic flight trainer, as appropriate;

(v) the name of a safety pilot, if required by the Civil Aviation (Operation of Aircraft) Regulations; and

(vi) the name of the authorised instructor if required;

(b) type of pilot experience or training:

(i) solo;

(ii) pilot-in-command (PIC);

(iii) PIC under supervision (U/S)

(iv) co-pilot;

(v) flight and ground training received from an authorised instructor; and

(vi) training received in an approved synthetic flight trainer from an authorised instructor.

(c) Conditions of flight:

(i) day or night;

(ii) actual instrument; and

(iii) simulated instrument conditions in flight or in an approved synthetic flight trainer.

(3) The pilot time described in this regulation may be used to:

(a) apply for a licence or rating issued under these Regulations; or
(b) satisfy the recent flight experience requirements of the Civil Aviation (Operation of Aircraft) Regulations.

(4) Except for a student pilot acting as PIC of an airship requiring more than one flight crewmember, a pilot may log as solo flight time only that flight time when the pilot is the sole occupant of the aircraft.

(5) A private or commercial pilot may log PIC time only for that flight time during which that person is:
   (a) the sole manipulator of the controls of an aircraft for which the pilot is rated; or
   (b) acting as PIC of an aircraft on which more than one pilot is required; or
   (c) a sole occupant.

(6) An airline transport pilot may log as PIC time all of the flight time while acting as PIC of an operation requiring an Airline Transport Pilot or Multi Crew Pilot Licences.

(7) An authorised instructor may log as PIC time all flight time while acting as an authorised instructor.

(8) A student pilot may log PIC time when that student pilot:
   (a) is the sole occupant of the aircraft; and
   (b) is undergoing training for a pilot licence or rating.

(9) A person may log co-pilot flight time only for that flight time during which that person:
   (a) is qualified in accordance with the co-pilot requirements of the Civil Aviation (Operation of Aircraft) Regulations, and occupies a crewmember station in an aircraft that requires more than one pilot by the aircraft’s type certificate; or
   (b) holds the appropriate category, class, and instrument rating if an instrument rating is required for the flight, for the aircraft being flown, and more than one pilot is required under the type certification of aircraft.

(10) A person may log instrument flight time only for that flight time when that person operates the aircraft solely by reference to instruments under actual or simulated instrument flight conditions.

(11) An authorised instructor may log instrument flight time when conducting instrument flight instruction in actual instrument flight conditions.

(12) For the purposes of logging instrument flight time to meet the recent instrument experience requirements of the Civil Aviation (Operation of Aircraft) Regulations, the following information shall be recorded in a person’s logbook:
   (i) the location and type of each instrument approach accomplished; and
   (ii) the name of the safety pilot, if required.

(13) An approved synthetic flight trainer may be used by a person to log instrument flight time, provided an authorised instructor is present during the simulated flight.

(14) A person may log training time when that person receives training from an authorised instructor in an aircraft or in an approved synthetic flight trainer.

(15) The training time shall be logged in a logbook and shall:
   (a) be endorsed in a legible manner by the authorised instructor; and
   (b) include a description of the training given, the length of the training lesson, and the instructor’s signature, licence number and licence expiry date.

Limitations on

28. A person shall not receive credit for use of any synthetic flight trainer
the use of synthetic flight trainer for satisfying any training testing, or checking requirement of this regulation unless the synthetic flight trainer is approved by the Authority for:

(a) training, testing, and checking for which it is used;

(b) each particular manoeuvre, procedure or crewmember function performed; and

(c) the 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.

Use of synthetic flight trainers for demonstrations of skill

29. -(1) A use of a synthetic flight trainer used for performing any manoeuvre required during the demonstration of skill for the issue of a flight crew licence or rating shall be approved by Authority to ensure that the synthetic flight trainer used is appropriate to the task.

(2) To maintain the competence required by these Regulations, a flight crewmember, may demonstrate his skills during proficiency flight checks in a synthetic flight trainer approved under sub regulation (1).

General requirements for pilot licences, ratings and authorisations

30. -(1) The Authority may issue to an applicant who cannot comply with certain eligibility requirements or areas of operations required for the issue of a licence because of physical limitations, or for other reasons, a licence, rating, or authorisation with appropriate limitations for operations only within the [State] if:

(a) the applicant is able to meet all other certification requirements for the licence, rating, or authorisation sought;

(b) physical limitation, if any, has been recorded with the Authority on the applicant’s medical records; and

(c) the Authority determines that the applicant’s inability to perform the particular area of operation shall not adversely affect safety.

(2) The Authority may remove a limitation placed on a person’s licence if that person demonstrates to an examiner or inspector satisfactory proficiency in the area of operation to which the limitation applies, or otherwise shows compliance with conditions to remove the limitation, as applicable.

(3) A person shall not act as the pilot in command of an aircraft unless that person holds the appropriate category, class, and type rating if a class rating, and type rating is required for the aircraft to be flown, except where the pilot is receiving training for the purpose of obtaining an additional pilot licence or rating while under the supervision of an authorised instructor.

(4) Subject to sub regulation (5), a person shall not act as a pilot of an aircraft that is carrying another person, or is operated for compensation or hire, unless that pilot holds a category, class, and type rating that applies to the aircraft.

(5) Sub-regulation (4) does not require a category and class rating for an aircraft not type certified as an aeroplane, rotorcraft, glider, or lighter-than-air aircraft.

(6) A person shall not act as PIC of a complex aircraft, high-performance aircraft, or a pressurised aircraft capable of flying 25,000 feet above mean sea level, or an aircraft that the Authority has determined requires aircraft type specific training unless the person has:

(a) received and logged ground and flight training from an authorised instructor in the applicable aircraft type, or in an approved synthetic flight trainer that is a representative of that aircraft, and has been found proficient in the operation and systems of that aircraft; and
(b) received an endorsement in the pilot’s logbook from an authorised instructor who certifies the person is proficient to operate that aircraft.

(7) A person shall not act as PIC of a tailwheel aeroplane unless that person has:

(a) received and logged flight training from an authorised instructor in a tailwheel aeroplane on the manoeuvres and procedures listed in paragraph; and

(b) received an endorsement in the person’s logbook from an authorised instructor who is satisfied that the person is proficient in the operation of a tailwheel aeroplane, to include at least normal and crosswind takeoffs and landings, wheel landings (unless the manufacturer has recommended against such landings), and go around procedures.

PART VI
PILOT LICENCES

Student Pilot Licence

31. -(1) To be eligible to receive and log flight instructions, a person must be in possession of a valid Student Pilot Licence (SPL).

(2) To be eligible for issue of SPL, an applicant shall:

(a) be at least seventeen years of age for a licence other than the operation of a glider, airship or balloon;

(b) be at least sixteen years of age for the operation of a glider balloon or airship;

(c) able to demonstrate the ability to read, speak, write, and understand the English language; and

(d) be in possession of a valid Class 2 Medical Certificate issued under these Regulations.

32. -(1) A holder of a Student Pilot Licence (SPL) shall not operate an aircraft in first solo flight unless that student has met the requirements of this regulation.

(2) A student pilot shall pass an aeronautical knowledge test on the following subjects:

(a) applicable sections of these Regulations and the Civil Aviation (Operation of Aircraft) Regulations;

(b) airspace structure and procedures for the airport where the student will perform solo flight; and

(c) flight characteristics and operational limitations for the make and model of aircraft to be flown.

(3) The student’s authorised instructor shall:

(a) administer the test; and

(b) at the conclusion of the test, review all incorrect answers with the student before authorising that student to conduct a solo flight.

(c) notify the air traffic services before the student commences such solo flight.

(4) Prior to conducting a solo flight, a student pilot shall have:

(a) received and logged flight training for the manoeuvres and procedures of this regulation that are appropriate to the make and model of aircraft to be flown; and

(b) demonstrated satisfactory proficiency and safety, as judged by an
authorised instructor, on the manoeuvres and procedures required by this regulation in the make and model of aircraft or similar make and model of aircraft to be flown.

- (c) has been judged by an authorized instructor as being able to speak and understand the English language used for radiotelephony communications, but shall not be required to comply with the Holistic Descriptors of the Rating Scale.

5) A student pilot who is preparing for solo flight shall have received training in English Language Proficiency and log flight training for the required manoeuvres and procedures, including the following as applicable, for each category and class rating:

(a) proper flight preparation procedures, including pre-flight planning and preparation, engine operation, and aircraft systems;
(b) taxiing or surface operations, including run-up;
(c) takeoffs and landings, including normal and crosswind;
(d) straight and level flight, and turns in both directions;
(e) climbs and climbing turns;
(f) airport traffic patterns,
(g) radio telephony, airport entry and departure procedures;
(h) collision avoidance, windshear avoidance, and wake turbulence avoidance;
(i) descents, with and without turns, using high and low drag configurations;
(j) flight at various airspeeds from cruise to slow flight;
(k) stall entries from various flight attitudes and power combinations with recovery initiated at the first indication of a stall, and recovery from a full stall;
(l) emergency procedures and equipment malfunctions;
(m) ground reference manoeuvres;
(n) approaches to a landing area with simulated engine malfunctions;
(o) slips to a landing; and
(p) go-arounds.

6) A holder of student pilot licence who is receiving training for solo flight shall receive and log flight training for the following additional manoeuvres and procedures, as applicable, as indicated for each category and class rating:

(a) in a multiengine aeroplane:
   (i) proper flight preparation procedures, including pre-flight planning and preparation, powerplant operation, and aircraft systems;
   (ii) taxiing or surface operations, including runups;
   (iii) takeoffs and landings, including normal and crosswind;
   (iv) straight and level flight, and turns in both directions;
   (v) climbs and climbing turns;
   (vi) airport traffic patterns, including entry and departure procedures;
   (vii) collision avoidance, windshear avoidance, and wake turbulence avoidance;
   (viii) descents, with and without turns, using high and low drag configurations;
   (ix) flight at various airspeeds from cruise to slow flight;
   (x) stall entries from various flight attitudes and power combinations with recovery initiated at the first indication of a stall, and recovery from a full stall;
   (xi) emergency procedures and equipment malfunctions;
(xii) ground reference manoeuvres;
(xiii) approaches to a landing area with simulated engine malfunctions; and
(xiv) go-arounds;

(b) in a helicopter:
(i) approaches to the landing area;
(ii) hovering and hovering turns;
(iii) simulated emergency procedures, including autorotational descents with a power recovery and power recovery to a hover;
(iv) rapid decelerations; and
(v) simulated one-engine-inoperative approaches and landings for multiengine helicopter.

(c) in a gyroplane:
(i) approaches to the landing area;
(ii) high rates of descent with power on and with simulated power off, and recovery from those flight configurations; and,
(iii) simulated emergency procedures, including simulated power-off landings and simulated power failure during departures.

(d) in a glider:
(i) the applicable manoeuvres and procedures shown in paragraph (a);
(ii) launches, including normal and crosswind;
(iii) inspection of towline rigging and review of signals and release procedures;
(iv) aero tow, ground tow, or self-launch procedures;
(v) procedures for disassembly and assembly of the glider;
(vi) slips to a landing;
(vii) procedures and techniques for thermalling; and
(viii) emergency operations, including towline break procedures.

(e) in an airship:
(i) rigging, ballasting, and controlling pressure in the ballonets, and superheating; and
(ii) landings with positive and with negative static trim;

(f) in a balloon:
(i) layout and assembly procedures;
(ii) ascents and descents;
(iii) landing and recovery procedures;
(iv) operation of hot air or gas source, ballast, valves, vents, and rip panels, as appropriate;
(v) use of deflation valves or rip panels for simulating an emergency;
(vi) the effects of wind on climb and approach angles; and
(vii) obstruction detection and avoidance techniques.

Privileges and Limitations

33. - (1) A holder of a Student Pilot Licence shall be entitled to fly as a PIC of an aircraft for the purpose of becoming qualified for a grant or renewal of a Pilot’s Licence

(2) A holder of an Student Pilot Licence (SPL) shall not act as pilot in command (PIC) of an aircraft:
(a) that is carrying a passenger;
(b) that is carrying property for compensation or hire;
(c) that is operated for compensation or hire;
(d) in furtherance of a business;
(e) on an international flight;
(f) when the flight cannot be made under visual meteorological conditions (VMC) as specified under the Civil Aviation (Rules of the Air and Air Traffic Control) Regulations; or
(g) in a manner contrary to any limitations placed in the pilot’s logbook by an authorized instructor.

(3) A holder of an SPL shall not act as a required flight crewmember on any aircraft for which more than one pilot is required by the aircraft type certificate or by these Regulations under which the flight is conducted, except when receiving flight training from an authorized instructor on board an airship, and no person other than a required flight crewmember is carried on the airship.

(4) A holder of an SPL shall not operate an aircraft in solo flight unless that student pilot has received within the ninety days preceding the date of the flight an endorsement made in the student’s logbook from an authorized instructor for the specific make and model of aircraft to be flown.

(5) A holder of an SPL shall not act as a PIC of an aircraft unless his logbook has been endorsed by an authorized instructor that he is capable of communicating with air traffic control on radiotelephony.

34. (1) Except as provided in sub-regulation (4), a holder of a Student Pilot Licence (SPL) shall meet the requirements of this regulation before:

(a) conducting a solo cross-country flight, or any flight greater than twenty five nautical miles from the airport from where the flight originated; or
(b) making a solo flight and landing at any location other than the airport of origin.

(2) Except as provided in sub-regulation (4), a student pilot who seeks solo cross-country flight privileges shall:

(a) have received flight training from an authorized instructor on the manoeuvres and procedures required by this regulation that are appropriate to the make and model of aircraft for which solo cross-country privileges are sought;
(b) have demonstrated cross-country proficiency on the appropriate manoeuvres and procedures required by this regulation to an authorized instructor;
(c) have satisfactorily accomplished the pre-solo flight manoeuvres and procedures required by this regulation in the make and model of aircraft or similar make and model of aircraft for which solo cross-country privileges are sought; and
(d) comply with any limitations included in the instructor’s endorsement that are required by sub-regulation (5).

(3) A holder of an SPL who seeks solo cross-country flight privileges must have received ground and flight training from an authorized instructor on the cross-country manoeuvres and procedures listed in this regulation that are appropriate to the aircraft to be flown.

(4) A student pilot shall obtain an endorsement from an authorized instructor to make solo flights, subject to the following conditions:

(a) a student pilot may make solo flights to another airport that is within twenty-five nautical miles from the airport where the student pilot normally receives training if:
(i) the authorised instructor who makes the endorsement gave the student pilot flight training at the other airport, and that training included flight in both directions over the route, entering and exiting the traffic pattern, and takeoffs and landings at the other airport;
(ii) the student pilot has a current solo flight endorsement in accordance with these regulations;
(iii) the instructor has determined that the student pilot is proficient to make the flight; and
(iv) the purpose of the flight is to practice takeoffs and landings at that other airport.

(b) a student pilot may make repeated specific solo cross-country flights to another airport that is within fifty nautical miles of the airport from which the flight originated, if:
(i) the authorised instructor who gave the endorsement gave the student flight training in both directions over the route, including entering and exiting the traffic patterns, takeoffs, and landings at the airport to be used;
(ii) the student has current solo flight endorsements in accordance with these regulations, and
(iii) the student has a current solo cross-country flight endorsement in accordance with sub-regulation (5), except that separate endorsements are not required for each flight made under this paragraph.

(5) Except as specified in sub-regulation (4)(b), a student pilot shall have a solo cross-country endorsement placed in the student pilot’s log book by the authorised instructor who conducted the training for each make and model aircraft the student will fly on each cross-country flight.

(6) A student pilot who is receiving training for cross-country flight shall receive and log flight training in the following manoeuvres and procedures:

(a) in an aeroplane or rotorcraft:
   (i) use of aeronautical charts for visual flight rules navigation using pilotage and dead reckoning with the aid of a magnetic compass;
   (ii) use of aircraft performance charts pertaining to cross-country flight;
   (iii) procurement and analysis of aeronautical weather reports and forecasts, including recognition of critical weather situations and estimating visibility while in flight;
   (iv) recognition, avoidance, and operational restrictions of hazardous terrain features in the geographical area where the student pilot will conduct cross-country flight;
   (v) use of radios for VFR navigation and two-way communications;
   (vi) climbs at best angle and best rate; and
   (vii) control and manoeuvring solely by reference to flight instruments, including straight and level flight, turns, descents, climbs, use of radio aids, and air traffic control clearances;

(b) in a glider:
   (i) the manoeuvres and procedure specified in sub-regulation (6)(a), as
applicable;

(ii) landings accomplished without the use of the altimeter from at least two thousand feet above the surface; and

(iii) recognition of weather and upper air conditions favourable for cross-country soaring, ascending flight, descending flight, and altitude control;

(c) in an airship:

(i) the manoeuvres and procedures specified in sub-regulation (6)(a), as applicable;

(ii) control of air pressure with regard to ascending and descending flight and altitude control;

(iii) control of the airship solely by reference to flight instruments; and

(iv) recognition of weather and upper air conditions conducive for the direction of cross-country flight.

Renewal requirements

35. A holder of an SPL may apply for renewal of the Licence if the holder has passed a Class II medical examination

Private Pilot Licence

Eligibility requirements

36. An applicant for a Private Pilot Licence (PPL), shall:

(a) be at least seventeen years of age for a licence other than the operation of glider or balloon;

(b) be at least sixteen years of age for a licence in a glider or balloon;

(c) demonstrate the ability to read, speak, write, and understand the English language in accordance with the language proficiency requirements contained in the Second Schedule to these Regulations;

(d) receive an endorsement for the knowledge test from an authorised instructor who:

(i) conducted the training on the aeronautical knowledge areas listed in regulation 37, that apply to the aircraft category sought; and

(ii) certified that the person is prepared for the required knowledge test;

(e) be in possession of a valid Class 2 Medical Certificate issued under these Regulations;

(f) pass the required knowledge test on the aeronautical knowledge areas listed in regulation 37;

(g) receive flight training and a logbook endorsement from an authorised instructor who:

(i) conducted the training in the areas of operation listed in regulation 38, that apply to the aircraft category and class rating sought; and

(ii) certified that the person is prepared for the required practical test;

(h) meet the aeronautical experience requirements of this sub-part that apply to the aircraft category and class rating sought before applying for the practical test;

(i) pass a practical test on the areas of operation listed in regulation 38 that apply to the aircraft category and class rating sought; and.
(j) comply with the appropriate provisions of these Regulations that apply to the aircraft category and class rating sought.

37. -(1) An applicant for a private pilot licence shall have demonstrated a level of knowledge appropriate to the privileges granted to the holder of such licence and appropriate to the category of aircraft intended to be included in the licence in at least the following subjects.

(a) air law:
- rules and regulations relevant to the holder of a PPL, rules of the air;
- altimeter setting procedures; appropriate air traffic services practices and procedures for aeroplane, helicopter, powered-lift and airship

(b) aircraft general knowledge:
- principles of operation and functioning of powerplants, systems and instruments;
- operating limitations of of the relevant category of aircraft and powerplants; relevant operational information from the flight manual or other appropriate document;
- for helicopter and powered –lift ,transmission (power-trains) where applicable
- for airship, physical properties and application of gases;

(c) flight performance, planning and loading
- effects of loading and mass distribution on flight characteristics; mass and balance calculations;
- use and practical application of take-off, landing and other performance data;
- pre-flight and en-route flight planning appropriate to private operations under VFR; preparation and filing of air traffic services flight plans; appropriate air traffic services procedures; position reporting procedures; altimeter setting procedures; operations in areas of high-density traffic;

(d) human performance:
- human performance including threats and error management;

(e) meteorology:
- application of elementary aeronautical meteorology, use of, and procedures for obtaining, meteorological information, altimetry; hazardous weather conditions;

(f) navigation:
- practical aspects of air navigation and dead-reckoning techniques; use of aeronautical charts;

(g) operational procedures:
- use of aeronautical documentation such as AIP, NOTAM, aeronautical codes and abbreviations;
- appropriate precautionary and emergency procedures, including action to be taken to avoid hazardous weather, wake turbulence and other operating hazards;
- (iii) application of threats and error management principles to operational performance;
(iv) altimeter setting procedures;
(v) in case of the helicopter, and if applicable, powered-lift, settling with power, ground resonance; retreating blade stall; dynamic roll-over and other operational hazards; safety procedures, associated with flight in VMC;
(vi) principles of flight:

(h)) radiotelephony:

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

(3) The aeronautical knowledge areas applicable to any relevant rotorcraft category and class rating shall include all areas covered under sub-regulation (2) and settling with power, ground resonance, roll over and other operating hazards.

(4) The aeronautical knowledge areas applicable to any relevant lighter than air category and class rating shall be as follows:

(a) air law rules and regulations relevant to the holder of a lighter than air category; rules of the air; appropriate air traffic services practices and procedures;

(b) aircraft general knowledge

(i) principles of operation of lighter than aircraft category systems and instruments;

(ii) operating limitations of lighter than aircraft category relevant operational information from the flight manual or other appropriate document;

(iii) physical properties and practical application of gases used in lighter than aircraft category;

(c) flight performance and planning

(i) effects of loading on flight characteristics; mass and balance calculations;

(ii) use and practical application of launching, landing and other performance data, including the effect of temperature;

(iii) pre-flight and en-route flight planning appropriate to operations under VFR, appropriate air traffic services procedures; altimeter setting procedures and operations in areas of high-density traffic;

(d) human performance

(i) human performance relevant to the private pilot including principles of threat and error management;

(e) meteorology

application of elementary aeronautical meteorology, use of, and procedures for obtaining meteorological information and altimetry; hazardous weather conditions;

(f) navigation

practical aspects of air navigation and dead-reckoning techniques and use of aeronautical charts;

(g) operational procedures

(i) use of aeronautical documentation such as AIP, NOTAM, aeronautical codes and abbreviations;

(ii) appropriate precautionary and emergency procedures, including action to be taken to avoid hazardous weather, wake turbulence and other operating hazards;

(iii) application of threat and error management to operational performance;
(iv) altimeter setting procedures;
(v) safety procedures, associated with flight in VMC.
(h) principles of flight relating to lighter than aircraft category.

38. An applicant for a Private Pilot Licence (PPL) shall receive and log ground and flight training from an authorised instructor on the following areas of operation:

(a) for all categories and class ratings, as applicable:
   (i) pre-flight operations, including mass and balance determination, aeroplane inspection and servicing;
   (ii) aerodrome and traffic pattern operations, collision avoidance precautions and procedures;
   (iii) control of the aeroplane by external visual reference;
   (iv) flight at critically slow airspeeds, recognition of, and recovery from, incipient and full stalls;
   (v) flight at critically high airspeeds, recognition of, and recovery from, spiral dives;
   (vi) normal and cross-wind take-offs and landings;
   (vii) maximum performance (short field and obstacle clearance) take-offs and short-field landings;
   (viii) flight by reference solely to instruments, including the completion of a level 180° turn;
   (ix) cross-country flying using visual reference, dead reckoning and, where available, radio navigation aids;
   (x) emergency operations, including simulated aeroplane equipment malfunctions; and
   (xi) operations to, from and transiting controlled aerodromes, compliance with air traffic services procedures;
   (xii) recognize and manage threats and errors.
   (xiii) communication procedures and phraseology.

(b) for aeroplane category rating, with a multi engine class rating the areas covered in paragraph (a) and in addition the following requirements:
   (i) emergency operations; including the applicant’s knowledge and performance of the following tasks:
       (aa) emergency descent;
       (bb) engine failure during take-off before Vmc
       (cc) engine failure after lift-off (simulated)
       (dd) approach and landing with an inoperative engine (simulated); and
   (ii) multi-engine operations; including the applicant’s knowledge and performance of the following tasks:
       (aa) manoeuvring with one engine inoperative;
       (bb) Vmc demonstration; and
       (cc) engine failure during flight (by reference to instruments).

(c) for rotorcraft category rating with a helicopter class rating the areas covered in paragraph (a) and in addition the following:
   (i) control of the helicopter by external visual reference;
   (ii) recovery at the incipient stage from settling with power; recovery techniques from low-rotor rpm within the normal
range of engine rpm;

(iii) ground manoeuvring and run-ups; hovering; take-offs and landings — normal, out of wind and sloping ground;

(iv) take-offs and landings with minimum necessary power; maximum performance take-off and landing techniques; restricted site operations; quick stops;

(v) cross-country flying using visual reference, dead reckoning and, where available, radio navigation aids, including a flight of at least one hour;

(vii) emergency operations, including simulated helicopter equipment malfunctions; autorotative approach and landing; and

(d) for rotorcraft category rating with a gyroplane class rating the areas covered in paragraph (a) and in addition flight at slow airspeeds;

(e) for glider category rating the following areas:

(i) pre-flight operations, including glider assembly and inspection;

(ii) techniques and procedures for the launching method used, including appropriate airspeed limitations, emergency procedures and signals used;

(iii) traffic pattern operations, collision avoidance precautions and procedures;

(iv) control of the glider by external visual reference;

(v) flight throughout the flight envelope;

(vi) recognition of, and recovery from, incipient and full stalls and spiral dives;

(vii) normal and cross-wind launches, approaches and landings;

(viii) cross-country flying using visual reference and dead reckoning; and

(ix) emergency procedures.

(f) for lighter-than-air category and class rating the following areas:

(i) pre-flight operations, including balloon assembly, rigging, inflation, mooring and inspection;

(ii) techniques and procedures for the launching and ascent, including appropriate limitations, emergency procedures and signals used;

(iii) collision avoidance precautions;

(iv) control of a free balloon by external visual reference;

(v) recognition of, and recovery from, rapid descents;

(vi) cross-country flying using visual reference and dead reckoning;

(vii) approaches and landings, including ground handling; and

(viii) emergency procedures.

(g) for powered-lifts category rating, operational experience in the following areas:

(i) recognize and manage threats and errors;

(ii) pre-flight operations, including mass and balance determination, powered-lift inspection and servicing;

(iii) aerodrome and traffic pattern operations, collision avoidance precautions and procedures;

(iv) control of the powered-lift by external visual reference;

(v) ground manoeuvring and run-ups; hover and rolling take-offs and climb-
out; hover and rolling approach and landings — normal, out of wind and sloping ground;
(vi) take-offs and landings with minimum necessary power;
(vii) maximum performance take-off and landing techniques;
(viii) restricted site operations; quick stops;
(ix) flight by reference solely to instruments, including the
(x) completion of a level 180° turn;
(xi) recovery at the incipient stage from settling with power; recovery
techniques from low-rotor rpm within the normal range of engine rpm;
(xii) cross-country flying using visual reference, dead reckoning and,
where available, radio navigation aids, including a flight of at least one
hour;
(xiii) emergency operations, including simulated powered-lift equipment
malfunctions; power of reconversion to autorotation and autorotative
approach, where applicable;
(xiv) transmission and interconnect driveshaft failure, where applicable;
(xv) operations to from and transiting controlled aerodromes, compliance
with air traffic services procedures; and
(xvi) communication procedures and phraseology.

Aeronautical experience and skill requirements for PPL

39. -(1) An applicant for a Private Pilot Licence (PPL) with an
aeroplane category rating shall have completed:

(a) for a single engine class rating for each category rating sought:
   (i) not less than 40 hours of flight time as pilot of aeroplanes, a total
       of 5 hours may have been completed in a synthetic flight trainer;
       and
   (ii) not less than 10 hours of solo flight time under the supervision of
       an authorized flight instructor, including 5 hours of solo cross-
       country flight time with at least one cross-country flight totalling
       not less than 270 km (150 NM) in the course of which full-stop
       landings at two different aerodromes shall be made;

(b) for a multi engine class rating for each category sought, in addition to the
    requirements of paragraph (a):
   (i) not less than 10 hours under the supervision of an authorised
       flight instructor in the category sought; and
   (ii) pass a practical skill test on multi-engine aircraft as specified
       in regulation 24.

(2) An applicant for a Private Pilot Licence (PPL) with a rotorcraft category
rating shall have completed, for a single engine rotorcraft type rating:

(a) not less than 40 hours of flight time or 35 hours if completed during a
course of approved training as pilot of rotorcraft, a total of 5 hours may
have been completed in a synthetic flight trainer; and

(b) not less than 10 hours of solo flight time under the supervision of an
authorized flight instructor, including 5 hours of solo cross-country
flight time with at least one cross-country flight totalling not less than
180 km (100 NM) in the course of which landings at two different points
shall be made.

(3) An applicant for a PPL with glider category shall have completed
(a) not less than 6 hours of flight time as pilot of gliders including 2 hours solo flight time during which not less than 20 launches and landings have been performed; and
(b) if the applicant has logged forty hours of flight time in aeroplanes the applicant shall complete 3 hours of flight time in a glider, including 2 hours of solo flight time during which not less than ten launches and landings have been performed.
(c) An applicant shall have demonstrated the ability to perform as pilot-in-command of a glider, the procedures and manoeuvres described in regulation 38 with a degree of competency appropriate to the privileges granted to the holder of a glider pilot licence, and to:
   (a) recognize and manage threats and errors;
   (b) operate the glider within its limitations;
   (c) complete all manoeuvres with smoothness and accuracy;
   (d) exercise good judgement and airmanship;
   (e) apply aeronautical knowledge; and
   (f) maintain control of the glider at all times in a manner such that the successful outcome of a procedure or manoeuvre is assured.
(4) An applicant for a PPL with a balloon class rating shall have completed 16 hours which consists of not less than 8 training flights in the areas of operation that includes:
   (a) where the training is being performed in a gas balloon:
      (i) two flights of two hours each that consists of one training flight within sixty days prior to application for the rating on the areas of operation for a gas balloon;
      (ii) five hours of solo flight in a gas balloon under an authorised instructor; and
      (iii) one flight involving a controlled ascent to three thousand feet above the launch site.
   (b) where the training is being performed in a balloon with an airborne heater:
      (i) two flights of one hour each within sixty days prior to application for the rating on areas of operation appropriate to a balloon with an airborne heater;
      (ii) five hours solo flight in a balloon with an airborne heater under an authorised instructor; and
      (iii) one flight involving a controlled ascent to three thousand feet above the launch site.
(5) An applicant for a PPL with an airship class rating shall have completed twenty five hours of flight training in airships on the areas of operation which consists of at least:
   (a) If the privileges of the licence are to be exercised at night, three hours of night flight training in an airship that includes:
      (i) a cross-country flight of over twenty-five nautical miles total distance; and
      (ii) five takeoffs and five landings to a full stop, with each landing involving a flight in the traffic pattern, at an airport; and
   (b) five hours of solo flight in an airship with an authorised instructor.
(6) An applicant for a Private Pilot Licence (PPL) with a powered-lift category rating shall have completed;
Privileges and limitations

40. Except as provided in sub-regulations (2) to (7), a holder of a Private Pilot Licence (PPL) shall not act as a crewmember of an aircraft:
   (a) carrying passengers or property for compensation or hire; or
   (b) operated for compensation or hire.

(2) A holder of a PPL may exercise the privileges of a holder of a flight radiotelephone operator licence as prescribed in regulation 129.

(3) A holder of a PPL may, for compensation or hire, act as a crewmember of an aircraft in connection with any business or employment if:
   (a) the flight is only incidental to that business or employment; and
   (b) the aircraft does not carry passengers or property for compensation or hire.

(4) A holder of a PPL may act as a crewmember of an aircraft used in a passenger-carrying flight sponsored by a charitable organisation described in paragraph (g), and for which the passengers make a donation to the organisation, when the following requirements are met:
   (a) the sponsor of the flight notifies the Authority at least seven days before the event and submits:
      (i) a signed letter from the sponsor that shows the name of the sponsor, the purpose of the charitable event, the date and time of the event, and the location of the event; and
      (ii) a photocopy of each crewmember’s pilot licence, Medical Certificate, and logbook entries that show the pilot has a valid licence and has logged at least two hundred hours of flight time;
   (b) the flight is conducted from a public airport that is adequate for the aircraft to be used, or from another airport that has been approved by the Authority for the operation;
   (c) no acrobatic or formation flights are conducted;
   (d) each aircraft used for the charitable event holds a valid standard certificate of airworthiness;
   (e) each aircraft used for the charitable event is airworthy and complies with the applicable requirements of the Civil Aviation (Operation of Aircraft) Regulations;
   (f) each flight for the charitable event is made during day visual flight rules conditions; and
   (g) the charitable organisation is an organisation identified as such by the appropriate authority of the government.

(5) A holder of a PPL may be reimbursed for aircraft operating expenses that are directly related to search and rescue operations, if the expenses involve only fuel, oil, airport expenditures, or rental fees, and the operation is sanctioned and under the direction and control of—
   (a) a government agency; or

(a) not less than 40 hours of flight time as a pilot of powered-lift; and
(b) not less than 10 hours of solo flight time under the supervision of an authorized flight instructor, including 5 hours of solo cross-country flight time with at least one cross-country flight totalling not less than 270 km (150 NM) in the course of which full stop landing at two different aerodromes shall be made.

(7) Except for balloons and gliders, an applicant for PPL who has flight time as a pilot in other categories may be credited with 10 hours of the total flight time.
(b) an organisation that conducts search and rescue operations.

(6) A holder of a PPL who is an aircraft salesman and who has logged at least two hundred hours of logged flight time may demonstrate an aircraft in flight to a prospective buyer.

(7) A holder of a PPL shall not pay less than the pro rata share of the operating expenses of a flight with passengers, if the expenses involve only fuel, oil, airport expenditures, or rental fees.

(8) Except as provided in sub-regulations (2) through (7), a holder of a PPL shall, not for compensation or hire, act as a co-pilot of an aircraft that is type certified for more than one pilot.

41. A PPL may be renewed if the holder of the licence has logged the following hours as PIC on either category, class or type rating sought within the twelve months preceding the date of application for renewal:

(a) for aeroplane and rotorcraft not less than 5 hours; and

(b) for glider or lighter than air not less than 3 hours.

Commercial Pilot Licence

42. (1) An applicant for a Commercial Pilot Licence (CPL) shall:

(a) be at least eighteen years of age;

(b) demonstrate the ability to read, speak, write, and understand the English language in accordance with the language proficiency requirements contained in the Second Schedule to these Regulations;

(c) receive a logbook endorsement from an authorised instructor who:

(i) conducted the required ground training on the aeronautical knowledge areas listed in regulation 43, that apply to the aircraft category and class rating sought; and

(ii) certified that the person is prepared for the required knowledge test that applies to the aircraft category and class rating sought.

(d) pass the required knowledge test on the aeronautical knowledge areas listed in regulation 47;

(e) receive the required training and a logbook endorsement from an authorised instructor who:

(i) conducted the training on the areas of operation listed in regulation 44 that apply to the aircraft category and class rating sought; and

(ii) certified that the person is prepared for the required practical test.

(f) be in possession of a Class 1 Medical Certificate issued under these Regulations;

(g) meet the aeronautical experience requirements of the applicable provisions of these Regulations that apply to the aircraft category and class rating sought before applying for the practical test

(h) pass the required practical test on the areas of operation listed in regulation 44 that apply to the aircraft category and class rating sought;

(i) hold a PPL issued under these Regulations or meet the requirements of regulation 15, pertaining to military licences; and

(j) comply with all sections of these Regulations which apply to the aircraft category and class rating sought.

Aeronautical

43. -(1) An applicant for a Commercial Pilot Licence (CPL) shall have
knowledge requirements for CPL demonstrated a level of knowledge appropriate to the privileges granted to the holder of such licence and appropriate to the category of aircraft intended to be included in the licence in at least the following subjects.

(2) The aeronautical knowledge areas applicable to any relevant aircraft category and class rating shall be as follows:

(a) air law;
   rules and regulations relevant to the holder of a CPL; rules of the air; appropriate air traffic services practices and procedures

(b) aircraft general knowledge:
   (i) principles of operation and functioning of powerplants, systems and instruments;
   (ii) operating limitations of relevant aircraft category and powerplants, relevant operational information from the flight manual or other appropriate document;
   (iii) use and serviceability checks of equipment and systems of appropriate aircraft category;
   (iv) maintenance procedures for airframes, systems and powerplants of appropriate aircraft category;
   (v) for helicopter and powered-lift, transmission(power-trains) where applicable.
   (vi) for airship, physical properties and practical application of gases.

(c) flight performance, planning and loading
   (i) effects of loading and mass distribution on aircraft handling, flight characteristics and performance, mass and balance calculations;
   (ii) use and practical application of take-off, landing and other performance data;
   (iii) pre-flight and en-route flight planning appropriate to commercial operations under VFR;
   (iv) preparation and filing of air traffic services flight plans and appropriate air traffic services procedures.
   (v) in the case of airship, helicopter and powered-lift effects of external loading.

(d) human performance;
   human performance relevant to the CPL; including principles of threat and error management.

(e) meteorology;
   (i) interpretation and application of aeronautical meteorological reports, charts and forecasts; use of, and procedures for obtaining, meteorological information, pre-flight and in-flight and altimetry;
   (ii) aeronautical meteorology; climatology of relevant areas in respect of the elements having an effect upon aviation; 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 hazardous weather avoidance;
(iii) causes, recognition and effects of icing; frontal zone penetration procedures; hazardous weather avoidance;

(f) navigation;

air navigation, including the use of aeronautical charts, instruments and navigation aids, understanding of the principles and characteristics of appropriate navigation systems and operation of airborne equipment;

(g) operation procedures;

(i) use of aeronautical documentation such as AIP, NOTAM, aeronautical codes and abbreviations;

(ii) appropriate precautionary and emergency procedures;

(iii) operational procedures for carriage of freight; potential hazards associated with dangerous goods;

(iv) requirements and practices for safety briefing to passengers, including precautions to be observed when embarking and disembarking from aircraft; and

(v) night and high altitude;

(vi) application of threats and error management principles to operational performance.

(vii) altimeter setting procedures;

(viii) in the case of the helicopter, and if applicable, powered-lift settling with power; ground resonance; retreating blade stall; roll-over and other operation hazards; safety procedures, associated with flight in VMC.

(h) principles of flight;

principles of flight relating to aircraft;

(i) radiotelephony;

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

(3) The aeronautical knowledge areas applicable to any relevant rotorcraft category and class rating shall include all areas covered under in sub-regulation (2) in addition to the following areas-

(i) powerplants; transmissions (power trains);

(ii) external loads on helicopter handling;

(iii) settling with power, ground resonance, roll-over and other operating hazards; and

(iv) operational procedures for carriage of freight including external loads;

(4) The aeronautical knowledge areas applicable to any relevant lighter than air category and class rating shall be as follows-

(a) air law;

rules and regulations relevant to the holder of a free balloon pilot licence; rules of the air; appropriate air traffic services practices and procedures;

(b) aircraft general knowledge;

(i) principles of operation of free balloon systems and instruments;

(ii) operating limitations of free balloons; relevant operational information from the flight manual or other appropriate
document;
(iii) physical properties and practical application of gases used in free balloons;
(c) flight performance and planning;
   (i) effects of loading on flight characteristics; mass calculations;
   (ii) use and practical application of launching, landing and other performance data, including the effect of temperature;
   (iii) pre-flight and en-route flight planning appropriate to operations under VFR; appropriate air traffic services procedures and altimeter setting procedures; operations in areas of high-density traffic;
(d) human performance;
(e) human performance relevant to the free balloon pilot;
(f) meteorology:
   application of elementary aeronautical meteorology; use of, and procedures for obtaining, meteorological information; altimetry;
(g) navigation;
   practical aspects of air navigation and dead-reckoning techniques; use of aeronautical charts;
(h) operational procedures
   (i) use of aeronautical documentation such as AIP, NOTAM, aeronautical codes and abbreviations;
   (ii) appropriate precautionary and emergency procedures, including action to be taken to avoid hazardous weather, wake turbulence and other operating hazards;
   (iii) application of threats and error management principles to operational performance;
(i) principles of flight;
(j) principles of flight relating to free balloons.
(k) in case of airship:
   (i) use, limitation and serviceability of avionics and instruments necessary for the control and navigation;
   (ii) use accuracy and reliability of navigation systems used in departure
   (iii) principles and characteristics of self-contained and external referenced navigation systems, operation of airborne equipment;

Flight instruction requirements

44. An applicant for a Commercial Pilot Licence (CPL), shall receive and record ground and flight training from an authorised instructor on the following areas of operation of this regulation that apply to the aircraft category and class rating sought:

(a) for all categories and class ratings, as applicable:
   (i) pre-flight operations, including mass and balance determination, aircraft inspection and servicing;
   (ii) aerodrome and traffic pattern operations, collision avoidance precautions and procedures;
   (iii) control of the aircraft by external visual reference;
   (iv) flight at critically slow airspeeds; spin avoidance; recognition of, and recovery from, incipient and full stalls;
   (v) flight at critically high airspeeds; recognition of, and recovery from, spiral dives;
(vi) normal and cross-wind take-offs and landings;
(vii) maximum performance (short field and obstacle clearance) take-offs;
short-field landings;
(viii) basic flight manoeuvres and recovery from unusual attitudes by
reference solely to basic flight instruments;
(ix) cross-country flying using visual reference, dead reckoning and
radio navigation aids; diversion procedures;
(x) abnormal and emergency procedures and manoeuvres; and
(xi) operations to, from and transiting controlled aerodromes,
compliance with air traffic services procedures, radiotelephony
procedures and phraseology.

(b) in addition to the areas of operation specified in paragraph (a), the
applicable areas of operation for a multiengine class rating as follows:
(i) emergency operations; including the applicant’s knowledge
and performance of the following tasks:
   (aa) emergency descent;
   (bb) engine failure during take-off before Vmc
       (simulated);
   (cc) engine failure after lift-off (simulated);
   (dd) approach and landing with one inoperative engine
       (simulated);
   (ee) systems and equipment malfunctions; and
   (ff) emergency equipment and survival gear

(ii) high altitude operations; including the applicant’s knowledge
and performance of the following tasks:
   (aa) supplemental oxygen; and
   (bb) pressurization.

(iii) multi-engine operations: including the applicant’s knowledge
and performance of the following tasks:
   (aa) manoeuvring with one engine inoperative;
   (bb) Vmc demonstration;
   (cc) engine failure during flight (by reference to
       instruments); and
   (dd) instrument approach with one engine inoperative (by
       reference to instruments).

(c) for a rotorcraft category rating with a helicopter type rating:
   (aa) recovery at the incipient stage from settling with power;
       recovery techniques from low-rotor rpm within the
       normal range of engine rpm;
   (bb) ground manoeuvring and run-ups; hovering; take-offs
       and landings - normal, out of wind and sloping ground;
       steep approaches;
   (cc) take-offs and landings with minimum necessary power;
       maximum performance take-off and landing
       techniques; restricted site operations; quick stops;
   (dd) hovering out of ground effect; operations with external
       load, if applicable; flight at high altitude;
   (ee) basic flight manoeuvres and recovery from unusual
       attitudes by reference solely to basic flight instruments;
(ff) abnormal and emergency procedures, including simulated
helicopter equipment malfunctions, autorotative
approach and landing; and

(d) for a rotorcraft category rating with a gyroplane class rating: flight at
slow airspeeds;

(e) for a lighter-than-air category rating with a balloon or airship class
rating:
   (i) fundamentals of instructing;
   (ii) pre-flight operations, assembly, rigging, inflation, mooring and
inspection;
   (iii) techniques and procedures for the launching and ascent,
including appropriate limitations, emergency procedures and
signals used;
   (iv) collision avoidance precautions;
   (v) control by external visual reference;
   (vi) recognition of, and recovery from, rapid descents;
   (vii) cross-country flying using visual reference and dead
reckoning;
   (viii) approaches and landings, including ground handling; and
   (ix) emergency procedures;
   (x) recognize and manage threats and errors;
   (xi) recognition of leaks;
   (xii) flight under IFR; and
   (xiii) communication procedures and phraseology.

Aeronautical experience and skill requirements for commercial pilot licence

45. An applicant for a Commercial Pilot Licence (CPL), aeroplanes shall
obtain the following hours of aeronautical experience:

(a) not less than 200 hours of flight time, or 150 hours if completed during
an integrated course of approved training provided for in an Approved
Training Organisation under the Civil Aviation (Approved Training
Organisation) Regulations, as a pilot of aeroplanes, of which 10 hours
may have been completed in a synthetic flight trainer.

(b) in aeroplanes, not less than:
   (i) 100 hours as PIC or, in the case of a course of approved training,
       70 hours as PIC;
   (ii) 20 hours of cross-country flight time as PIC including a cross-
        country flight totalling not less than 540 km (300 NM) in the
        course of which full-stop landings at two different aerodromes
        shall be made;
   (iii) 10 hours of instrument instruction time of which not more than 5
        hours may be instrument time in the synthetic flight trainer;
   (iv) 5 hours of night flying, including 5 take-offs and 5 landings as
        PIC.

(c) A holder of a pilot licence in another category may be credited towards
the 200 hours of flight time as follows-
   (i) 10 hours as PIC in a category other than helicopters; or
(ii) 30 hours as PIC holding a PPL on helicopters; or
(iii) 100 hours as PIC holding a CPL on helicopters.

(2) An applicant for a CPL helicopter licence shall have completed—

(a) not less than 150 hours of flight time, or 100 hours if completed during an integrated course of approved training provided for in an ATO under the Civil Aviation (Approved Training Organisation) Regulations, as a pilot of helicopters, of which 10 hours may have been completed in a synthetic flight trainer;

(b) not less than;

(i) 35 hours as PIC;
(ii) 10 hours of cross-country flight time as PIC including a cross-country flight in the course of which full-stop landings at two different points shall be made;
(iii) 10 hours of instrument instruction time of which not more than 5 hours may be instrument ground time; and
(iv) if the privileges of the licence are to be exercised at night, 5 hours of night flight time including 5 take-offs and 5 landing patterns as PIC.

(c) The holder of a pilot licence in the helicopter category may be credited towards the 150 hours of flight time as follows—

(i) 20 hours as PIC holding a PPL in aeroplanes; or
(ii) 50 hours as PIC holding a CPL in aeroplanes.

(d) An applicant for a CPL (gyroplane) shall have completed:

(i) one hundred and fifty hours of flight time as a pilot, including at least one hundred hours in powered aircraft, of which twenty-five hours shall be in gyroplanes;
(ii) one hundred hours of PIC flight time, including at least:

(aa) ten hours in gyroplanes; and
(bb) three hours in cross-country flight in gyroplanes; and
(iii) twenty hours of training on the areas of operation listed in regulation 44, including at least:

(aa) five hours of instrument training in an aircraft;
(bb) one cross-country flight of at least two hours in a gyroplane in day VFR conditions, consisting of a total straight-line distance of more than fifty nautical miles from the original point of departure; and
(iv) ten hours of solo flight in a gyroplane on the areas of operation listed in regulation 44, including at least—

(aa) one cross-country flight with landings at a minimum of three points, with one segment consisting of a straight-line distance of at least fifty nautical miles from the original point of departure; and
(bb) five hours in night visual flight rules conditions with ten takeoffs and ten landings with each landing involving a flight in the traffic pattern.

(3) An applicant for a commercial pilot licence lighter than air (airship category) shall have completed not less than 200 hours of flight time as a pilot, including not less than:

a) 50 hours as a pilot of airships;
b) 30 hours in airships as pilot-in-command or pilot-in-command under supervision, to
include not less than:
- 10 hours of cross-country flight time; and
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 airships; and
d) 20 hours of flight training in airships in the areas of operation listed in regulation 44.

(4) An applicant for a CPL lighter than air (balloon category) shall have completed 35 hours which consists of not less than 20 hours training flights in the areas of operation, that includes:
(a) for a gas balloon:
   (i) two training flights of not less than two hours each in the appropriate areas of operation within sixty days prior to application for the rating;
   (ii) 10 hours as PIC; and
   (iii) two flights involving a controlled ascent to five thousand feet above the launch site.
(b) for a balloon with an airborne heater:
   (i) two training flights of two hours each in the appropriate areas of operation within sixty days prior to application for the rating;
   (ii) 10 hours as PIC; and
   (iii) two flights involving a controlled ascent to five thousand feet above the launch site.
(c) for a free balloon:
   i. the procedures and manoeuvres described in regulation 38(f) with a degree of competency appropriate to the privileges granted to the holder of a free balloon pilot licence;
   ii. recognize and manage threats and errors;
   iii. operate the free balloon within its limitations;
   iv. complete all manoeuvres with smoothness and accuracy;
   v. exercise good judgement and airmanship;
   vi. apply aeronautical knowledge; and
   vii. maintain control of the free balloon at all times in a manner such that the successful outcome of a procedure or manoeuvre is assured.

Privileges and limitations

46.  -(1) A holder of a Commercial Pilot Licence (CPL) may:
(a) exercise all the privileges of the holder of a PPL as stipulated in regulation 40;
(b) act as a pilot-in-command and co-pilot in an aircraft engaged in operations other than commercial air transportation;
(c) act as a pilot-in-command in commercial air transportation in an aircraft certificated for single pilot operation;
(d) act as a co-pilot in commercial air transportation in an aircraft required to be operated with a co-pilot;
(e) exercise all the privileges of the holder of a flight radiotelephone operator licence as stipulated in regulation 129; and
(f) fly at night.
(2) A holder of a CPL may act as PIC of an aircraft for compensation or hire, including the carriage of persons or property for compensation or hire, provided the
pilot is qualified in accordance with the applicable regulations.

(3) A holder of a CPL shall not act as a pilot-in-command (PIC) of an aircraft certificated take-off mass of over 5,700 kgs.

47. A holder of a CPL may apply for renewal of the licence if the holder of the licence has logged as PIC or co-pilot within the six months preceding the date of application for renewal, the following hours:
(a) for aeroplanes and rotorcraft; not less than 6 hours and 6 take-offs and landings; and
(b) for lighter than air; 3 hours and 3 launches and landings.

Airline Transport Pilot Licence

48. An applicant for an Airline Transport Pilot Licence (ATPL) shall:
(a) be at least twenty one years of age;
(b) demonstrate the ability to read, speak, write, and understand the English language in accordance with the language proficiency requirements contained in the Second Schedule to these Regulations;
(c) meet at least one of the following requirements:
   (i) hold a valid and current Commercial Pilot Licence (CPL) and an instrument rating;
   (ii) meet the military experience requirements under regulation 15, to qualify for a CPL, and an instrument rating if the person is a rated military pilot or former rated military pilot; or
   (iii) hold either a foreign ATPL or a foreign CPL and an instrument rating issued by another Contracting State.
(d) meet the applicable aeronautical experience requirements of this subpart before applying for the practical test;
(e) pass a knowledge test on the applicable aeronautical knowledge areas of regulation 49 that apply to the aircraft category and class rating sought; and
(f) pass the practical test on the applicable areas of operation specified in regulation 49, that apply to the aircraft category and class rating sought; and
(g) have a valid Class 1 Medical Certificate issued under these Regulations.

49. -(1) Subject to sub-regulation (2) an applicant for a Airline Transport Pilot Licence (ATPL), shall receive and record ground training in a manner prescribed by the Authority, on the aeronautical knowledge areas that apply to aeroplane and helicopter aircraft categories.
(2) The aeronautical knowledge areas applicable to aeroplane aircraft category shall be as follows:
(a) air law:
   rules and regulations relevant to the holder of an airline transport pilot licence — aircraft; rules of the air; appropriate air traffic services practices and procedures;
(b) aircraft general knowledge:
   (i) general characteristics and limitations of electrical, hydraulic, pressurization and other aircraft systems; flight control systems,
including autopilot and stability augmentation;
(ii) principles of operation, handling procedures and operating limitations of aircraft powerplants; effects of atmospheric conditions on engine performance; relevant operational information from the flight manual or other appropriate document;
(iii) operating procedures and limitations of appropriate aircraft; effects of atmospheric conditions on aircraft performance;
(iv) use and serviceability checks of equipment and systems of appropriate aircraft;
(v) flight instruments; compasses, turning and acceleration errors; gyroscopic instruments, operational limits and precession effects; practices and procedures in the event of malfunctions of various flight instruments;
(vi) maintenance procedures for airframes, systems and powerplants of appropriate aircraft;
(c) flight performance, planning and loading:
(i) effects of loading and mass distribution on aircraft handling, flight characteristics and performance; mass and balance calculations;
(ii) use and 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 services procedures; altimeter setting procedures;
(c) human performance:
human performance including principles of threat and error management relevant to the airline transport pilot — aircraft;
(d) meteorology:
(i) interpretation and application of aeronautical meteorological reports, charts and forecasts; codes and abbreviations; use of, and procedures for obtaining, meteorological information, pre-flight and in-flight; altimetry;
(ii) aeronautical meteorology; climatology of relevant areas in respect of the elements having an effect upon aviation; 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;
(iii) causes, recognition and effects of engine and airframe icing; frontal zone penetration procedures; hazardous weather avoidance;
(iv) practical high altitude meteorology, including interpretation and use of weather reports, charts and forecasts; jetstreams;
(e) navigation
(i) air navigation, including the use of aeronautical charts, radio navigation aids and area navigation systems; specific navigation requirements for long-range flights;
(ii) use, limitation and serviceability of avionics and instruments necessary for the control and navigation of aircraft;
(iii) use, accuracy and reliability of navigation systems used in departure, en-route, approach and landing phases of flight; identification of radio navigation aids;
(iv) principles and characteristics of self-contained and external-referenced navigation systems; operation of airborne equipment;
(f) operational procedures:
   (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;
   (iii) precautionary and emergency procedures; safety practices associated with flight under IFR;
   (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
   (iv) night and high altitude;

(g) principles of flight:
   principles of flight relating to aircraft; subsonic aerodynamics; compressibility effects, manoeuvre boundary limits, wing design characteristics, effects of supplementary lift and drag devices; relationships between lift, drag and thrust at various airspeeds and in different flight configurations;

(h) radiotelephony:
   radiotelephony procedures and phraseology; action to be taken in case of communication failure.

(3) The aeronautical knowledge areas applicable to helicopter category rating shall include all areas covered under sub-regulation (2) and in addition the following areas:

(a) helicopter general knowledge:
   (i) general characteristics and limitations of electrical, hydraulic, and other helicopter systems; flight control systems, including autopilot and stability augmentation;
   (ii) principles of operation, handling procedures and operating limitations of helicopter powerplants; transmission (power-trains); effects of atmospheric conditions on engine performance; relevant operational information from the flight manual;
   (iii) operating procedures and limitations of appropriate helicopters; effects of atmospheric conditions on helicopter performance; relevant operational information from the flight manual;

(b) flight performance and planning:
   (i) effects of loading and mass distribution, including external loads, on helicopter handling, flight characteristics and performance; mass and balance calculations;
   (ii) causes, recognition and effects of engine, airframe and rotor icing; hazardous weather avoidance;

(c) navigation:
   use, accuracy and reliability of navigation systems; identification of radio navigation aids;

(d) operational procedures:
   (i) interpretation and use of aeronautical documentation such as AIP, NOTAM, aeronautical codes and abbreviations;
   (ii) precautionary and emergency procedures; settling with power, ground resonance, retreating blade stall, dynamic roll-over and other operating hazards; safety practices associated with flight
under VFR;
(iii) operational procedures for carriage of freight, including external loads, and dangerous goods;
(iv) requirements and practices for safety briefing to passengers, including precautions to be observed when embarking and disembarking from helicopters;
(e) principles of flight-
Principles of flight relating to helicopters;
(f) radiotelephony-
radiotelephony procedures and phraseology as applied to VFR operations; action to be taken in case of communication failure.

50. An applicant for Airline Transport Pilot Licence (ATPL), aeroplanes or helicopters shall have received the flight instruction required for the issue of commercial pilot licence as prescribed in regulation 44; and
(a) for ATPL aeroplanes shall receive the flight instructions required for the issue of the instrument rating prescribed in Regulation 70; or
(b) for ATPL helicopters if the privileges of instrument rating are to be exercised shall receive the flight instructions required for the issue of the instrument rating prescribed in Regulation 70.

(2) An applicant shall have demonstrated 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:
(a) pre-flight procedures, including the preparation of the operational flight plan and filing of the air traffic services flight plan;
(b) normal flight procedures 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 use of checklists; and
(e) in the case of aeroplanes and powered-lifts, procedures and manoeuvres for instrument flight including simulated engine failure.

(3) In the case of an aeroplane, the applicant shall have demonstrated the ability to perform the procedures and manoeuvres described in (2) as pilot-in-command of a multiengined aeroplane.

51. -(1) An applicant for an airline transport pilot licence, shall have completed, in the case of:
(a) an aeroplane, not less than one thousand five hundred hours of flight time as a pilot of aeroplanes; or
(b) helicopter not less than one thousand hours of flight time as a pilot of helicopter;
and 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.

(2) The applicant shall have completed in aircraft not less than:
(a) in aeroplanes: 500 hours as pilot-in-command under supervision or 250 hours, either as pilot-in-command, or made up by not less than 70 hours as pilot-in-command and the necessary additional flight time as pilot-in-
command under supervision;

(b) 200 hours of cross-country flight time, of which not less than 100 hours shall be as PIC or as co-pilot performing, under the supervision of the PIC, the duties and functions of a PIC, provided that the method of supervision employed is acceptable to the Authority;

(c) in helicopters: 250 hours, either as pilot-in-command, or made up of not less than 70 hours as pilot-in-command and the necessary additional flight time as pilot-in-command under supervision;

(d) for aeroplanes 75 hours of instrument time, of which not more than 30 hours may be obtained in the synthetic flight trainer and for helicopter 30 hours of instrument time, of which not more than 10 hours may be obtained in the synthetic flight trainer; and

(e) for aeroplanes 100 hours and for helicopter 50 hours of night flight as PIC or as co-pilot.

(3) Where the applicant for ATPL aeroplanes or rotorcraft has flight time as a pilot of either category, the applicant shall be credited with 50% of the flight time as PIC towards the flight time of the category sought as required in sub-regulation (1).

(4) An applicant shall have demonstrated the ability to perform the procedures and manoeuvres described in regulation 50(2) with a degree of competency appropriate to the privileges granted to the holder of an airline transport pilot licence, and to:

(a) recognize and manage threats and errors;

(b) 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;

(c) operate the aircraft in the mode of automation appropriate to the phase of flight and to maintain awareness of the active mode of automation;

(d) perform, in an accurate manner, normal, abnormal and emergency procedures in all phases of flight;

(e) exercise good judgement and airmanship, to include structured decision making and the maintenance of situational awareness; and

(f) communicate effectively with other flight crewmembers 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 (SOPs) and use of checklists.

(5) When 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 multi-crew operations unless the holder has met the requirements, as appropriate, established for:

(a) private pilot licence: to exercise all the privileges of the holder of a private pilot licence in the aeroplane category provided the requirements of regulation 38 and 39 have been met;

(b) before exercising the privileges of the instrument rating in a single-pilot operation in aeroplanes, the licence holder shall have demonstrated an ability to act as pilot-in-command in a single-pilot operation exercised by reference solely to instruments and shall have met the skill requirement specified in regulation 67 appropriate to the aeroplane category.

(c) before exercising the privileges of a commercial pilot licence in a single-pilot operation in aeroplanes, the licence holder shall have:

   (i) completed in aeroplanes 70 hours, either as pilot-in-command, or
made up of not less than 10 hours as pilot-in-command and the necessary additional flight time as pilot-in-command under supervision;
(ii) completed 20 hours of cross-country flight time as pilot-in-command, or made up of not less than 10 hours as pilot-in-command and 10 hours as pilot-in-command under supervision, including a cross-country flight totaling not less than 540 km (300 NM) in the course of which full-stop landings at two different aerodromes shall be made; and
(iii) met the requirements for the commercial pilot licence specified in regulations 43, 44 and 45 with the exception of regulation 44(a) and 45(b)(i), appropriate to the aeroplane category.

(6) Any limitation of privileges specified in sub regulation (5) shall be endorsed on the licence.

52. An applicant who holds a valid Airline Transport Pilot Licence (ATPL) and seeks additional aircraft category, class and type rating shall:
(a) meet the applicable eligibility requirements;
(b) pass a knowledge test on the applicable aeronautical knowledge areas;
(c) meet the applicable aeronautical experience requirements; and:
(d) pass the practical test on the areas of operation.

53. A holder of an Airline Transport Pilot Licence (ATPL) may:
(a) exercise all the privileges of a holder of a Private Pilot Licence and Commercial Pilot Licence and Instrument Rating for aeroplane as stipulated in Regulations 40, 46 and 74;
(b) act as pilot-in-command and co-pilot in commercial air transport; and
(c) exercise all the privileges of the holder of a flight radiotelephone operator licence as stipulated in regulation 129.

(2) A holder of an ATPL may be authorised to act as a flight instructor, not being a holder of a flight instructor rating, when instructing pilots within an Air Operator Certificate holder’s approved training programme in aircraft of the category, class, and type, as applicable, for which the airline transport pilot is rated, and in synthetic flight trainers of those aircraft, and endorse the logbook or other training record of the person to whom training has been given.

(3) A holder of an ATPL shall not instruct in an aircraft or in an approved synthetic flight trainer except for the briefing and debriefing sessions:
(a) for more than eight hours in any twenty-four-consecutive-hour period; or
(b) for more than thirty six hours in any seven-consecutive-day period.

(4) A holder of an ATPL shall not instruct in Category II or Category III operations unless he has been trained and successfully tested under Category II or Category III operations, as applicable.

54. A holder of an Airline Transport Pilot Licence may apply for renewal of the licence if the holder of the licence has logged not less than six hours as pilot in command or co-pilot and has done six take-offs and landings within the six months preceding the date of application for renewal.

Multi-crew Pilot Licence

Note: The following Regulations 55-60 shall come into force on the 1st July 2012
An applicant for Multi-crew Pilot Licence (MPL), shall:

(a) be not less than eighteen years of age;
(b) demonstrate the ability to read, speak, write, and understand the English language in accordance with the language proficiency requirements contained in the Second Schedule to these Regulations;
(c) meet at least one of the following requirements:
   (i) demonstrate a level of knowledge appropriate to the privileges granted to the holder of an airline transport pilot licence and appropriate to the aeroplane category in an approved training course;
   (ii) hold either a foreign MPL or a foreign ATPL and an instrument rating issued by another Contracting State.
(d) meet the applicable aeronautical experience requirements of this sub-part before applying for the practical test;
(e) pass a knowledge test on the applicable aeronautical knowledge areas of regulation 49 and 50 that apply to the aircraft category rating sought;
(f) pass the practical test on the applicable areas of operation specified in regulation 49 and 50 that apply to the aircraft category sought; and
(g) have a valid Class 1 Medical Certificate issued under these Regulations.

The applicant for a Multi-Crew Pilot Licence (MPL), shall have met the requirements specified in the Airline transport pilot licence appropriate to the aeroplane category in an approved training course and in the Third Schedule.

The applicant shall have completed a course of approved training covering the experience requirements in regulation 56.

The applicant shall have received dual flight instruction in all the competency units specified in the Third Schedule, to the level required for the issue of the multi-crew pilot licence, to include the competency units required to pilot under instrument flight rules.

An applicant for Multi-crew pilot licence shall have completed in an approved training course of not less than 240 hours as pilot flying and pilot not flying of actual and simulated flight.

(2) Flight experience in actual flight shall include at least the experience requirements stipulated under regulation 39 upset recovery training, night flying and flight by reference solely to instruments.

(3) In addition to meeting the requirements in sub regulation (2), the applicant shall have gained, in a turbine-powered aeroplane certificated for operation with a minimum crew of at least two pilots, or in a flight simulation training device approved for that purpose by the Authority in accordance with the Third Schedule, paragraph 4, the experience necessary to achieve the advanced level of competency defined in the Third Schedule.

(4) The applicant shall have demonstrated the ability to perform, as pilot-in-command
of an aircraft within the appropriate category required to be operated with a copilot, the following procedures and manoeuvres:

a) pre-flight procedures, including the preparation of the operational flight plan and filing of the air traffic services flight plan;
b) normal flight procedures 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 use of checklists; and
e) in the case of aeroplanes and powered-lifts, procedures and manoeuvres for instrument flight described in regulation 72, including simulated engine failure.

(5) In the case of an aeroplane, the applicant shall have demonstrated the ability to perform the procedures and manoeuvres described in sub regulation (4) as pilot-in-command of a multi-engined aeroplane.

(6) The applicant shall have demonstrated the ability to perform the procedures and manoeuvres described in subregulation (4) with a degree of competency appropriate to the privileges granted to the holder of an airline transport pilot licence, and to:

a) recognize and manage threats and errors;
b) 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;
c) operate the aircraft in the mode of automation appropriate to the phase of flight and to maintain awareness of the active mode of automation;
d) perform, in an accurate manner, normal, abnormal and emergency procedures in all phases of flight;
e) exercise good judgement and airmanship, to include structured decision making and the maintenance of situational awareness; and
f) communicate effectively with other flight crewmembers 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 (SOPs) and use of checklists.

59. (1) A holder of Multi-Crew Pilot Licence (MPL) shall:
(a) exercise all the privileges of the holder of a private pilot licence in the aeroplane category provided the requirements of regulation 40 have been met;
(b) to exercise the privileges of the instrument rating in a multi-crew operation; and
(c) to act as co-pilot of an aeroplane required to be operated with a copilot.

(2) A holder of Multi-Crew Pilot Licence shall, before exercising the privileges of the instrument rating in a single-pilot operation in aeroplanes, have demonstrated an ability to act as pilot-in-command in a single-pilot operation exercised by reference solely to instruments and shall have met the skill requirement of regulation 70 appropriate to the aeroplane category.

(3) A holder of Multi-Crew Pilot Licence shall before exercising the privileges of a commercial pilot licence in a single-pilot operation in aeroplanes, have:
(a) completed in aeroplanes 70 hours, either as pilot-in command, or made up of not less than 10 hours as pilot-in-command and the necessary additional flight time as pilot-in-command under supervision;
(b) completed 20 hours of cross-country flight time as pilot-in-command, or...
made up of not less than 10 hours as pilot-in-command and 10 hours as pilot-in-command under supervision, including a cross-country flight totalling not less than 540 km (300 NM) in the course of which full-stop landings at two different aerodromes shall be made; and
(c) met the requirements for the commercial pilot licence with the exception of regulation 45 (b).

60. A holder of Multi-Crew Pilot Licence may apply for renewal of the licence if the holder of the licence has logged not less than six hours as pilot in command or co-pilot and has done six take-offs and landings within the six months preceding the date of application for renewal.

PART VII
PILOT RATINGS AND AUTHORISATIONS

Category rating

61. A pilot seeking a category rating shall:
(a) have received the required training and possess the aeronautical experience prescribed by these regulations for the aircraft category and, if applicable, class and type rating sought;
(b) have an endorsement in that pilot’s logbook or training record from an authorised instructor that the applicant has been found competent in the following areas, as appropriate to the pilot licence for the aircraft category and, if applicable, class and type rating sought:
   (i) aeronautical knowledge areas; and
   (ii) areas of operation; and
(c) pass the knowledge and practical test that is appropriate to the pilot licence for the aircraft category and, if applicable, the class rating sought.

Class ratings

62. A pilot seeking an additional class rating:
(a) shall have an endorsement in that pilot’s logbook or training record from an authorised instructor that the applicant has been found competent in the following areas, as appropriate to the pilot licence and for the aircraft class rating sought:
   (i) aeronautical knowledge area; and
   (ii) areas of operation.
(b) shall pass the practical test applicable to the pilot licence for the aircraft class rating sought
(c) need not meet the training time requirements prescribed under these Regulations for the aircraft class rating sought; and
(d) need not take an additional knowledge test, if the applicant holds an aeroplane, rotorcraft or airship category at that pilot licence level.

Type ratings

63. (1) To act as a pilot in command of
(a) an aircraft certificated for at least two pilots;
(b) any aircraft considered necessary by the Authority; or
(c) each type of helicopter,
a pilot shall hold a type rating for that aircraft.
(2) A person shall not act as a commercial pilot in an aeroplane of which the maximum certificated take-off mass of over 2,300 kg unless that person’s licence includes an Instrument Rating.
(3) A pilot seeking an aircraft type rating to be added on a pilot licence, or the addition of an aircraft type rating that is accomplished concurrently with an additional aircraft category or class rating shall:

(a) have an endorsement in the logbook or training record from an authorised instructor that the applicant has been found competent in the areas of operation appropriate to the pilot licence for the aircraft category, class and type rating sought and the applicant has logged:

(i) for aeroplanes of maximum certificated take-off mass of 5,700 kgs or below not less than 5 hours of flight time under the supervision of an authorised flight instructor in the aircraft type sought; and

(ii) for aeroplanes of maximum certificated take-off mass of over 5,700 kgs where training is conducted in a:

(aa) synthetic flight trainer, not less than 30 hours of synthetic flight trainer time and 3 hours of actual flying time in the aircraft type sought.

(bb) Level D synthetic flight trainer of the aircraft type sought approved by the Authority, not less than 36 hours.

(b) pass the flight check-out for the aircraft type rating sought; and

(c) pass a knowledge test on the aircraft type on which the rating is sought.

(ii) for aeroplanes of maximum certificated take-off mass of over 5,700 kgs where training is conducted in a:

(a) synthetic flight trainer, not less than 30 hours of synthetic flight trainer time and 3 hours of actual flying time in the aircraft type sought; or

(b) Level D synthetic flight trainer of the aircraft type sought approved by the Authority, not less than 36 hours

64. -(1) An applicant for a Category II or Category III operations pilot authorisation shall:

(a) hold a pilot licence with an instrument rating or an airline transport pilot licence;

(b) hold a category and class rating, and type rating, for the aircraft for which the authorisation is sought; and

(c) complete the practical test requirements.

(2) An applicant for a Category II or Category III operations pilot authorisation shall have at least:

(a) fifty hours of night flight time as PIC;

(b) seventy-five hours of instrument time under actual or simulated instrument conditions that may include not more than:

(i) a combination of twenty-five hours of simulated instrument flight time in an approved synthetic flight trainer; or

(ii) forty hours of simulated instrument flight time if accomplished in an approved course conducted by an appropriately rated approved training organisation certified under the Civil Aviation (Approved Training Organisations) Regulations and

(c) two hundred fifty hours of cross-country flight time as PIC.

(3) Upon passing a practical test for a Category II or III operations pilot
authorisation, a pilot may renew that authorisation for each type of aircraft for which the pilot holds the authorisation.

(4) The Authority may not renew a Category II or Category III operations pilot authorisation for a specific type aircraft for which an authorisation is held beyond twelve months from the date the applicant passed a practical test in that type of aircraft.

(5) Where the holder of a Category II or Category III operations pilot authorisation passes the practical test for a renewal in the month before the authorisation expires, the Authority will consider that the holder passed it on the date the authorisation expired.

(6) The Authority may issue a Category II or Category III pilot authorisation by way of a letter, as a part of an applicant’s instrument rating or pilot licence.

(7) Upon original issue the authorisation shall contain the following limitations:
   (a) for Category II operations, five hundred metres runway visual range (RVR) and a one hundred and fifty feet decision height (DH); and
   (b) for Category III operations, as specified in the authorisation document.

(8) To remove the limitations on a Category II or Category III pilot authorisation:
   (a) a Category II operations limitation holder may remove the limitation by showing that, since the beginning of the sixth preceding month, the holder has made three Category II operations ILS approaches with a one hundred and fifty foot decision height to a landing under actual or simulated instrument conditions; or
   (b) a Category III operations limitation holder may remove the limitation by showing experience as specified in the authorisation.

(9) An authorisation holder or an applicant for an authorisation may use a synthetic flight trainer if that synthetic flight trainer is approved by the Authority for such use, to meet the experience requirement of sub-regulation (11), or for the practical test required by these Regulations for a Category II or a Category III operations pilot authorisation, as applicable.

(10) An applicant for the
   (a) issue or renewal of a Category II operations pilot authorisation; and
   (b) the addition of another type of aircraft to a Category II operations pilot authorisation shall pass a practical test.

(11) To be eligible for the practical test for an authorisation under this regulation, an applicant shall:
   (a) meet the requirements of this regulation; and
   (b) if the applicant has not passed a practical test for this authorisation within the twelve months preceding the date of the test:
      (i) meet the requirements of the Civil Aviation (Operation of Aircraft) Regulations; and
      (ii) have performed at least six ILS approaches within the six calendar months preceding the date of the test, of which at least three of the approaches shall have been conducted without the use of an approach coupler.

(12) An applicant shall accomplish the approaches specified in sub-regulation (11)(b)(ii):
   (a) under actual or simulated instrument flight conditions;
   (b) to the minimum decision height for the ILS approach in the type aircraft in which the practical test is to be conducted, except that the approaches need not be conducted to the decision height authorised.
for Category II operations;
(c) to the decision height authorised for Category II operations only if conducted in an approved synthetic flight trainer qualified for Category II operations; and
(d) in an aircraft of the same category and class and type, as applicable, as the aircraft in which the practical test is to be conducted or in an approved synthetic flight trainer that—
   (i) represents an aircraft of the same category and class and type, as applicable, as the aircraft in which the authorisation is sought; and
   (ii) is used in accordance with an approved course conducted by an approved training organisation certified under the Civil Aviation (Approved Training Organisations) Regulations.

(13) The flight time acquired in meeting the requirements of sub-regulation (11)(b)(ii) may be used to meet the requirements of sub-regulation (11)(b)(i).

(14) A category II operations practical test consists of an oral and flight increment:
   (a) in case of an oral increment test the applicant shall demonstrate knowledge of the following:
      (i) required landing distance;
      (ii) recognition of the decision height;
      (iii) missed approach procedures and techniques using computed or fixed altitude guidance displays
      (iv) use and limitations of RVR;
      (v) use of visual clues, their availability or limitations, and altitude at which they are normally discernible at reduced RVR;
      (vi) procedures and techniques related to transition from nonvisual to visual flight during a final approach under reduced RVR;
      (vii) effects of vertical and horizontal windshear;
      (viii) characteristics and limitations of the ILS and runway lighting system;
      (ix) characteristics and limitations of the flight director system, auto approach coupler, including split axis type if equipped, auto throttle system if equipped), and other required Category II operations equipment;
      (x) assigned duties of the co-pilot during Category II approaches, unless the aircraft for which authorisation is sought does not require an co-pilot; and
      (xi) instrument and equipment failure warning systems.
   (b) in the case of a flight increment test it shall be conducted in an aircraft of the same category, class, and type, as applicable, as the aircraft in which the authorisation is sought or in an approved synthetic flight trainer that—
      (i) represents an aircraft of the same category and class, and type, as applicable, as the aircraft in which the authorisation is sought; and
      (ii) is used in accordance with an approved course conducted by an ATO certificated under the Civil Aviation (Approved Training Organisations) Regulations;
         (aa) the flight increment shall consist of at least two ILS approaches to one hundred feet above including at least one landing and one missed approach;
         (bb) all approaches performed during the flight increment
shall be made with the use of an approved flight control guidance system, except if an approved auto approach coupler is installed, at least one approach shall be hand flown using flight director commands;

(cc) if a multiengine aeroplane with the performance capability to execute a missed approach with one engine inoperative is used for the practical test, the flight increment shall include the performance of one missed approach with an engine, which shall be the most critical engine, if applicable, set at idle or zero thrust before reaching the middle marker;

(dd) if an approved multi-engine synthetic flight trainer is used for the practical test, the applicant shall execute a missed approach with the most critical engine, if applicable, failed;

(ee) for an authorisation for an aircraft that requires a type rating, the applicant shall pass a practical test in coordination with a co-pilot who holds a type rating in the aircraft in which the authorisation is sought;

(ff) The Authority’s inspector or evaluator may conduct oral questioning at any time during a practical test.

(15) The Authority shall require that an applicant pass a practical test for:

(a) issue or renewal of a Category III operations pilot authorisation; or
(b) the addition of another type of aircraft to a Category III operations pilot authorisation.

(16) To be eligible for the practical test an applicant shall:

(a) meet the requirements of this regulation; and
(b) if the applicant has not passed a practical test for this authorisation during the twelve calendar months preceding the month of the test shall:
   (i) meet the requirements of the Civil Aviation (Operation of Aircraft) Regulations and
   (ii) have performed at least six ILS approaches during the six calendar months preceding the month of the test, of which at least three of the approaches shall have been conducted without the use of an approach coupler.

(17) An applicant shall conduct the approaches specified in sub-regulation (16)(b)(ii):

(a) under actual or simulated instrument flight conditions;
(b) to the alert height or decision height for the ILS approach in the type of aircraft in which the practical test is to be conducted;
(c) not necessarily to the decision height authorised for Category III operations;
(d) to the alert height or decision height, as applicable, authorised for Category III operations only if conducted in an approved synthetic flight trainer; and
(e) in an aircraft of the same category and class, and type, as applicable, as the aircraft in which the practical test is to be conducted or in an approved synthetic flight trainer that:
   (i) represents an aircraft of the same category and class, and type, as applicable, as the aircraft for which the authorisation is sought; and
   (ii) is used in accordance with an approved course conducted by an
approved training organisation certificated under the Civil Aviation (Approved Training Organisations) Regulations.

(18) An applicant for a Category III operations pilot authorisation shall demonstrate knowledge of the following:

(a) required landing distance;
(b) determination and recognition of the alert height or decision height, as applicable, including use of a radio altimeter;
(c) recognition of and proper reaction to significant failures encountered prior to and after reaching the alert height or decision height, as applicable;
(d) missed approach procedures and techniques using computed or fixed attitude guidance displays and expected height loss as they relate to manual go-around or automatic go-around, and initiation altitude, as applicable;
(e) use and limitations of RVR, including determination of controlling RVR and required transmissometers;
(f) use, availability, or limitations of visual cues and the altitude at which they are normally discernible at reduced RVR readings including:
   (i) unexpected deterioration of conditions to less than minimum RVR during approach, flare, and rollout;
   (ii) demonstration of expected visual references with weather at minimum conditions;
   (iii) the expected sequence of visual cues during an approach in which visibility is at or above landing minima; and
   (iv) procedures and techniques for making a transition from instrument reference flight to visual flight during a final approach under reduced RVR;
(g) effects of vertical and horizontal windshear;
(h) characteristics and limitations of the ILS and runway lighting system;
(i) characteristics and limitations of the flight director system auto approach coupler, including split axis type if equipped, auto throttle system, if equipped, and other Category III operations equipment;
(j) assigned duties of the co-pilot during Category III operations, unless the aircraft for which authorisation is sought does not require a co-pilot;
(k) recognition of the limits of acceptable aircraft position and flight path tracking during approach, flare, and, if applicable, rollout; and
(l) recognition of, and reaction to, airborne or ground system faults or abnormalities, particularly after passing alert height or decision height, as applicable.

(19) An applicant for Category III operations pilot authorisation may conduct the practical test in an aircraft of the same category and class, and type, as applicable, as the aircraft for which the authorisation is sought, or in an approved synthetic flight trainer that:

(a) represents an aircraft of the same category and class, and type, as applicable, as the aircraft in which the authorisation is sought; and
(b) is used in accordance with an approved course conducted by an approved training organisation certificated under the Civil Aviation (Approved Training Organisations) Regulations.

(20) A Category III operations practical test shall consist of at least two ILS approaches to one hundred feet above ground level, including one landing and one missed approach initiated from a very low altitude that may result in a touchdown.
during the go-around manoeuvre.

(21) An applicant for Category III operations pilot authorization shall perform all approaches during the practical test with the approved automatic landing system or an equivalent landing system approved by the Authority.

(22) If a multiengine aircraft with the performance capability to execute a missed approach with one engine inoperative is used for Category III operations pilot authorization practical test, the practical test shall include the performance of one missed approach with the most critical engine, if applicable, set at an idle or zero thrust before reaching the middle or outer marker.

(23) If an approved multiengine synthetic flight trainer is used for the Category III operations pilot authorization practical test, the applicant shall execute a missed approach with an engine, which shall be the most critical engine, if applicable, failed.

(24) For a Category III operations pilot authorization for an aircraft that requires a type rating the applicant shall pass a practical test in co-ordination with a co-pilot who holds a type rating in the aircraft in which the authorisation is sought.

(25) Subject to the limitations of this sub-regulation, for Category IIIB operations predicated on the use of a fail-passive rollout control system, the applicant shall execute at least one manual rollout using visual reference or a combination of visual and instrument references, and shall initiate the manoeuvre by a fail-passive disconnect of the rollout control system:

(a) after main gear touchdown;
(b) prior to nose gear touchdown;
(c) in conditions representative of the most adverse lateral touchdown displacement allowing a safe landing on the runway; and
(d) in weather conditions anticipated in Category III B operations.

(26) A person authorised by the Authority may conduct an oral test at any time during the Category III operations pilot authorization practical test.

65. Where an applicant for a PPL or CPL balloon successful takes a practical test in:

(a) a balloon with an airborne heater, the Authority shall place upon the pilot licence a limitation restricting the exercise of the privileges of that licence to a balloon with an airborne heater; or
(b) a gas balloon, the Authority shall place upon the pilot licence a limitation restricting the exercise of the privilege of that licence to a gas balloon.

**Night Rating**

66. A Private Pilot Licence (PPL) holder shall not act as a pilot in command by night in the aircraft unless a night rating or an instrument rating is included in his or her licence.

67. An applicant for a night rating shall have received five hours dual instruction under a qualified instructor in night flying, five flights as pilot in command including five take offs and landings in an aircraft.

68. A night rating shall entitle a Private Pilot Licence (PPL) holder to act as a pilot in command of an aircraft at night but does not entitle the holder to pilot an aircraft under IFR conditions.
69. An applicant for a night rating renewal shall have within the immediately preceding six months carried out as pilot in command not less than five takeoffs and five landings at night.

**Instrument Rating**

70. - (1) A holder of a pilot licence shall not act either as pilot in command or as co-pilot of an aircraft under instrument flight rules unless such holder has received an instrument rating appropriate to the aircraft category.

(2) An applicant for an instrument rating shall-
(a) hold a Private Pilot Licence or Commercial Pilot Licence with an aircraft category and type rating for the instrument rating sought;
(b) receive a logbook or training record endorsement from an authorised instructor certifying that the person is prepared to take the required practical test;
(c) pass the required knowledge test on the aeronautical knowledge areas, unless the applicant already holds an instrument rating in another category; and
(d) pass the required practical test on the areas of operation in-
   (i) the aircraft category, and type appropriate to the rating sought; or
   (ii) a synthetic flight trainer or a flight training device appropriate to the rating sought and approved for the specific manoeuvre or procedure performed.

(e) be in possession of a valid Class 1 medical certificate issued under these regulations.

71. An applicant for an instrument rating (aeroplanes and helicopters) shall receive and record ground training from an authorised instructor on the following subjects
(a) air law
   rules and regulations relevant to flight under Instrument Flight Rules (IFR); related air traffic services practices and procedures;
(b) aircraft general knowledge
   (i) use, limitation and serviceability of avionics and instruments necessary for the control and navigation of aircraft under IFR and in instrument meteorological conditions; use and limitations of autopilot;
   (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
   (i) pre-flight preparations and checks appropriate to flight under IFR;
   (ii) operational flight planning; preparation and filing of air traffic services flight plans under IFR; altimeter setting procedures;
(d) human performance
human performance relevant to instrument flight in aircraft including principles of threat and error management;
(e) meteorology
   (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) causes, recognition and effects of engine and airframe icing; frontal zone penetration procedures; hazardous weather avoidance;
(f) navigation
   (i) practical air navigation using radio navigation aids;
   (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) operational procedures
   (i) 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;
   (ii) precautionary and emergency procedures; safety practices associated with flight under IFR;
   (iii) application of threat and error management to operational performance.
(h) radiotelephony
   radiotelephony procedures and phraseology as applied to aircraft operations under IFR; action to be taken in case of communication failure.

72. (1) An applicant for an Instrument Rating shall have 20 hours or more of the instrument flight time required in Regulation 73 (2) (b) while receiving and logging dual instruction in aircraft from an authorised flight instructor in an aircraft or approved synthetic flight trainer, on the subjects listed in the Regulation. 69.

(2) The applicant shall have gained not less than 10 hours of the instrument flight time required in regulation 73(2)(b) while receiving dual instrument flight instruction in the aircraft category being sought, from an authorized flight instructor.

(3) The instructor shall ensure that the applicant has operational experience in at least the following areas to the level of performance required for the holder of an instrument rating:
(a) pre-flight procedures, including the use of the flight manual or equivalent document; and appropriate air traffic services documents in the preparation of an IFR flight plan;
(b) pre-flight inspection, use of checklists, taxiing and pre-take-off checks;
(c) procedures and manoeuvres for IFR 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 IFR procedures;
   (iv) holding procedures;
   (v) instrument approaches to specified minima;
(vi) missed approach procedures; and
(vii) landings from instrument approaches;
(d) in-flight manoeuvres and particular flight characteristics; or
(e) if appropriate, operation of multi-engine helicopter solely by reference to
instruments with one engine inoperative or simulated inoperative.

73. -(1) An applicant for an Instrument Rating shall hold a Private Pilot Licence (PPL) or a Commercial Pilot Licence or Airline Transport Pilot Licence (ATPL)
(2) An applicant for instrument rating shall have completed not less than-
(a) 50 hours of cross-country flight time as pilot-in-command of aircraft in
categories acceptable to the Authority, of which not less than 10 hours shall
be in aeroplane or helicopter; and
(b) 40 hours of instrument time in Helicopters or Aeroplanes 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.
(3) If the privileges of the instrument rating are to be exercised on a multi-
engine aeroplane out of the 20 hours specified in regulation 73(2)(b) the applicant
must have received 15 hours of dual instruction in such an aeroplane from an
authorised flight instructor.
(4) An applicant shall have demonstrated the ability to perform as pilot-in
command of an aircraft, the procedures and manoeuvres described in regulation 70
with a degree of competency appropriate to the privileges granted to the holder of an
Instrument rating and to:
(a) operate the aircraft within its limitations;
(b) complete all manoeuvres with smoothness and accuracy;
(c) exercise good judgement and airmanship;
(d) apply aeronautical knowledge;
(e) maintain control of the aircraft at all times in a manner such that the
successful outcome of the procedures or manoeuvre is never
seriously in doubt; and
(f) recognize and manage threats and errors.
(5) An applicant shall have demonstrated the ability to operate a multi-
engine aeroplane solely by reference to instruments with one engine inoperative, or
simulated inoperative, if the privileges of the Instrument rating are to be exercised on
such aeroplane.

74. -(1) A holder of an instrument rating may act as pilot of an aeroplane
flying in accordance with instrument flight rules (IFR).
(2) To exercise the privileges on a multi-engine aeroplane, the holder shall
have complied with the requirements of regulations 67, 69 and 71.

75. An applicant for renewal of instrument rating shall pass a flight
test either on an aircraft or an approved synthetic flight trainer of an aircraft
type rating included in the pilot licence

Flight Instructor Rating

76. -(1) To be eligible for a flight instructor rating an applicant
shall:

(a) be at least eighteen years of age;
(b) hold either a CPL or ATPL with—
   (i) an aircraft category and class rating that is appropriate to the flight instructor rating sought; and
   (ii) an instrument rating, if the person holds a CPL and is applying for a flight instructor rating with:
      (aa) an aeroplane category and multiengine class rating; and
      (bb) an instrument rating;
(c) have received a logbook endorsement from an authorised instructor on the fundamentals of instructing listed in regulation 77 appropriate to the required knowledge test;
(d) have passed a knowledge test on the areas listed in regulation 77;
(e) have received a logbook endorsement from an authorised instructor on the areas of operation listed in regulation 79, appropriate to the flight instructor rating sought;
(f) have passed the required practical test on the areas of operations listed in regulation 79, that is appropriate to the flight instructor rating sought in:
   (i) an aircraft that is representative of the category and class of aircraft for the aircraft rating sought; or
   (ii) an approved synthetic flight trainer that is representative of the category and class of aircraft for the rating sought, and used in accordance with an approved course at an approved training organisation certificated under the Civil Aviation (Approved Training Organisations) Regulations.
(g) have accomplished the following for a flight instructor rating with an aircraft rating:
   (i) receive a logbook endorsement from an authorised instructor indicating that the applicant is competent and possesses instructional proficiency in stall awareness, spin entry, spins, and spin recovery procedures after receiving flight training in those training areas in an aircraft, as appropriate, that is certificated for spins; and
   (ii) demonstrate instructional proficiency in stall awareness, spin entry, spins, and spin recovery procedures;
(h) have logged at least fifteen hours as PIC in the category, class and type of aircraft that is appropriate to the flight instructor rating sought; and
(i) have complied with the appropriate regulations that apply to the flight instructor rating sought.

(2) For the purpose of the requirement of sub regulation (1)(g)(ii), the Authority may accept the endorsement specified in paragraph (g)(i) as satisfactory evidence of instructional proficiency in stall awareness, spin entry, spins, and spin recovery procedures for the practical test, provided that the practical test is not a retest as a result of the applicant failing the previous test for deficiencies in those knowledge or skill areas.

(3) If the retest referred in sub-regulation (2) is the result of deficiencies in the ability of an applicant to demonstrate the requisite knowledge or skill, the applicant shall demonstrate the knowledge and skill to an examiner in an aircraft, as appropriate, that is certificated for spins.
77. (1) The applicant shall have met the knowledge requirements for the issue of a commercial pilot licence as prescribed in regulation 43 as appropriate.

(2) In addition, to the requirements of sub-regulation (1) the applicant shall demonstrate a level of knowledge appropriate to the privileges granted to the holder of a flight instructor rating, in the following areas:
   (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;
   (j) analysis and correction of student errors;
   (k) human performance relevant to flight instruction; and
   (l) hazards involved in simulating system failures and malfunctions in the air.

78. (1) An applicant for a flight instructor rating shall have met the experience requirements for the issue of a commercial pilot licence as prescribed in regulation 45.

(2) An applicant for a flight instructor rating shall demonstrate, in the category of aircraft for which flight instructor privileges are sought, the ability to instruct in those areas in which flight instruction is to be given, including pre-flight, post-flight and ground instruction as appropriate.

79. An applicant for a flight instructor rating shall, under the supervision of an authorised flight instructor:
   (a) have received instruction of not less than twenty hours in flight instructional techniques including demonstration, student practices, recognition and correction of common student errors; and
   (b) have practised instructional techniques in those flight manoeuvres and procedures in which it is intended to provide flight instruction.

80. A holder of a flight instructor rating shall:
   (a) sign the logbook or any other approved record keeping document of each person to whom that instructor has given flight training or ground training;
   (b) maintain a record in a logbook or a separate document that contains the following:
      (i) the name of each person whose logbook 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 practical test and a record of the kind of test, the date, and the results; and
   (c) retain the records required by this regulation for three years from the date of giving the flight training or ground training.

81. An applicant for an additional category flight instructor rating shall
meet the eligibility requirements listed in regulation 76 that apply to the flight instructor rating sought.

Privileges.

82. (1) A flight instructor shall have the following privileges:
(a) to supervise student pilots on solo flights;
(b) to carry out flight and ground instructions for the issue or renewal of:
   (i) a private pilot licence;
   (ii) a commercial Pilot licence;
   (iii) an instrument rating; and
   (iv) a flight instructor rating.
(2) To exercise the privileges in sub-regulation (1) a flight Instructor shall:
   (a) hold a licence and rating for which instruction is to be given in the appropriate aircraft category;
   (b) holds a licence and rating necessary to act as the pilot-in-command of the aircraft on which the instruction is to be given; and
   (c) have the flight instructor privileges entered on the licence.
(3) A flight instructor shall not carry out instruction on a flight simulation training device required for the issue of a pilot licence or rating unless such person
   (a) holds or has held an appropriate licence;
   (b) has appropriate flight training and flight experience; and
   (c) has received proper authorization from Authority.

Limitations and qualifications.

83. (1) A holder of a flight instructor rating shall observe the limitations and qualifications specified in this regulation.
(2) In any twenty four consecutive-hour period, a flight instructor may not conduct more than eight hours of flight training.
(3) A flight instructor shall not conduct flight training in any aircraft for which the flight instructor does not hold:
   (a) a valid pilot licence with the applicable category and class rating and flight instructor rating;
   (b) if appropriate, a type-rating;
   (c) for instrument flight training or for training for a type rating not limited to visual flight rules (VFR), an appropriate instrument rating on his pilot licence and flight instructor rating.
(4) A flight instructor shall not endorse:
   (a) a student pilot’s logbook for solo flight privileges, unless that flight instructor has:
      (i) given that student the flight training required for solo flight privileges required under these Regulations;
      (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) a student pilot’s logbook for a solo cross-country flight, unless the 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;
(c) a logbook of a pilot for a flight check-out, unless that instructor has conducted a review of that pilot in accordance with the requirements of regulation 24; and
(d) a logbook of a pilot for an instrument proficiency check, unless that instructor has tested that pilot in accordance with the requirements of Civil Aviation (Operation of Aircraft) Regulations.

(5) A flight instructor shall not give training required for the issue of a licence or rating in a multiengine aeroplane or helicopter unless that flight instructor has at least five flight hours of PIC time in the specific make and model of multiengine aeroplane or helicopter, as appropriate.

(6) A flight instructor shall not provide instruction to a pilot to qualify for a flight instructor rating unless that flight instructor:
(a) holds an appropriate valid flight instructor rating and has exercised the privileges of that rating within the last twenty four months
(b) has given two hundred hours of flight training as a flight instructor in the relevant aircraft category; and
(c) in the case of glider rating, has given at least eighty hours of flight training as a flight instructor in gliders.

84. A flight instructor rating may be renewed if the applicant:
(a) passes a practical test for:
(i) renewal of the flight instructor rating; or
(ii) an additional flight instructor privileges; or
(b) presents to the Authority:
(i) a record of training students that shows that within twelve months preceding the date of application for renewal of the rating, the flight instructor has endorsed at least five students for a practical test for a licence or rating, and at least eighty percent of those students passed that test on the first attempt; or
(ii) a record that shows that within the preceding twelve months, the flight instructor has performed as a flight instructor or company check pilot and has logged not less than 20 instructional hours.
(iii) a certificate showing that the applicant has successfully completed an approved flight instructor refresher course consisting of ground training or flight training, or both, within the ninety days preceding the date of the expiry of the flight instructor rating.

85. A holder of an expired flight instructor rating shall pass a flight instructor’s practical test in order to renew the expired flight instructor rating.
Flight Examiner Authorisation

86. (1) A flight examiner shall hold:
   (a) a licence and rating for which he is authorized to conduct skill tests or proficiency checks; and
   (b) appropriate flight instructor ratings for skill tests.

   (2) To qualify for a flight examiner’s authorisation, a pilot shall have logged 1000 hours of flight time and 200 hours providing flight instruction.

   (3) The ground, flight and synthetic flight training for examiner shall include the subjects listed in regulation 77.

   (4) To qualify for a flight examiner’s authorisation, a pilot shall have conducted at least one skill test under the observation by the Authority, in the role of an examiner for which authorization is sought, including briefing, conduct of the skill test, assessment of the applicant to whom the skill test is given, debriefing and recording or documentation.

   (5) Subject to compliance with the requirements specified in these Regulations, the privileges of the examiner’s authorization are to conduct skill tests and proficiency checks for a licence and ratings.

87. (1) The ground training for examiners shall include:
   (a) examiner duties, functions and responsibilities;
   (b) applicable regulations and procedures;
   (c) appropriate methods, procedures and techniques for conducting the required tests and checks;
   (d) proper evaluation of student performance including the detection of:
      (i) improper and insufficient training; and
      (ii) personal characteristics of an applicant that could adversely affect safety;
   (e) appropriate corrective action in the case of unsatisfactory tests and checks; and
   (f) approved methods, procedures and limitations for performing the required normal, abnormal and emergency procedures in the aircraft.

   (2) The flight training shall include:
   (a) training and practice in conducting flight evaluation from the left and right pilot seats for pilot examiners in the required normal, abnormal and emergency procedures to ensure competence to conduct the flight tests and checks;
   (b) the potential results of improper, untimely or non-execution of safety measures during an evaluation; and
   (c) the safety measures to be taken from either pilot seat for pilot check examiners for emergency situations that are likely to develop during an evaluation.

   (3) The flight training for examiners in synthetic flight trainer shall include:
   (a) training and practice in conducting flight checks in the required
normal, abnormal and emergency procedures to ensure competence to conduct the evaluations tests and checks required under these Regulations; and

(b) training in the operation of synthetic flight trainer to ensure competence to conduct the evaluations required under these Regulations.

PART VIII
LICENCES FOR FLIGHT CREWMEMBERS OTHER THAN PILOTS

Flight Engineer Licence

88. A person shall not act as a flight engineer of an aircraft registered in [State] unless that person holds a flight engineer licence with appropriate ratings.

89. An applicant for a flight engineer licence shall:

(a) be at least eighteen years of age;
(b) demonstrate the ability to read, speak, write and understand the English language in accordance with the language proficiency requirements contained in the First Schedule to these Regulations;
(c) comply with the requirements of these Regulations that apply to the rating sought; and
(d) possess a valid Class 2 Medical Certificate issued under these Regulations.

90. An applicant for an additional aircraft class, category or type rating flight engineer licence, shall:

(a) pass the knowledge test and practical test that is appropriate to the class category or type of aircraft for which an additional rating is sought; and
(b) satisfactorily complete an approved flight engineer training program that is appropriate to the additional class rating sought.

91. -(1) An applicant for a flight engineer licence shall have demonstrated a level of knowledge appropriate to the privileges granted to the holder of a flight engineer licence and shall pass a knowledge test on the following subjects:

(a) air law: rules and regulations relevant to the holder of a flight engineer licence, rules and regulations governing the operation of aircraft pertinent to the duties of a flight engineer;
(b) aircraft general knowledge:
   (i) basic principles of powerplants, gas turbines or piston engines, characteristics of fuels, fuel systems including fuel control, lubricants and lubrication systems, afterburners and injection systems, function and operation of engine ignition and starter systems;
   (ii) principles of operation, handling procedures and operating limitations of aircraft powerplants, effects of atmospheric conditions on engine performance;
   (iii) airframes, flight controls, structures, wheel assemblies, brakes and anti-skid units, corrosion and fatigue life,
(iv) ice and rain protection systems;
(v) pressurization and air-conditioning systems, oxygen systems;
(vi) hydraulic and pneumatic systems;
(vii) basic electrical theory, electric systems (AC and DC), aircraft wiring systems, bonding and screening;
(viii) principles of operation of instruments, compasses, autopilots, radio communication equipment, radio and radar navigation aids, flight management systems, displays and avionics;
(ix) limitations of appropriate aircraft;
(x) fire protection, detection, suppression and extinguishing systems; and
(xi) use and serviceability checks of equipment and systems of appropriate aircraft;

(c) flight performance and planning:
(i) effects of loading and mass distribution on aircraft handling, flight characteristics and performance, mass and balance calculations; and
(ii) use and practical application of performance data including procedures for cruise control;

(d) human performance:
human performance relevant to the flight engineer including principles of threat and error management;

(e) operational procedures:
(i) principles of maintenance, procedures for the maintenance of airworthiness, defect reporting, pre-flight inspections, precautionary procedures for fuelling and use of external power, installed equipment and cabin systems;
(ii) normal, abnormal and emergency procedures; and
(iii) operational procedures for carriage of freight and dangerous goods;

(f) principles of flight: fundamentals of aerodynamics; and
(g) radiotelephony: radiotelephony procedures and phraseology.
(h) fundamentals of navigation; principles and operation of self-contained systems;
(i) operational aspects of meteorology.

(2) The validity of the knowledge test results for an applicant for a flight engineer’s licence shall be eighteen months after passing the examination.

92. (1) Except as otherwise specified in this regulation, an applicant for a flight engineer licence shall obtain and log the flight time used to satisfy the aeronautical experience requirements of sub-regulation (2) on an aeroplane on which
a flight engineer is required by these Regulations.

(2) An applicant for a flight engineer licence with a type rating shall present, for the type rating sought, satisfactory evidence of one of the following, including the practical experience with the aircraft described in sub-regulation (1):

(a) at least three years of practical experience in aircraft maintenance and at least five hours of flight training in the duties of a flight engineer; or

(b) graduation from at least a two and half-years specialised aeronautical training course in aircraft maintenance and at least six months of practical experience in maintaining aircraft and aircraft engines and at least five hours of flight training in the duties of a flight engineer; or

(c) a degree in aeronautical or avionics engineering from a college, university or engineering school acceptable to the Authority at least one year of practical experience in aircraft maintenance and at least five hours of flight training in the duties of a flight engineer; or

(d) a degree in electrical or mechanical engineering from a college, university or engineering school acceptable to the Authority at least one year of practical experience in aircraft maintenance and at least five hours of flight training in the duties of a flight engineer; or

(e) at least a CPL with an instrument rating and at least five hours of flight training in the duties of a flight engineer; or

(f) at least two hundred hours of flight time in a transport category aeroplane as PIC or a co-pilot performing the functions of a PIC under the supervision of a PIC; or

(g) not less than one hundred hours of flight time as a flight engineer; or

(h) within the ninety-day period before the application, successful completion of an approved flight engineer ground and flight course.

(3) The applicant for a flight engineer licence shall have operational experience in the performance of the duties of a flight engineer, under the supervision of a flight engineer approved by the Authority for that purpose, in at least the following areas:

(a) Normal procedures
   (i) pre-flight inspections;
   (ii) fuelling procedures, fuel management;
   (iii) inspection of maintenance documents;
   (iv) normal flight deck procedures during all phases of flight;
   (v) crew coordination and procedures in case of crew incapacitation;
   (vi) defect reporting.

(b) Abnormal and alternate (standby) procedures
   (i) recognition of abnormal functioning of aircraft systems;
   (ii) use of abnormal and alternate (standby) procedures.

(c) Emergency procedures
   (i) recognition of emergency conditions;
   (ii) use of appropriate emergency procedures.

93. (1) An applicant for a flight engineer licence with a type rating shall:

(a) pass a practical test on the duties of a flight engineer in the type of aircraft for which a rating is sought or an approved synthetic flight trainer replicating such an aircraft;

(b) show satisfactorily performance in pre-flight inspection, servicing, starting, pre-takeoff and post-landing procedures;

(c) while in-flight, show satisfactorily performance of the normal duties
and procedures relating to the aeroplane, aeroplane engines, propellers, if appropriate, systems and appliances; and

(d) while in-flight, in a synthetic flight trainer or in an approved training device, show satisfactorily performance on emergency duties and procedures and recognise and take appropriate action for malfunctions of the aeroplane, engines, propellers, if appropriate, systems and appliances.

(2) An applicant for a flight engineer licence shall have demonstrated the ability to perform as flight engineer of an aircraft, the duties and procedures described in regulation 92(3) with a degree of competency appropriate to the privileges granted to the holder of a flight engineer licence, and to:

(a) recognize and manage threats and errors;
(b) use aircraft systems within the aircraft’s capabilities and limitations;
(c) exercise good judgement and airmanship;
(d) apply aeronautical knowledge;
(e) perform all the duties as part of an integrated crew with the successful outcome assured; and
(f) communicate effectively with the other flight crew members.

Privileges.

94. A holder of a flight engineer licence may:

(a) act as flight engineer of any type of aircraft on which the holder is rated;
(b) be authorized to act as a flight engineer instructor for issue or renewal of flight engineer licences or ratings; and
(c) exercise all the privileges of the holder of a flight radiotelephone operator licence as stipulated in regulation 129.

Renewal Requirements.

95. A holder of a Flight Engineer Licence may apply for renewal of the licence if the holder has logged not less than six hours as Flight Engineer within the six months preceding the date of application for renewal.

PART IX

LICENCES, CERTIFICATES, RATINGS AND AUTHORISATIONS FOR PERSONNEL OTHER THAN FLIGHT CREWMEMBERS

Air Traffic Controller Licence

96. -(1) A person shall not act as an air traffic controller (ATC) unless that person holds an air traffic controller licence issued under these Regulations.

(2) A licence to act as an air traffic controller shall include:

(a) one or more ratings as specified in regulation 5(4) specifying the type of air traffic control service which the holder of the licence is competent to provide; and
(b) a list of the places at which, and the type of radar equipment, if any, with the aid of which the licence holder may provide the service;

(3) Where during a continuous period of six months the holder of an air traffic controller licence has not at any time provided at a particular place the type of air traffic control service specified in the rating, the rating shall cease to be valid for that place at the end of the six months period.

(4) Upon a rating ceasing to be valid as specified for a place, in sub
paragraph (3) the holder of the air traffic controller licence shall forthwith inform the Authority to that effect and shall forward the licence to the Authority to enable the licence to be endorsed accordingly.

97. An applicant for an air traffic controller licence shall:
(a) be at least 21 years of age;
(b) demonstrate the ability to read, speak, write and understand the English language in accordance with the language proficiency requirements contained in the First Schedule to these Regulations without impediment of speech that would interfere with two way radio conversation; and
(c) comply with the knowledge requirements of regulations 98 and 100.
(d) hold a current Class 3 Medical Certificate.

98. -(1) An applicant for an air traffic controller licence shall have received and passed an approved training course in air traffic control conducted at an approved training organisation in at least the following subjects:
(a) air law - rules and regulations relevant to the air traffic controller;
(b) air traffic control equipment - principles, use and limitations of equipment used in air traffic control;
(c) general knowledge - principles of flight; principles of operation and functioning of aircraft, powerplants and systems; aircraft performances relevant to air traffic control operations;
(d) human performance - human performance relevant to air traffic control;
(e) language - the language or languages nationally designated for use in air traffic control and ability to speak such language or languages without accent or impediment which would adversely affect radio communication;
(f) meteorology - aeronautical meteorology; use and appreciation of meteorological documentation and information; origin and characteristics of weather phenomena affecting flight operations and safety; altimetry;
(h) navigation - principles of air navigation; principle, limitation and accuracy of navigation systems and visual aids; and
(i) operational procedures - 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) The applicant shall have undergone the actual control of air traffic under the supervision of an appropriately rated air traffic controller and acquired experience for the rating sought as specified in regulation 99.

(3) The validity of the knowledge test results for an applicant for a air traffic controller licence shall be eighteen months after passing the test.
99. The ratings and knowledge requirements for Air traffic controller ratings shall be as follows:

(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 and 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 and search and rescue plans; and

(c) approach radar, approach precision radar and area radar control ratings:
   an applicant shall meet the requirements specified in 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 at least the following additional subjects:
   (i) principles, use and limitations of radar, other surveillance systems and associated equipment; and
   (ii) procedures for the provision of approach, precision approach or area radar control services, as appropriate, including procedures to ensure appropriate terrain clearance;

(d) 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. Not less than 50 of those precision approaches shall have been carried out at the unit and on the equipment for which the rating is sought;

(e) area control procedural rating; to provide and/or supervise the provision of area control service within the control area or portion thereof, for which the licence holder is rated; and

(f) area control surveillance rating: to 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.

100. (1) The applicant shall have completed an approved training course and 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 and acquire experience for the rating sought as follows:

(a) 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 for which the rating is sought;

(b) approach control rating: an approach control service, for a period of not less than 180 hours or three months, whichever is greater, at the unit for which the rating is sought;

(c) approach radar control rating: an approach radar control service, for a period of not less than 180 hours or three months, whichever is greater, at the unit for which the rating is sought;

(d) 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, not less than 50 of those precision approaches shall have been carried out at the unit and on the equipment for which the rating is sought;

(e) area control rating: an area control service, 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

(f) area radar control rating: an area radar control service, for a period of not less than 180 hours or three months, whichever is greater, at the unit for which the rating is sought.

Provided that:

(i) the experience specified in this sub-regulation shall have been completed within the 6-month period immediately preceding application;

(ii) where the applicant already holds an air traffic controller rating in another category, or the same rating for another unit, the Authority shall determine whether the experience requirement can be reduced, and if so, to what extent; and

(iii) if the privileges of the approach radar control rating include surveillance radar approach duties, the experience shall include not less than 25 plan position indicator (PPI) approaches on the surveillance equipment of the type in use at the unit for which the rating is sought and under the supervision of an appropriately rated approach radar controller.

(2) The experience requirements specified for air traffic controller ratings in regulation 99 may be credited as part of the experience specified in this regulation.

(3) Concurrent issuance of two air traffic controller ratings: When two air traffic controller ratings are sought concurrently, the Authority shall determine the applicable requirements on the basis of the requirements for each rating. These requirements shall not be less than those of the more demanding rating.

101. -(1) Subject to sub-regulation (2) a holder of an air traffic controller licence which includes ratings of two or more of the classes specified in sub-regulation (2) shall not at any one time perform the function specified in respect of more than one of these ratings.

(2) The functions of any one of the following groups of ratings may be exercised at the same time -

(a) the aerodrome control rating and the approach control rating;

(b) approach control rating and the approach radar control rating; except that the functions of the approach radar control rating shall not be exercised at the same time as the functions of the approach radar
control rating if the service being provided under the approach radar
control is a surveillance radar approach terminating at a point less
than two nautical miles from the point of intersection of the glide
path with the runway, the two functions shall not be exercised at the
same time;
(c) the area control rating and the area radar control rating; or
(d) by an aerodrome control tower or area control centre when it is
necessary or desirable to combine under the responsibility of one unit
of the functions of the approach control service with those of the
aerodrome control service or area control service.

102. (1) The privileges of the holder of an air traffic controller
licence endorsed with one or more of the undermentioned ratings shall be:

(a) aerodrome control rating: to provide or to supervise the provision of
aerodrome control service for the aerodrome for which the licence
holder is rated;

(b) approach control rating: to provide or to supervise the provision of
approach control service for the aerodrome or aerodromes for which the
licence holder is rated, within the airspace or portion of the airspace,
under the jurisdiction of the unit providing approach control service;

(c) approach radar control rating: to provide or supervise the provision of
approach control service 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 of the airspace, under the jurisdiction of the
unit providing approach control service; and in case the holder complies
with the rating the privileges shall include the provision of surveillance
radar approaches;

(d) approach precision radar control rating: to provide and/or supervise the
provision of precision approach radar service at the aerodrome for which
the licence holder is rated;

(e) area control rating: to provide or supervise the provision of area control
service within the control area or portion of the control area, for which
the licence holder is rated;

(f) area radar control rating: to provide or supervise the provision of area
control service with the use of radar, within the control area or portion of
the control area, for which the licence holder is rated.

(2) Before exercising the privileges indicated in sub-regulation (1), the air
traffic controller licence holder shall be familiar with all pertinent and current
information and shall indicate by signing his name indicating the time in Universal
Time Co-ordinated (UTC) in the appropriate air traffic controller log book.

(3) The holder of an air traffic controller licence shall not provide
instruction in an operational environment except as authorised in writing by the
Authority.

103. An air traffic controller rating becomes invalid when an air traffic
controller has ceased to exercise the privileges of the rating for a period of six months and shall remain invalid until the controller’s ability to exercise the privileges of the rating has been re-established.

104.  

-(1) Except in an emergency, a licensed air traffic controller shall not perform any duties for twenty four consecutive hours during each seven consecutive days.

(2) An air traffic controller may not serve or be required to serve -

(a) for more than ten consecutive hours; or

(b) for more than ten hours during a period of twenty four consecutive hours, unless the air traffic controller has had a rest period of at least eight hours at or before the end of the ten hours of duty.

105.  

A person holding an air traffic controller licence shall not act as an air traffic controller nor shall an employer allow a licensed controller, if the controller or the employer knows or suspects that the controller is suffering from or, having regard to the circumstances of the period of duty to be undertaken, is likely to suffer from, such fatigue as may endanger the safety of any aircraft to which an air traffic control service may be provided.

106.  

-(1) An air traffic controller shall not provide any type of air traffic service at any aerodrome at which air traffic control service is required to be provided under the Civil Aviation (Rules of the Air and Air Traffic Control) Regulations or at any other place, not being an aerodrome, at which air traffic control service is provided, whether or not under the direction of the Authority, unless he does so in accordance with the terms of-

(a) a valid air traffic controller licence so granted authorising air traffic controller to provide that type of service at that aerodrome or other places;

(b) a valid air traffic controller licence so granted which does not authorise air traffic controller to provide that type of service at the aerodrome or other place, but he is supervised by a person who is present at the time and who is the holder of a valid air traffic controller licence so granted which authorises him to provide at that aerodrome or other place the type of air traffic control service which is being provided; or

(c) the air traffic controller’s appointment as an air traffic controller trainee and he is supervised by a person who is present at the time and who is the holder of a valid air traffic controller’s licence so granted which authorises him to provide that type of service at any aerodrome or at a place at which air traffic control service is provided:

Provided that the air traffic controller licence shall not be required by any person who acts in the course of his duty as a member of the [State] military or a visiting force.

(2) A holder of an air traffic controller licence shall not perform any of the functions specified in regulation 100 in respect of a rating at any of the places referred to in sub-regulation (1) unless:

(a) his licence includes that rating and the rating is valid for the place at which, and the type of radar equipment, if any, with the aid of
which functions are performed; or

(b) he is supervised by a person who is present at the time and who is
the holder of a valid air traffic controller’s licence granted under
these Regulations which authorises him to provide at that
aerodrome or other place the type of air traffic control service
which is being provided.

(3) Nothing in this regulation shall prohibit a holder of a valid air traffic
troller licence from providing at any place for which the licence includes a valid
rating, information to aircraft in flight in the interests of safety.

107. An air traffic controller licence may be renewed if the holder
demonstrates, at a level appropriate to the privileges being renewed, the skill,
judgement and performance required to provide a safe, orderly and expeditious
control service within the six months preceding the date of application for renewal.

Ground Instructor Licence

108. -(1) An applicant for a ground instructor licence shall-
(a) be at least eighteen years of age;
(b) demonstrate the ability to read, speak, write, and understand the English
language in accordance with the language proficiency requirements
contained in the Second Schedule to these Regulations;
(c) pass a knowledge test on the fundamentals of instructing including-
   (i) the learning process;
   (ii) elements of effective teaching;
   (iii) student evaluation and testing;
   (iv) course development;
   (v) lesson planning;
   (vi) classroom training techniques;
   (vii) techniques of applied instructions;
   (viii) use of training aids;
   (ix) analysis and correction of student errors; and
   (x) human performance relevant to ground instruction;
(d) pass a knowledge test on the aeronautical knowledge areas specified in
regulations 37, 43 and 49 as appropriate.
(2) A ground instructor licence shall be issued with either one of the
following ratings-
   (a) basic;
   (b) advanced;
   (c) instrument; or
   (d) a combination of a) and c) or b) and c)
(3) The knowledge test specified in sub-regulation (1)(c) is not required if
the applicant holds a flight instructor rating issued under these Regulations.
(4) The knowledge test results for a ground instructor licence shall be valid
for eighteen months after passing the examination.

109. - (1) A holder of a ground instructor licence may exercise the
privileges appropriate to the rating as follows-
   (a) for a holder of a basic ground instructor rating-
      (i) ground training in the aeronautical knowledge areas required for
the issue of a private pilot licence (PPL) or associated ratings;
(ii) ground training required for a private pilot flight check-out; and
(iii) a recommendation for a knowledge test required for the issuance of a PPL;

(b) for a holder of an advanced ground instructor rating—
(i) ground training in the aeronautical knowledge areas required for the issue of any pilot licence or rating;
(ii) ground training required for any flight check out; and
(iii) a recommendation for a knowledge test required for the issue of any licence;

(c) for a holder of an instrument ground instructor rating—
(i) ground training in the aeronautical knowledge areas required for the issue of an instrument rating;
(ii) ground training required for an instrument proficiency check; and
(iii) a recommendation for a knowledge test required for the issue of an instrument rating.

(2) A person who holds a ground instructor licence shall be authorised, within the limitations of the ratings on the ground instructor licence, to endorse the logbook or other training record of a person to whom the holder has provided the training or recommendation specified in sub-regulation (1).

110. An applicant for a ground instructor licence is required to hold or have held a Commercial Pilot Licence (CPL) or Airline Transport Pilot Licence (ATPL) as appropriate or pass the following—
(a) basic ground instructor rating: aeronautical knowledge requirements for CPL as prescribed in regulation 43;
(b) advanced ground instructor rating;
(c) aeronautical knowledge requirements for ATPL as prescribed in regulation 49;
(d) instrument ground instructor rating—
(i) meet the requirements of either (a) or (b) and in addition the instrument rating knowledge requirements as prescribed in regulation 71; and
(ii) be a holder of a valid instrument rating.

111. A holder of a ground instructor licence shall not perform the duties of a ground instructor unless within the twelve preceding months the person has served for three months as a ground instructor.

Flight Operations Officer Licence

112. An applicant for a flight operations officer licence shall—
(a) be at least twenty one years of age;
(b) demonstrate the ability to read, speak, write, and understand the English language in accordance with the language proficiency requirements contained in the Second Schedule to these Regulations; and
(c) comply with the knowledge requirements, experience or training requirements and skill requirements for flight operations officer as contained in these Regulations.
113. An applicant for a flight operations officer licence shall pass a knowledge test covering the following areas-

(a) air law:
   (i) rules and regulations relevant to the holder of a flight operations officer licence and appropriate air traffic services practices and procedures;

(b) aircraft general knowledge:
   (i) 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:
   (i) 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 and extended range operation;
   (iii) preparation and filing of air traffic services flight plans; and
   (iv) basic principles of computer-assisted planning systems.

(d) human performance:
   (i) human performance relevant to dispatch duties;

(e) meteorology:
   (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) interpretation and application of aeronautical meteorological reports, charts and forecasts, codes and abbreviations, use of, and procedures for obtaining, and meteorological information

(f) navigation:
   principles of air navigation with particular reference to instrument flight;

(g) operational procedures:
   (i) use of aeronautical documentation;
   (ii) operational procedures for the carriage of freight and dangerous goods;
   (iii) procedures relating to aircraft accidents and incidents and emergency flight procedures; and
   (iv) procedures relating to unlawful interference and sabotage of aircraft;

(h) principles of flight:
   principles of flight relating to the appropriate category of aircraft; and
   (i) radio communication:

(j) procedures for communicating with aircraft and relevant ground stations.

(2) The knowledge test results for a flight operations officer licence shall be valid for eighteen months after passing the examination.
Experience or training requirements.

114. An applicant for a flight operations officer licence shall present documentary evidence satisfactory to the Authority that the applicant has the experience or training as follows:

(a) a total of two years’ service in any one or in any combination of the capacities specified in sub-paragraph (i), (ii), (iii), provided that in any combination of experience the period served in any capacity shall be at least one year

(i) a flight crewmember in commercial air transport; or

(ii) a meteorologist in an organization dispatching aircraft in commercial air transport; or

(iii) an air traffic controller or technical supervisor of flight operations officer or air transportation flight operations systems; or

(b) at least one year as an assistant in the dispatching or aircraft used in commercial air transport; or

(c) has satisfactorily completed an approved course training in a flight operations.

2) An applicant shall have served under the supervision of a flight operations officer for at least ninety days within the six months immediately preceding the application.

Skill requirements.

115. An applicant for a flight operations officer licence shall demonstrate the 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 or computer generated flight plans; and

(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.

Privileges.

116. Subject to compliance with the requirements set forth in these Regulations, the privileges of a holder of a flight operations officer licence shall be to serve in that capacity with responsibility for each area for which the applicant meets the requirements specified in the Civil Aviation (Operation of Aircraft) Regulations.

Renewal requirements.

117. A flight operations officer licence may be renewed if the holder has performed his duties in the six months preceding the date of application for renewal exercising the privileges of the licence.

Aircraft Maintenance Engineer

General eligibility requirements.

118. -(1) An applicant for a grant of an Aircraft Maintenance Engineer licence (AMEL) shall-
(a) be at least eighteen years of age;
(b) demonstrate the ability to read, speak, write, and understand the English language, interpret technical reports and maintenance publications and carry out technical discussions in the English language;
(c) comply with the knowledge, experience and competency requirements prescribed for the rating sought; and
(d) pass all of the prescribed examinations for the rating sought, within twelve months preceding the date of filing the application.

(2) A Licensed Aircraft Maintenance Engineer (LAME) who applies for an additional rating shall meet the requirements of regulation 114.

119. (1) An applicant for an aircraft maintenance engineers’ licence shall demonstrate the level of knowledge and skill in the subjects as provided in the Fourth Schedule to these Regulations.

(2) The knowledge test results for an aircraft maintenance engineer’s licence shall be valid for twelve months after passing the examination.

120. (1) Except as specified in sub-regulation (2) applicants for the issue or extension of a licence in categories A, C, X and R must show confirmed minimum specific periods of aircraft maintenance engineering experience totalling 3 years.

(2) An applicant for Category ‘X’ – Compass Compensation and Adjustment shall hold a Licence Without Type Ratings (LWTR) in both Categories ‘A’ and ‘C’ or ‘X’ or ‘R’ and shall have a minimum of six months engineering experience relating to the maintenance of operating aircraft in the two years preceding the date of application with a minimum of six compass swings

(3) An applicant must demonstrate the following minimum experience gained while maintaining operating aircraft and not in component workshops or on static or non-flying aircraft:

(a) for a Category ‘A’ or ‘C’ LWTR, twenty four months relating to Airframe and/or Engine maintenance, twelve months of which must be in the two years immediately preceding the date of application; or
(b) for any Category ‘R’ or ‘X’ LWTR (excluding Category ‘X’ – Compass Compensation and Adjustment), twenty four months related to avionic systems, twelve months of which must be in the two years immediately preceding the date of application; and
(c) Six months, within the twelve months referred to in (a) and (b), relevant to the specific LWTR for which application is being made.

(4) Where an applicant for category ‘X’ electrical holds a valid licence which includes both Category ‘A’ and Category ‘C’ LWTR sub divisions, the experience in sub-regulation (3)(b) need not be complied with and the applicant need show only the six months experience relevant to the LWTR required in sub-regulation 3(c).

(5) An applicant for a LWTR in one category holding a valid licence in another category the experience requirement of sub-regulation (3)(a) and (3)(b) may be reduced dependent on the total practical experience accumulated while holding that licence and training attended but in any case shall demonstrate the experience requirements of sub-regulation 3(c). Any of the periods specified above may be concurrent.
(6) Subject to sub-regulation (7) extension of a licence to include a type rating:
(a) shall not require a period of general experience additional to that required for the relevant LWTR, which must be held before a type rating is granted; and
(b) shall require satisfactory record of experience, gained within the three years before the application, appropriate to the type rating sought.

(7) An applicant for a type rating from a holder of a LWTR which was gained following successful completion of an approved initial course shall show confirmed evidence that he has obtained at least twelve months relevant aircraft engineering experience with an organisation engaged in the maintenance of operational aircraft in addition to that gained during the course.

121. -(1) Except as specified in sub-regulations (4) and (5), a holder of an aircraft maintenance engineer licence (AMEL) may perform or supervise the maintenance, preventive maintenance, or modification of, or after inspection, approve for return to service, any aircraft, airframe, aircraft engine, propeller, appliance, component, or part thereof, for which the holder of an AMEL is rated, provided the holder has-
(a) satisfactorily performed the work at an earlier date;
(b) demonstrated the ability to perform the work to the satisfaction of the Authority;
(c) received training acceptable to the Authority on the tasks to be performed; or
(d) performed the work while working under the direct supervision of a holder of an AMEL or an aviation repair specialist who is appropriately authorised and has:
   (i) previous experience in the specific operation concerned; or
   (ii) received training acceptable to the Authority on the task to be performed.

(2) Except as specified in sub-regulation (4) and (5), a holder of an AMEL with an airframe rating may, after he has performed the inspection required by the Civil Aviation (Operation of Aircraft) Regulations on an airframe or any related part or appliance, approve and return the airframe or any related part or appliance to service.

(3) Except as specified in sub-regulations (4) and (5), a holder of an AMEL with an engine rating may perform the inspection required by the Civil Aviation (Operation of Aircraft) Regulations on an engine or propeller or any related part or appliance and approve and return the airframe or any related part or appliance to service.

(4) Except as specified in sub-regulation (5) a holder of an AMEL with a radio, electrical, instruments, auto-pilot and compass rating may inspect, repair, maintain, function, test and return to service aircraft radio, electrical, instruments and compass systems and components respectively.

(5) A holder of an AMEL with an airframe, engine or radio, electrical, instruments and compass rating shall not supervise the maintenance, preventive maintenance, or modification of, or approve and return to service, any aircraft, airframe, engine, propeller, appliance, component or part thereof, for which the holder of an AMEL is rated unless the holder has satisfactorily performed the work concerned at an earlier date.
(6) When an Authority authorizes an approved maintenance organization to appoint non-licensed personnel to exercise the privileges of regulation 121(1) – (5), the person appointed shall meet the requirements specified in regulation 119 and 120.

122. -(1) A holder of an Aircraft Maintenance Engineers Licence shall apply for renewal of licence at least two months before the expiry period in a form and manner prescribed by the Authority.

(2) The holder must have performed work comparable with that required for the grant of the licence for periods totaling at least six months during the twenty four months preceding the date of the expiry of the licence.

(3) A person who fails to renew his licence after the expiry period may do so within the next twelve months provided that he proves that he has been continuously engaged in practical work for the entire extended period.

(4) A person who does not apply for a renewal within the extended period as provided for in sub-regulation (3) or fails to prove that he has continuously been engaged in practical work during that period will be required to sit for an exam before his licence is renewed.

(5) A holder of an aircraft maintenance engineer’s licence shall not exercise the privileges of the licence unless the licence is kept valid as prescribed by the Authority.

Aviation Repair Specialist Authorisation

123. An applicant for an aviation repair specialist authorisation shall:

(a) be at least eighteen years of age;

(b) demonstrate the ability to read, speak, write, and understand the English language and interpret technical reports and maintenance publications and carry out technical discussions in the English language;

(c) be specially qualified to perform maintenance on aircraft or aircraft components appropriate to the job for which the aviation repair specialist was employed;

(d) be employed for a specific job requiring special qualifications by an approved maintenance organisation certificated under the Civil Aviation (Approved Maintenance Organisation) Regulations;

(e) be recommended for certification by the aviation repair specialist’s employer, to the satisfaction of the Authority, as able to satisfactorily maintain aircraft or components, appropriate to the job for which the aviation repair specialist is employed; and

(f) either-

(i) have at least eighteen months of practical experience in the procedures, practices, inspection methods, materials, tools, machine tools, and equipment generally used in the maintenance duties of the specific job for which the person is to be employed and certificated; or

(ii) have completed formal training acceptable to the Authority and specifically designed to qualify the applicant for the job on which the applicant is to be employed.
124. —(1) An applicant for an aviation repair specialist authorisation who is employed by an approved maintenance organization shall be concurrent with the rating issued to the approved maintenance organisation limited to the specific job for which the aviation repair specialist is employed to perform, supervise or approve for return to service.

(2) An applicant for an aviation repair specialist authorisation in respect of airframe, engine, avionics or other systems shall not be issued with that authorisation for purposes of circumventing the process of obtaining an aircraft maintenance engineer licence (AMEL).

(3) An aviation repair specialist may perform or supervise the maintenance, preventive maintenance or alteration of aircraft, airframes, engines, propellers, appliances, components and parts appropriate to the designated speciality area for which the aviation repair specialist is or authorised and rated, but only in connection with employment by a maintenance organisation approved under the Civil Aviation (Approved Maintenance Organisation) Regulations.

(4) An aviation repair specialist shall not perform or supervise duties unless the aviation repair specialist understands the current instructions of the employing approved maintenance organisation and the instructions for continued airworthiness, which relate to the specific operations concerned.

125. A person who holds an aviation repair specialist authorisation shall keep that authorisation within the immediate area where the person normally exercises the privileges of the authorisation and shall present it for inspection upon the request of the Authority or any other person authorised by the Authority.

126. A holder of an aviation repair specialist authorisation shall surrender the authorisation to the Authority when it is suspended, revoked or at the time the holder leaves the employment of the approved maintenance organisation.

Flight Radiotelephony Operator Licence

127. Except for a holder of a pilot licence, a person required to use radiotelephone apparatus aboard an aircraft shall hold a flight radiotelephony operator licence.

(2) An applicant for a flight radiotelephony operator licence shall-
(a) be at least seventeen years of age;
(b) demonstrate the ability to read, speak, write and understand the English language in accordance with the language proficiency requirements contained in the Second Schedule to these Regulations;
(c) comply with the knowledge and skill requirements, for flight radiotelephone operator as contained in regulation 128; and
(d) demonstrate a level of knowledge appropriate to the privileges granted to a holder of a flight radiotelephone operator licence.

128. —(1) An applicant for a flight radiotelephony operator licence shall pass a practical and knowledge test covering the following areas-
(a) the ICAO spelling alphabet;
(b) departure and position reporting;
(c) obtaining meteorological information;
(d) transmission and procedures of distress and urgency signals;
(e) communication techniques and procedures;
(f) the necessity for brevity in radiotelephony communication and priorities;
(g) pre-flight briefing;
(h) classification of directional finding bearings;
(i) radiotelephony facilities and frequencies available in the FIR;
(j) elementary knowledge of the relationship between wavelength and frequency;
(k) radiotelephony procedures and phraseology; and
(l) ability to use the radio equipment of the type installed in the aircraft and
(m) including the ability to carry out emergency procedures.
(2) The knowledge test results for a radio telephony operator licence shall be valid for twenty four months after passing the examination.

Privileges. 129. A holder of a flight radiotelephony operator licence shall have the privilege to use the radiotelephone on board an aircraft.

Renewal requirements. 130. A holder of a flight radiotelephony operator licence may apply for renewal of the licence if the holder has exercised the privileges of the licence in the six months preceding the date of application.

Cabin Crewmember Certificate

131. -(1) A person shall not act as a cabin crewmember unless that person holds-
(a) a cabin crewmember certificate;
(b) a rating for the specific aircraft type or is operating under the supervision of a rated cabin crew for the purpose of qualifying for the rating;
(c) the required knowledge for the type of aircraft and operating position;
(d) the current Medical Certificate Class 2;
(2) A person undergoing training to qualify for a cabin crewmember certificate or rating shall not:
(a) form a part of the required minimum number of cabin crewmember for that aircraft;
(b) be assigned to an operating position that requires a cabin crewmember.
(3) In this regulation, operating position means a duty station assigned to the cabin crewmember for execution of emergency duties.

Eligibility requirements 132. An applicant for cabin crewmember certificate shall-
(a) be at least eighteen years of age
(b) be able to read, speak and understand the English language sufficiently to adequately carry out the responsibilities of a cabin crewmember;
(c) have completed a course of training approved by the Authority and
(d) have passed a knowledge test.
133. -(1) An applicant for a cabin crewmember certificate shall have demonstrated a level of knowledge appropriate to the privileges granted to the holder of a cabin crewmember certificate, in the following subjects:

(a) fire and smoke training to include-
   (i) emphasis on the responsibility of cabin crew to deal promptly with emergencies involving fire and smoke and, in particular, emphasis on the importance of identifying the actual source of the fire;
   (ii) the importance of informing the flight crew immediately, as well as the specific actions necessary for co-ordination and assistance, when fire or smoke is discovered;
   (iii) the necessity for frequent checking of potential fire-risk areas including toilets and the associated smoke detectors;
   (iv) the classification of fires and the appropriate type of extinguishing agents and procedures for particular fire situations, the techniques of application of extinguishing agents, the consequences of misapplication, and of use in a confined space; and
   (v) the general procedures of ground based emergency services at aerodromes.

(b) water survival training to include the actual donning and use of personal flotation equipment in water by each cabin crewmember; before first operating on an aeroplane fitted with life-rafts or other similar equipment, training must be given on the use of this equipment, as well as actual practice in water;

(c) survival training appropriate to the areas of operation such as polar, desert, jungle or sea;

(d) medical aspects and first aid to include -
   (i) instruction on first aid and the use of first-aid kits;
   (ii) first aid associated with survival training and appropriate hygiene; and
   (iii) the physiological effects of flying and with particular emphasis on hypoxia;

(e) passenger handling to include the following-
   (i) advice on the recognition and management of passengers who are, or become, intoxicated with alcohol or are under the influence of drugs or are aggressive;
   (ii) methods used to motivate passengers and the crowd control necessary to expedite an aeroplane evacuation;
   (iii) regulations covering the safe stowage of cabin baggage including cabin service items and the risk of the baggage becoming a hazard to occupants of the cabin or otherwise obstructing or damaging safety equipment or aeroplane exits;
   (iv) the importance of correct seat allocation with reference to aeroplane mass and balance with particular emphasis given on the seating of disabled passengers and the necessity of seating able-bodied passengers adjacent to unsupervised exits;
   (v) duties to be undertaken in the event of encountering turbulence including securing the cabin;
(vi) precautions to be taken when live animals are carried in the cabin;
(vii) dangerous goods training as prescribed in Civil Aviation (Operation of Aircraft) Regulations and Civil Aviation (Air Operator Certification and Administration) Regulations; and
(viii) security procedures, including the provisions of Civil Aviation (Operation of Aircraft) Regulations and Civil Aviation (Air Operator Certification and Administration) Regulations;

(f) communication - emphasis shall be placed on the importance of effective communication between cabin crew and flight crew including technique, common language and terminology;
(i) the importance of cabin crew performing their duties in accordance with the Operations Manual;
(ii) continuing competence and fitness to operate as a cabin crewmember with special regard to flight and duty time limitations and rest requirements;
(iii) an awareness of the aviation regulations relating to cabin crewmember and the role of the Authority;
(iv) general knowledge of relevant aviation terminology, theory of flight, passenger distribution, meteorology and areas of operation;
(v) pre-flight briefing of the cabin crewmember and the provision of necessary safety information with regard to their specific duties;
(vi) the importance of ensuring that relevant documents and manuals are kept up-to-date with amendments provided by the operator;
(vii) the importance of identifying when cabin crewmembers have the authority and responsibility to initiate an evacuation and other emergency procedures;
(viii) the importance of safety duties and responsibilities and the need to respond promptly and effectively to emergency situations; and

(g) discipline and responsibilities;

(h) Crew Resource Management (CRM) to include appropriate provisions of the Civil Aviation (Operation of Aircraft) Regulations in relation to cabin crewmember.

(2) The knowledge test results for a cabin crewmember certificate shall be valid for twelve months after passing the examination.
**Skill requirements.**

134. An applicant for a cabin crewmember certificate shall have demonstrated the ability to perform as cabin crewmember of an aircraft in the following procedures-

(a) to execute those safety duties and functions which the cabin crewmember is assigned to perform in the event of an emergency or in a situation requiring emergency evacuation;

(b) drilled and capable in the use of emergency and life saving equipment required to be carried such as life jackets, life rafts, evacuation slides, emergency exits, portable fire extinguishers, oxygen equipment and first-aid kits;

(c) when serving on aeroplanes operated above 10,000 feet, knowledge as regards the effect of lack of oxygen and, in the case of pressurized aeroplanes, as regards physiological phenomena accompanying a loss of pressurisation;

(d) aware of other crewmembers’ assignments and functions in the event of an emergency so far as is necessary for the fulfilment of the cabin crewmember’s own duties;

(e) aware of the types of dangerous goods which may, and may not, be carried in a passenger cabin and has completed the dangerous goods training programme required by Civil Aviation (Operation of Aircraft) Regulations;

(f) knowledge about human performance as related to passenger cabin safety duties including flight crew-cabin crew co-ordination.

**Privileges**

135. A holder of a cabin crewmember certificate may-

(a) act as a cabin crewmember in aircraft of types specified in the certificate when such aircraft are engaged in commercial transport operations; and

(b) be authorized to act as a cabin crewmember instructor for issue or renewal of cabin crew certificate and aircraft type ratings.

**Renewal requirements**

136. A holder of a cabin crewmember certificate may apply for renewal if the holder has successfully completed the annual safety and emergency procedure training approved by the Authority every twelve months.

**PART X**

**AVIATION MEDICAL STANDARDS AND CERTIFICATION**

**General**

137. The Authority may issue classes of Medical Assessment that are intended to indicate the minimum medical standards as follows-

(a) Class 1 applies to applicants for or holders of:
(i) Commercial Pilot Licence: aeroplanes, helicopters and powered-lift;
(ii) Airline transport Pilot Licence: aeroplanes, helicopters and powered-lift;
(iii) Flight engineer licence; and
(iv) Multi-crew pilot licence: aeroplanes.

(b) Class 2 applies to applicants for or holders of:
(i) Commercial Pilot Licence: lighter-than-air
(ii) Private Pilot Licence: aeroplanes, helicopters and glider; Student Pilot Licence: for all aircraft and powered-lift; and
(iii) Cabin crew certificate.

(c) Class 3 applies to applicants for or holders of air traffic controller licence.

138. -(1) The Authority may designate a medical doctor who meets the qualifications specified in sub-regulation (2) as an aviation medical examiner to conduct medical examinations for fitness of applicants for the issue or renewal of licences or certificates specified in these Regulations.
(2) For a medical doctor to be designated as an aviation medical examiner, he shall:
(a) be qualified and licenced in the practice of medicine;
(b) have obtained aviation medicine training at an institution recognised by the Authority;
(c) demonstrate adequate competence in aviation medicine; and
(d) have practical knowledge and experience of the conditions in which the holders of licences and ratings carry out their duties.

(3) A medical examiner shall receive refresher training at regular intervals as prescribed by the Authority.

139. -(1) The Authority may delegate to an aviation medical examiner the authority to-
(a) accept applications for physical examinations necessary for issue of a Medical Certificate under these Regulations;
(b) examine applicants for and holders of Medical Certificates to determine whether the applicants meet applicable medical standards; and
(c) recommend issuance, renewal, denial or withdrawal of Medical Certificates to an applicant based on meeting or failing to meet applicable medical standards.

(2) The Authority shall use the services of medical assessors to evaluate reports submitted to it by medical examiners.
(3) The Authority shall retain the right to reconsider any action of an aviation medical examiner.
Medical Certification Procedures

140. - (1) An applicant for a Medical Certificate shall, in a form and manner prescribed by the Authority, sign and furnish the medical examiner with a personally certified statement of medical facts concerning personal, familiar and hereditary history that is as complete and accurate as the applicant’s knowledge permits.

(2) Where the aviation medical examiner finds that additional medical information or history is needed, the aviation medical examiner shall request that the applicant to furnish that information, or authorize any clinic, hospital, physician, or other person to release to the aviation medical examiner all available information or records concerning that history.

(3) Where an applicant for a Medical Certificate fails within a reasonable period to provide the requested medical information or history, or fails to authorise the release so requested, the Authority may deny the application as well as suspend, modify or revoke all Medical Certificates held by the applicant.

(4) Where a Medical Certificate is suspended or modified under sub-regulation (3), the suspension or modification remains in effect until:

(a) the holder provides the requested information, history, or authorisation to the Authority; and

(b) the Authority determines that the holder meets the medical standards.

141. - (1) An aviation medical examiner who is authorised to conduct a medical examination under regulation 140 shall-

(a) sign the required report and Medical Certificate and submit directly to the Authority the full details in the form and manner prescribed by the Authority;

(b) report to the Authority any individual case where in the aviation medical examiner’s judgement, an applicant has failed to meet any requirement that is likely to jeopardize flight safety; and

(c) having commenced a medical evaluation of an applicant, submit to the Authority the report, whether the evaluation is terminated prior to completion, yielded sub-standard results, or was completed satisfactorily.

(2) If the medical report is submitted to the Authority in electronic format, adequate identification of the examiner shall be established.

142. - (1) An aviation medical examiner shall issue the applicable medical certificate to any person who meets the medical standards prescribed in these regulations, based on medical examination and evaluation of the applicant’s history and condition.

(2) A person to be issued with a medical certificate shall undergo a medical examination based on the physical and mental standards contained in these Regulations.

(3) If the medical examination is carried out by two or more medical examiners, the Authority shall appoint one of these to be responsible for coordinating the results of the examination, evaluating the findings with regard to medical fitness, and signing the report.

(4) The medical examiner shall be required to submit sufficient medical information to the Authority to enable the Authority to audit Medical Assessments.
143. - (1) An applicant for a medical certificate may be denied a certificate if, upon medical examination, the applicant does not meet the physical and mental standards specified in these Regulations.
   (2) The denial of the Medical Certificate is effective-
       (a) the date of the medical evaluation that determined the applicant did not meet the physical and mental standards specified in these Regulations; and
       (b) until such time that the applicant is again determined by the Authority to be fit to exercise the privileges through:
           (i) an accredited medical conclusion;
           (ii) a special flight test; or
           (iii) with respect to a transient condition, until a subsequent satisfactory report is acceptable to the Authority.

(2) An applicant who is denied a Medical Certificate by an aviation medical examiner may, within thirty days after the date of the denial, apply in writing to the Authority for reconsideration of the denial.

(3) Upon receiving an application for reconsideration, the Authority shall appoint more than one medical examiner to conduct medical examination on the applicant and shall designate one of the medical examiners to be responsible for coordinating the results of the examination, evaluation and findings with regard to medical fitness, and signing the report.

(4) Where the applicant does not apply for reconsideration during the thirty day period after the date of the denial, the Authority shall consider that applicant has withdrawn the application for a Medical Certificate.

(5) The period of validity of a Medical Assessment may be reduced when clinically indicated.

144. - (1) Medical confidentiality shall be respected at all times and all medical reports and records shall be securely held with accessibility restricted to authorised personnel.

(2) When justified by operational considerations, a medical assessor shall determine to what extent pertinent medical information, in addition to the information contained in the medical report submitted under regulation 143, is presented to relevant officials of the Authority.

145. - (1) The Authority may issue a medical certificate with a limitation to an applicant who does not meet the applicable standards for a medical certificate if the applicant shows to the satisfaction of the Authority that:
       (a) an accredited medical conclusion indicates that in 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; and
       (b) relevant ability, skill, and experience of the applicant and operational conditions have been given due consideration.

(2) The Authority shall issue a medical limitation on a licence when the Authority or an aviation medical examiner determines the safe performance of the licence holder’s duties is dependent on compliance with such a limitation.
146. -(1) A Class 1 Medical Certificate issued to an applicant who is-
(a) under the age of forty years shall be valid for twelve months from the
day the medical examination is performed; and
(b) forty years of age or more shall be valid for six months from the day the
medical examination is performed.
(2) A Class 2 Medical Certificate issued to an applicant who is:
(a) under the age of forty years shall be valid for twenty four months from
the day the medical examination is performed;
(b) forty years of age or more shall be valid for twelve months from the day
the medical examination is performed.
(3) A Class 3 Medical Certificate issued to an applicant who is:
(a) under the age of forty years shall be valid for twenty four months from the
day the medical examination is performed; and
(b) forty years of age or more shall be valid for twelve months from the day
the medical examination is performed.

147. - (1) The requirements for the renewal of a Medical Certificate are the
same as those for the initial assessment except where otherwise specifically stated.
(2) When required to obtain or renew correcting lenses, the applicant for
medical examination shall advise the aviation medical examiner conducting the
medical examination of the new prescription, including revised reading distances:
(a) for a Class 1 Medical Certificate, for the visual cockpit tasks relevant to the
types of aircraft in which the applicant is likely to function;
(b) for a Class 2 Medical Certificate, for the visual cockpit and cabin tasks
relevant to the types of aircraft in which the applicant is likely to function;
and
(c) for a Class 3 Medical Certificate, for the air traffic control duties the
applicant is to perform.

148. A person shall not hold or be issued with a Medical Certificate if that
person suffers from any disease or disability that could render that person likely to
become suddenly unable to either perform assigned duties safely or operate an aircraft
safely.

149. A person shall not hold or be issued a Medical Certificate if that
person-
(a) has any organic, functional or structural disease, defect or limitation
(active, latent, acute or chronic);
(b) has any wound, injury or sequelae from operation; or
(c) uses any prescribed or non-prescribed medication or other treatment that,
based on the case history and appropriate qualified medical judgement
relating to the condition involved, the Authority finds that the medication
or treatment:
(i) makes the person unable to safely perform the duties or exercise the
privileges of the licence or rating applied for or held; or
(ii) may reasonably be expected, for the maximum duration of the
medical Certificate applied for or held, to make the applicant
unable to perform the duties or exercise the privileges of the
licence or rating.
150. (1) An applicant for a Medical Certificate shall be free from—
(a) any abnormality, congenital or acquired; or
(b) any active, latent, acute or chronic disability; or
(c) any wound, injury or sequelae from operation; or
(d) any effect or side-effect of any prescribed or non-prescribed therapeutic
diagnostic or preventive medication taken such as would entail a degree of
functional incapacity which is likely to interfere with the safe operation of
an aircraft or with the safe performance of duties.
(2) An applicant for a Medical Certificate shall not suffer from any disease or
disability which could render the applicant likely to become suddenly unable to
perform assigned duties safely and in the case of an applicant for a class 1 or 2 Medical
Certificate, to operate an aircraft safely.
(3) An applicant shall have no established medical history or clinical
diagnosis of—
(a) an organic mental disorder;
(b) a mental or behavioural disorder due to use of psychoactive substances
   including dependence syndrome induced by alcohol or other psychoactive
   substances;
(c) schizophrenia or schizotypal or delusional disorder;
(d) a mood (affective) disorder;
(e) a neurotic, stress-related or somatoform disorder;
(f) a behavioural syndrome associated with psychological disturbances or
   physical factors;
(g) a disorder of adult personality or behaviour, particularly if manifested by
   repeated overt acts;
(h) mental retardation;
(i) a disorder of psychological development;
(j) a behavioural or emotional disorder with onset in childhood or adolescence;
or
(k) a mental disorder not otherwise specified such as might render the
   applicant unable to safely exercise the privileges of the licence applied for
   or held.

151. (1) A person holding or being issued a Medical Certificate shall be
required to demonstrate a hearing performance sufficient for the safe exercise of his
licence or rating privileges.

(2) An applicant for a medical certificate shall be tested by pure-tone
audiometer at first issue for Class 1 not less than once every five years, and for Class 3
not less than once every four years, up to the age of 40 years, thereafter not less than
once every two years.
(3) An applicant for a Class 2 medical certificate shall be tested by pure-tone
audiometry at first issue and, after the age of 50 years, not less than once every two
years or other alternative methods providing equivalent results may be used.
(4) At a medical examination where audiometer is not performed, an applicant
shall be tested in a quiet room by whispered and spoken voice tests.

152. A Medical Certificate may be issued to an applicant where oral drugs
are administered under conditions permitting appropriate medical supervision and
control and which, according to an accredited medical conclusion, are compatible with
the safe exercise of the applicant’s licence and rating privileges.
Visual requirements:

(1) A person holding or being issued a Medical Certificate shall have:
   (a) normally functioning eyes and adnexae;
   (b) normal fields of vision, normal binocular function; and
   (c) no active pathological condition, acute or chronic, nor sequelae of surgery or trauma of the eyes or their adnexae, which is likely to jeopardise flight safety.

(2) A person with reduced stereopsis, abnormal convergence not interfering with near vision, and ocular misalignment where the fusional reserves are sufficient to prevent asthenopia and diplopia shall not be disqualified.

Vision testing requirements:

(1) The corrected and uncorrected visual acuity must be measured and recorded at each examination.

An applicant for a medical examination who uses contact lenses need not have his uncorrected visual acuity measured at each re-examination provided the history of the contact lens prescription is known.

(2) The test for visual acuity must comply with the following-
   (a) for a visual acuity test in a lighted room, use a test illumination level of approximately 50 lx, normally corresponding to a brightness of 30 cd per square metre;
   (b) visual acuity shall be measured by means of a series of optotypes of landolt, or similar optotypes, placed at a distance of six metres from the applicant, or five metres as appropriate.

(3) The Authority may require a separate ophthalmic report before issue of a Medical Certificate.

(4) The conditions which indicate a need to obtain an ophthalmic report include-
   (a) a substantial decrease in the uncorrected visual acuity;
   (b) any decrease in best corrected visual acuity; and
   (c) the occurrence of eye disease, eye injury or eye surgery.

Acceptability of correcting lenses

(1) A person may meet the visual acuity fitness for near or distant vision by using correcting lenses.

(2) Correcting spectacles may be used if:
   (a) not more than one pair of correcting spectacles is used to demonstrate compliance with visual acuity requirements;
   (b) single-vision near correction lenses (full lenses of one power only, appropriate to reading) are not used for both near and distance vision; and
   (c) in order to read the instruments and a chart or manual held in the hand, and to make use of distant vision through the windscreen without removing the lenses, the spectacles are as appropriate:
(i) lookover;  
(ii) bifocal; or  
(iii) trifocal.

(3) An applicant for medical examination may use contact lenses to meet the distance vision acuity requirement if the lenses are:
(a) monofocal;  
(b) non-tinted; and  
(c) well tolerated.

(4) A person issued with a Medical Certificate that requires correcting lenses or spectacles shall have a limitation placed on the document requiring that person, while exercising the privileges of the licence or certificate, as appropriate-
(a) wear the distant-correction lenses at all times,  
(b) have readily available and use the near-correction spectacles as necessary to accomplish near vision functions; and  
(c) have a second pair of suitable spectacles (distant or near-correction, as appropriate) available for immediate use.

Distance vision requirements

156. -(1) A person issued with a Medical Certificate shall have a distant visual acuity, with or without correcting lenses of at least-
(a) 6/9 with binocular visual acuity of 6/6 or better, for class 1 medical certificate; or  
(b) 6/12 with binoculars visual acuity of 6/9 or better, for class 2 medical certificate  6/9 with binoculars visual acuity of 6/6 or better, for class 3 medical certificate.

(2) Uncorrected distance visual acuity is not a limiting factor.  
(3) An applicant for a medical certificate with a large refractive error shall use contact lenses or high-index spectacle lenses.

(4) Where spectacles are used, high-index lenses are needed to minimize peripheral field distortion.

(4) An applicant for a medical certificate whose uncorrected distant visual acuity in either eye is worse than 6/60 shall provide a full ophthalmic report prior to initial medical evaluation and every five years thereafter.

(5) An applicant for a medical certificate who has undergone surgery affecting the refractive status of the eye shall be free of those sequelae likely to interfere with the safe exercise of the applicant’s licence privileges.

Near vision requirements

157. -(1) A person issued with a Medical Certificate shall meet the following minimum visual standards for near visual acuity to read, with or without corrective lenses, an:-
(a) N14 chart or its equivalent at a distance of 100 cm, with “N14” referring to “Times Roman” font; and  
(b) N5 chart at a distance of 30 to 50 cm as selected by the applicant, with “N5” referring to “Times Roman” font.

(2) Where the near-vision requirements are met only by the use of near-correction and the applicant also needs distant-correction, both corrections must be added to a pair of spectacles to be used to meet the requirements.

(3) When required to obtain or renew correcting lenses, an applicant for a medical certificate shall advise the aviation medical examiner of reading distances for the duties the applicant is to perform.
(4) When required to obtain or renew correcting lenses, an applicant for a medical certificate shall advise the aviation medical examiner of reading distances for the visual flight deck tasks relevant to the types of aircraft in which the applicant is likely to function.

158. - (1) An applicant for a medical certificate shall demonstrate the ability to perceive readily those colours the perception of which is necessary for the safe performance of duties.
(2) The applicant shall be able to correctly identify a series of pseudoisochromatic plates (tables) in daylight or in artificial light of the same colour temperature such as that provided by Illuminate “C” or “D65” as specified by the International Commission on Illumination (CIE).
(3) An applicant failing to obtain a satisfactory score in such a test may nevertheless be assessed as fit provided the applicant is able to readily and correctly identify aviation coloured lights displayed by means of a recognized colour perception lantern in a special test conducted by the aviation medical examiner (AME).
(4) An applicant for a medical certificate unable to satisfactorily complete the special test provided in sub-regulation (3):
(a) shall only be eligible for a Class 2 Medical Certificate with the following restriction: “Valid for Day Operations Only;” and
(b) shall be advised that any sunglasses worn during the exercise of the privileges must be non-polarizing and of a neutral grey tint.

159. - (1) A person shall not hold or be issued a Medical Certificate if that person
(a) possesses any abnormality or disease of the ear or related structures which is likely to interfere with the safe exercise of the applicant’s licence or rating privileges;
(b) except for Class 3 Medical Certificate
   (i) has disturbance of vestibular function;
   (ii) has significant dysfunction of the eustachian tubes;
   (iii) has unhealed perforation of the tympanic membranes; and
   (iv) has nasal obstruction;
(c) has malformation or any disease of the buccal cavity or upper respiratory tract which is likely to interfere with the safe exercise of the applicant’s licence and rating privileges.
(2) Except for a Class 3 medical certificate, a single dry perforation of the tympanic membrane need not render a person unfit.

160. - (1) An applicant for a medical certificate when tested on a pure-tone audiometer shall not have a hearing loss, in either ear separately, of more than 35 dB at any of the frequencies 500, 1000 or 2000 Hz, or more than 50 dB at 3000 Hz.
(2) An applicant with a hearing loss greater than that specified in sub-regulation (1) may be declared fit provided that the applicant has normal hearing performance against a background noise that reproduces or simulates the masking properties of flight deck noise upon speech and beacon signals.
(3) A person shall not hold or be issued a Class 2 medical certificate if that person is unable to hear an average conversational voice in a quiet room, using both ears, at a distance of two metres from the examiner and with the back turned to the examiner or an alternative practical hearing test conducted in flight in the cockpit of an aircraft of the type for which the applicant’s licence and ratings are valid may be used.

161. - (1) A person shall not hold nor be issued a Medical Certificate if that person has any abnormality of the heart, congenital or acquired, which is likely to interfere with the safe exercise of his licence or rating privileges.

(2) An applicant who has undergone coronary by-pass grafting or angioplasty with or without stenting or other cardiac intervention or who has a history of myocardial infarction or suffers from any other potentially incapacitating cardiac condition shall not hold nor be issued a medical certificate unless the applicant’s cardiac condition has been investigated and evaluated in accordance with best medical practice and is assessed not likely to interfere with the safe exercise of the applicant’s licence or rating privileges.

(3) The applicant for a medical certificate with an abnormal cardiac rhythm shall not hold or be issued a Medical Certificate unless the cardiac arrhythmia has been investigated and evaluated with best medical practice and is assessed not likely to interfere with the safe exercise of the applicant’s licence or rating privileges.

162. A person shall not hold or be issued a medical certificate if that person has-
(a) systolic and diastolic blood pressures outside normal limits; or
(b) a significant functional or structural abnormality of the circulatory system.

163. - (1) Electrocardiography shall form part of the heart examination for the first issue of a medical certificate.

(2) Electrocardiography shall be included in a re-examination of applicant for a medical certificate over the age of fifty years no less frequently than two years, except for Class 1 medical certificate which shall be annually.

164. - (1) A person shall not hold nor be issued a medical certificate if that person has a medical history or clinical diagnosis of any of the following:
(a) a progressive or non-progressive disease of the nervous system, the effect of which, is likely to interfere with the safe exercise of the applicant’s licence or rating privileges;
(b) epilepsy; or
(c) any disturbance of consciousness without satisfactory medical explanation of cause.

(2) A person shall not hold nor be issued a medical certificate if that person has suffered any head injury, the effects of which, are likely to interfere with the safe exercise of the applicant’s licence and rating privileges.
Respiratory capability.

165. (1) A person shall not hold nor be issued a medical certificate if that person has an established medical history or clinical diagnosis of-

(a) disability of the lungs or any active disease of the structures of the lungs, mediastinum or pleurae likely to result in incapacitating symptoms during normal or emergency operations;
(b) active pulmonary tuberculosis; and
(c) asthma causing significant symptoms or likely to cause incapacitating symptoms during normal or emergency operations.

(2) Unless there is an accredited medical conclusion indicating that the use of drugs for control of asthma is not likely to interfere with the safe exercise of the applicant’s license or rating privileges, the use of such drugs is disqualifying.

(3) An applicant with chronic obstructive pulmonary disease shall be assessed as unfit unless the applicant’s condition has been investigated and evaluated in accordance with best medical practice and is assessed not likely to interfere with the safe exercise of the applicant’s license or rating privileges.

(4) An applicant with quiescent or healed lesions which are known to be tuberculous, or are presumably tuberculous in origin, may be assessed as fit.

Radiology (X-ray) evaluation

166. A radiography evaluation shall be accomplished during the initial chest examination and be conducted as necessary in subsequent medical examinations where there are historical chest cavity issues, symptoms or doubtful clinical cases.

Vestibular apparatus

167. (1) A person shall not hold or be issued a medical certificate if that person has an established medical history or clinical diagnosis of any of the following medical conditions-

(a) active acute or chronic pathological process of the internal ear or of the middle ear;
(b) a disease or condition of the middle or internal ear, nose, oral cavity, pharynx, or larynx that-
   (i) interferes with, or is aggravated by, flying or may reasonably be expected to do so; or
   (ii) interferes with, or may reasonably be expected to interfere with clear and effective speech communication;
(c) a disease or condition manifested by, or that may reasonably be expected to be manifested by, vertigo or a disturbance of equilibrium;
(d) permanent disturbances of the vestibular apparatus; or
(e) permanent obstruction to eustachian tubes.

(2) Unless there is an accredited medical conclusion indicating that the condition is not likely to affect the safe exercise of the applicant’s license or rating privileges, the following medical conditions are disqualifying-

(a) acute or chronic impairment of nasal air entry on either side; or
(b) serious malformation or serious, acute or chronic affection of the buccal cavity or upper respiratory tract.
168. A person shall not hold nor be issued a medical certificate if that person possesses any abnormality of the bones, joints, muscles, tendons or related structures which is likely to interfere with the safe exercise of the applicant’s licence or rating privileges.

169. A person shall not hold or be issued a Medical Certificate if that person has an established medical history or clinical diagnosis of any metabolic, nutritional or endocrine disorders that are likely to interfere with safe exercise of his licence or rating privileges.

170. A person shall not hold nor be issued a medical certificate if that person has an established medical history or clinical diagnosis of-
(a) insulin treated diabetes mellitus; or
(b) non-insulin treated diabetes mellitus unless the condition is shown to be satisfactorily controlled by diet alone or by diet combined with oral anti-diabetic medication, the use of which is compatible with the safe exercise of that person’s licence or rating privileges.

171. -(1) A person shall not hold, nor be issued a medical certificate if that person has an established medical history or clinical diagnosis of any of the following medical conditions:
(a) significant impairment of function of the gastrointestinal tract or its adnexa;
(b) sequelae of disease of, or surgical intervention on, any part of the digestive tract or its adnexae, likely to cause incapacitation in flight, in particular, obstruction due to stricture or compression; or
(c) hernias that might give rise to incapacitating symptoms except for Class 3 medical certificate.
(2) Unless there is an accredited medical conclusion indicating that the effects of the operation are not likely to cause incapacitation in flight, an applicant who has undergone a major surgical operation on the biliary passages or the digestive tract or its adnexa with a total or partial excision or a diversion of any of these organs that may cause incapacity in flight shall not hold, nor be issued a medical certificate.

172. -(1) A person shall not hold nor be issued a medical certificate if that person has an established medical history or clinical diagnosis of genitor-urinary disease, unless adequately investigated and his condition found unlikely to interfere with the safe exercise of the person’s licence or rating privileges.
(2) A urine examination shall form part of the medical examination and abnormalities shall be adequately investigated.
(3) A person shall not hold nor be issued a medical certificate if that person has:
(a) any sequelae of diseases of, or surgical procedures on the kidneys or the genitor-urinary tract, in particular obstructions due to stricture or compression, unless his condition has been investigated and evaluated in accordance with the best medical practice and is assessed not likely to interfere with the safe exercise of that person’s licence or rating privileges; or
(b) undergone nephrectomy unless the condition is well compensated.
Lymphatic glands or disease of the blood.

173. An applicant for a medical certificate with diseases of the blood or the lymphatic system shall be assessed as unfit unless adequately investigated and his condition found unlikely to interfere with the safe exercise of the applicant’s licence or rating privileges.

Gynaecological conditions.

174. An applicant for a medical certificate who has a gynaecological disorder that is likely to interfere with the safe exercise of the applicant’s licence or rating privileges shall be assessed as unfit.

Pregnancy.

175. -(1) An applicant for a medical certificate who is pregnant shall be assessed as unfit unless obstetrical evaluation and continued medical supervision indicate a low-risk uncomplicated pregnancy.

(2) For an applicant with a low-risk uncomplicated pregnancy evaluated and supervised in accordance with sub-regulation (1), the fit certificate shall, in the case of Class 1 and 2 medical certificate be limited to the period from the end of the 12th week to the end of the 26th week of gestation and in the case of Class 3 medical certificate be limited until the period until the end of the 34th week of gestation.

(3) Following confinement or termination of pregnancy the applicant shall not be permitted to exercise the privileges of her licence until she has undergone evaluation in accordance with best medical practice and it has been determined that she is able to safely exercise the privileges of her licence or ratings.

Speech defects.

176. An applicant for a medical certificate with stuttering or other speech defects sufficiently severe to cause impairment of speech communication shall be assessed as unfit.

Acquired Immunodeficiency Syndrome.

177. -(1) An applicant for a medical certificate with acquired immunodeficiency syndrome (AIDS) shall be assessed as unfit.

(2) An applicant for a medical certificate who is seropositive for human immunodeficiency virus (HIV) shall be assessed as unfit unless full investigation provides no evidence of clinical disease.

PART XI
EXEMPTIONS

Requirements for application

178. -(1) A person may apply to the Authority for an exemption from any of these Regulations.

(2) An applications for an exemption shall be submitted at least sixty days in advance of the proposed effective date, to obtain timely review.

(3) A request for an exemption must contain the applicant’s:
   (a) name;
   (b) physical address and mailing address;
   (c) telephone number;
   (d) fax number if available;
   (e) email address if available; and

(3) The application shall be accompanied by a fee specified by the Authority, for technical evaluation.

Substance of the

179. -(1) An application for an exemption must contain the following:
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, that is, benefit the public as a whole;
(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 review and discussion 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 the [State]’s airspace, an indication whether the exemption would contravene any provision of the Standards and Recommended Practices of the International Civil Aviation Organization (ICAO) as well as the Regulations pertaining to the airspace in which the operation will occur.

(2) Where the applicant seeks emergency processing, the application must contain supporting facts and reasons that the application was not timely filed, and the reasons 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 in a timely fashion.

Review, Publication and Issue or Denial of the Exemption

180. -(1) The Authority shall review the application for accuracy and compliance with the requirements of regulations 178 and 179.

(2) If the application appears on its face to satisfy the provisions of this regulation and the Authority determines that a review of its merits is justified, the Authority will publish a detailed summary of the application in either the [State] Gazette, aeronautical information circular or at least one local daily newspaper for comment and specify the date by which comments must be received by the Authority for consideration.

(3) Where the filing requirements of regulations 178 and 179 have not been met, the Authority will notify the applicant and take no further action until and unless the applicant corrects the application and re-files it in accordance with these Regulations.

(4) If the request is for emergency relief, the Authority shall publish the application or the Authority’s decision as soon as possible after processing the application.

181. -(1) After initial review, if the filing requirements have been satisfied, 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 the regulation, although 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;

(c) whether a grant of the exemption would contravene the applicable ICAO Standards and Recommended Practices; and

(d) whether the request should be granted or denied, and of any conditions or limitations that shall be part of the exemption.

(2) The Authority shall notify the applicant by letter and publish a detailed summary of its evaluation and decision to grant or deny the request.

(3) The summary referred to in sub-regulation (2) shall specify the duration of the exemption and any conditions or limitations of the exemption.

(4) If the exemption affects a significant population of the aviation community of the [State] the Authority shall publish the summary in an aeronautical information circular.

PART XII
GENERAL PROVISIONS

182. -(1) A holder of a licence, certificate or authorisation issued by the Authority shall have in his physical possession or at the work site when exercising the privileges of that licence, certificate or authorisation.

(2) A crewmember of a foreign registered aircraft shall hold a valid licence, certificate or authorisation, including an appropriate and current medical certificate, issued by the State of Registry and has it in his or her physical possession or at the work station when exercising the privileges of that licence, certificate or authorisation.

183. -(1) A holder of a licence, rating or a certificate issued under these Regulations shall not exercise the privileges of the licence, rating or certificate while under the influence of any psychoactive substance, by reason of which human performance is impaired.

(2) A person whose function is critical to the safety of aviation (safety-sensitive personnel) shall not undertake that function while under the influence of any psychoactive substance, by reason of which human performance is impaired.

(3) The person referred to in sub-regulation (1) and (2) shall not engage in any kind of problematic use of substances.
184. - (1) A person who performs any function requiring a licence, rating, qualification or authorisation prescribed by these Regulations directly or by contract may be tested for drug or alcohol usage.

(2) A person who refuses to submit to a test to indicate the percentage by weight of alcohol in the blood, when requested by a law enforcement officer or the Authority, or refuses to furnish or to authorise the release of the test results requested by the Authority shall:
   (a) be denied any licence, certificate, rating, qualification, or authorisation issued under these Regulations for a period of up to one year from the date of that refusal; or
   (b) have their licence, certificate, rating, qualification, or authorisation issued under these Regulations suspended or revoked.

(3) A person who refuses to submit to a test to indicate the presence of narcotic drugs, marijuana, or depressant or stimulant drugs or substances in the body, when requested by a law enforcement officer or the Authority, or refuses to furnish or to authorise the release of the test results requested by the Authority shall:
   (a) be denied any licence, certificate, rating, qualification, or authorisation issued under these Regulations for a period of up to one year from the date of that refusal; or
   (b) have their licence, certificate, rating, qualification, or authorisation issued under these Regulations suspended or revoked.

(4) Any person who is convicted for the violation of any local or national statute relating to the growing, processing, manufacture, sale, disposition, possession, transportation, or importation of narcotic drugs, marijuana, or depressant or stimulant drugs or substances, shall-
   (a) be denied any license, certificate, rating, qualification, or authorisation issued under these Regulations for a period of up to one year after the date of conviction; or
   (b) have their licence, certificate, rating, qualification, or authorisation issued under these Regulations suspended or revoked.

185. A person who holds a licence, certificate, or authorisation required by these Regulations shall present it for inspection upon a request from the Authority or any person authorised by the Authority.

186. - (1) A holder of a licence, certificate or authorisation issued under these Regulations may apply to change the name on a licence or certificate.

(2) The holder shall include with any such request:-
   (a) the current licence or certificate; and
   (b) a court order, or other legal document verifying the name change;

(3) The Authority may change the licence, certificate or authorisation and issue a replacement thereof;

(4) The Authority shall return to the holder the original documents specified in sub-regulation 2(b) and retain copies thereof and return the replaced licence, certificate or authorisation with the appropriate endorsement.
187. A holder of a licence, certificate, or authorisation issued under these Regulations shall notify the Authority of the change in the physical and mailing address and shall do so in the case of:

(a) physical address, at least fourteen days in advance;
(b) mailing address upon the change.

188. A person may apply to the Authority in the prescribed form for replacement of documents issued under these Regulations if the documents are lost or destroyed.

189. —(1) The Authority may, where it considers it to be in the public interest, suspend provisionally, pending further investigation, any licence, certificate, approval, permission, exemption, authorisation or such other document issued, granted or having effect under these Regulations.

(2) The Authority may, upon the completion of an investigation which has shown sufficient ground to its satisfaction and where it considers it to be in the public interest, revoke, suspend, or vary any licence, certificate, approval, permission, exemption, authorisation or other document issued or granted under these Regulations.

(3) The Authority may, where it considers it to be in the public interest, prevent any person or aircraft from flying.

(4) A holder or any person having the possession or custody of any licence, certificate, approval, permission, exemption, authorisation or other documents which has been revoked, suspended or varied under these Regulations shall surrender it to the Authority within 14 days from the date of revocation, suspension or variation.

(5) The breach of any condition subject to which any licence, certificate, approval, permission, exemption, authorisation, or any other document has been granted or issued under these Regulations shall render the document invalid during the continuance of the breach.

190. —(1) A person shall not-

(a) use any licence, certificate, approval, permission, exemption, authorisation or other document issued or required by or under these Regulations which has been forged, altered, revoked, or suspended, or to which he is not entitled; or
(b) forge or alter any licence, certificate, approval, permission, exemption, authorisation or other document issued or required by or under these Regulations; or
(c) lend any licence, certificate, approval, permission, exemption, authorisation or other document issued or required by or under these Regulations to any other person; or
(d) make any false representation for the purpose of procuring for himself or any other person the grant issue renewal or variation of any such licence, certificate, approval, permission or exemption, authorisation or other document.
(2) During the period for which it is required under these Regulations to be preserved, a person shall not mutilate, alter, render illegible or destroy any records, or any entry made therein, required by or under these Regulations to be maintained, or knowingly make, or procure or assist in the making of, any false entry in any such record, or wilfully omit to make a material entry in such record.

(3) All records required to be maintained by or under these Regulations shall be recorded in a permanent and indelible material.

(4) A person shall not issue any certificate, document or exemption under these Regulations unless he is authorised to do so by the Authority.

(5) A person shall not issue any certificate of the kind referred to in sub-regulation (4) unless he has satisfied himself that all statements in the certificate are correct, and that the applicant is qualified to hold that certificate.

191. (1) Any person who knows of a violation of the Civil Aviation Act or any regulations or orders issued thereunder, shall report it to the Authority.

(2) The Authority will determine the nature and type of any additional investigation or enforcement action that need be taken.

192. A person who fails to comply with any direction given to him by the Authority or by any authorised person under any provision of these Regulations shall be deemed for the purposes of these Regulations to have contravened that provision.

193. (1) The Authority may notify the fees to be charged in connection with the issue, validation, renewal, extension or variation of any certificate, 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 any orders, notices or proclamations made thereunder.

(2) Upon an application being made in connection with which any fee is chargeable in accordance with the provisions of sub-regulation (1), the applicant shall be required, before the application is accepted, 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.

194. (1) These Regulations shall apply to aircraft, not being military aircraft, belonging to or exclusively employed in the service of the Government, and for the purposes of such application, the Department or other authority for the time being responsible for management of the aircraft shall be deemed to be the operator of the aircraft, and in the case of an aircraft belonging to the Government, to be the owner of the interest of the Government in the aircraft.

(2) Except as otherwise expressly provided, the naval, military and air force authorities and member of any visiting force and property held or used for the purpose of such a force shall be exempt from the provision of these regulations to the same extent as if the visiting force formed part of the military force of the [State].
Extra-territorial application of Regulations

195. Except where the context otherwise requires, these Regulations—
(a) in so far as they apply, whether by express reference or otherwise, to aircraft registered in [State], shall apply to such aircraft wherever they may be;
(b) in so far as they apply, whether by express reference or otherwise, to other aircraft, shall apply to such aircraft when they are within the [State];
(c) in so far as they prohibit, require or regulate, whether by express reference or otherwise, the doing of anything by any person in, or by any of the crew of, any aircraft registered in [State], shall apply to such persons and crew, wherever they may be; and
(d) in so far as they prohibit, require or regulate, whether by express reference or otherwise, the doing of anything in relation to any aircraft registered in [State] by other persons shall, where such persons are citizens of the [State], apply to them wherever they may be.

PART XIII
OFFENCES AND PENALTIES

196. A person who contravenes any provision of these Regulations may have his licence, certificate, approval, authorisation, exemption or other document revoked or suspended.

197. (1) A person who contravenes any provision of these Regulations, orders, notices or proclamations made thereunder 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 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 unless he proves that the contravention occurred without his consent or connivance and that he exercised all due diligence to prevent the contravention.

(2) If it is proved that an act or omission of any person, which would otherwise have been a contravention by that person of a provision of these Regulations, orders, notices or proclamations made thereunder was due to any cause not avoidable by the exercise of reasonable care by that person, the act or omission shall be deemed not to be a contravention by that person of that provision.

(3) Where a person is charged with contravening a provision of these Regulations orders, notices or proclamations made thereunder by reason of his having been a member of the flight crew of an aircraft on a flight for the purpose of commercial air transport operations, the flight shall be treated, without prejudice to the liability of any other person under these Regulations, as not having been for that purpose if he proves that he neither knew nor had reason to know that the flight was for that purpose.

(4) A person who contravenes any provision of these Regulations, orders, notices or proclamations made thereunder not being a provision referred to in sub-regulation (9) shall, upon conviction, be liable to a fine, and in the case of a continuing contravention, each day of the contravention shall constitute a separate offence.

(5) In case an aircraft is involved in a contravention and the contravention is by the owner or operator of the aircraft, the aircraft shall be subject to a lien for the penalty.
(6) Any aircraft subject to alien for the purpose of sub-regulation (5) may be seized by and placed in the custody of the Authority;

(7) The aircraft shall be released from custody of the Authority upon-

(a) payment of the penalty or the amount agreed upon in compromise;

(b) deposit of a bond in such amount as the Authority may prescribe, conditioned upon payment of the penalty or the amount agreed upon in compromise;

(c) receiving an order of the court to that effect.

(8) The Authority and any person specifically authorised by name by him or any police officer not below the rank of inspector specifically authorised by name by the Minister, may compound offences under Part A of the Fifth Schedule to these Regulations by assessing the contravention and requiring the person reasonably suspected of having committed the offence to pay to the Authority a sum equivalent in [State] shillings of one hundred United States dollars and three hundred United States dollars for provisions referred to in sub-part (i) and sub-part (ii) respectively in Part A of the Schedule to these Regulations.

(9) If any person contravenes any provision specified in Part B of the Fifth Schedule to these Regulations, upon conviction is liable to a fine not less than the equivalent in [State] Shillings of one thousand United States Dollars or to imprisonment for a term of twelve months or to both.

(10) Where any person is aggrieved by any order made under sub-regulation (8), he may, within twenty one days of such order being made, appeal against the order to a higher court and the provisions of Part X of the Criminal Procedure Act, shall apply mutatis mutandis, to every such appeal as if it were an appeal against a sentence passed by a district court in the exercise of its original jurisdiction.

Uganda

83. (1) If any provision of these Regulations, orders, notices or proclamations made thereunder 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 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 unless he proves that the contravention occurred without his consent or connivance and that he exercised all due diligence to prevent the contravention.

(2) Any person who contravenes any provision specified as an “A” provision in the First Schedule to these Regulations shall be guilty of an offence and shall on conviction be liable to a fine not exceeding one million shillings for each offence or each flight or to imprisonment for a term not exceeding one year or to both.

(3) Any person who contravenes any provision specified as a “B” provision in the First Schedule to these Regulations shall be guilty of an offence and shall on conviction be liable to a fine not exceeding two million shillings for each offence or each flight or to imprisonment for a term not exceeding three years or to both.
Kenya

54. (1) If any provision of these Regulations, orders, notices or proclamations made under the 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 shall, without prejudice to the liability of any other person under these Regulations for that contravention, be deemed to have contravened that provision unless he proves that the contravention occurred without his consent or connivance and that he or she exercised all due diligence to prevent the contravention.

(2) A person who contravenes any provision specified as an “A” provision in the Fourth Schedule to these Regulations commits an offence and is liable on conviction to a fine not exceeding one million shillings for each offence and or to imprisonment for a term not exceeding one year or to both.

(3) A person who contravenes any provision specified as a “B” provision in the Fourth Schedule to these Regulations commits an offence and is liable on conviction to a fine not exceeding two million shillings for each offence and or to imprisonment for a term not exceeding three years or to both.

(4) A person who contravenes any provision of these Regulations not being a provision referred to in the Fourth Schedule to these Regulations commits an offence and is liable on conviction to a fine not exceeding two million shillings, and in the case of a second or subsequent conviction for the like offence to a fine not exceeding four million shillings.
FIRST SCHEDULE

Regulation 4(3)

SPECIFICATIONS FOR PERSONNEL LICENCES

Personnel licences issued by a Contracting State in accordance with the relevant provisions of these Regulations shall conform to the following specifications:

1 Detail
(a) A Contracting State having issued a licence shall ensure that other States are able to easily determine the licence privileges and validity of ratings.

(b) The following details shall appear on the licence:
I) Name of State (in bold type);
II) Title of licence (in very bold type);
III) Serial number of the licence, in Arabic numerals, given by the authority issuing the licence;
IV) Name of holder in full (in Roman alphabet also if script of national language is other than Roman);
IVa) Date of birth;
V) Address of holder if desired by the State;
VI) Nationality of holder;
VII) Signature of holder;
VIII) Authority and, where necessary, conditions under which the licence is issued;
IX) Certification concerning validity and authorization for holder to exercise privileges appropriate to licence;
X) Signature of officer issuing the licence and the date of such issue;
XI) Seal or stamp of authority issuing the licence;
XII) Ratings, e.g. category, class, type of aircraft, airframe, aerodrome control, etc.;
XIII) Remarks, i.e. special endorsements relating to limitations and endorsements for privileges, including from 5 March 2008 an endorsement of language proficiency, and other information required in pursuance to Article 39 of the Chicago Convention;
XIV) Any other details desired by the State issuing the licence.

2 Material: First quality papers or other suitable material, including plastic cards, shall be used and the items mentioned in paragraph 1(b) shown clearly thereon.

3 Language
When licences are issued in a language other than English, the licence shall include an English translation of at least items i), ii), vi), ix), xii), xiii) and xiv) under paragraph 1(b) and when provided in a language other than English, authorizations issued shall include an English translation of the name of the State issuing the authorization, the limit of validity of the authorization and any restriction or limitation that may be established.

4 Arrangement of items
Item headings on the licence shall be uniformly numbered in roman numerals as indicated in paragraph 1(b), so that on any licence the number will, under any arrangement, refer to the same item heading.
SECOND SCHEDULE

Regulation 7(1)

LANGUAGE PROFICIENCY REQUIREMENTS

(1) To meet the language proficiency requirements contained in regulation 7, an applicant for a licence or a licence holder shall demonstrate, in a manner acceptable to the Authority, compliance with the holistic descriptors at paragraph (2) and with the Operational Level (Level 4) of the Language Proficiency Rating Scale in paragraph (3).

(2) Holistic descriptors - proficient speakers shall:
(a) communicate effectively in voice-only (telephone/radiotelephone) and in face-to-face situations;
(b) communicate on common, concrete and work-related topics with accuracy and clarity;
(c) use appropriate communicative strategies to exchange messages and to recognize and resolve misunderstandings (e.g. to check, confirm, or clarify information) in a general or work-related context;
(d) handle successfully and with relative ease the linguistic challenges presented by a complication or unexpected turn of events that occurs within the context of a routine work situation or communicative task with which they are otherwise familiar; and
(e) use a dialect or accent which is intelligible to the aeronautical community.

(3) Rating scales:
(a) Operational Level (Level 4):
(i) Pronunciation: Pronunciation, stress, rhythm and intonation are influenced by the first language or regional variation but only sometimes interfere with understanding.
(ii) Structure: 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.
(iii) Vocabulary: 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.
(iv) Fluency: 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.
(v) Comprehension: 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.
(vi) Interactions: 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.

(b) Extended Level (Level 5)
(i) Pronunciation: Pronunciation, stress, rhythm, and intonation, though influenced by the first language or regional variation, rarely interfere with ease of understanding.
(ii) Structure: Basic grammatical structures and sentence patterns are consistently well controlled. Complex structures are attempted but with errors which sometimes interfere with meaning.
(iii) Vocabulary: Vocabulary range and accuracy are sufficient to communicate effectively on common, concrete, and work related topics. Paraphrases consistently and successfully. Vocabulary is sometimes idiomatic.
(iv) Fluency: 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.
(v) Comprehension: 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 and/or accent) or registers.
(iv) Interactions: Responses are immediate, appropriate, and informative. Managers the speaker/listener relationship effectively.

(c) Expert Level (Level 6)
(i) Pronunciation: Pronunciation, stress, rhythm, and intonation, thought possibly influenced by the first language or regional variation, almost never interfere with ease of understanding.
(ii) Structure: Both basic and complex grammatical structures and sentence patterns are consistently well controlled.
(iii) Vocabulary: Vocabulary range and accuracy are sufficient to communicate effectively on a wide variety of familiar and unfamiliar topics. Vocabulary is idiomatic, nuanced, and sensitive to register.
(iv) Fluency: Able to speak at length with a natural, effortless flow. Varies speech flow for stylistic effect, e.g. to emphasize a point. Uses appropriate discourse markers and connectors spontaneously.
(v) Comprehension: Comprehension is consistently accurate in nearly all contexts and includes comprehension of linguistic and cultural subtleties.
(vi) Interactions: Interacts with ease in nearly all situations. Is sensitive to verbal and non-verbal cues, and responds to them appropriately.
REQUIREMENTS FOR THE ISSUE OF THE MULTI-CREW PILOT LICENCE — AEROPLANE

1. Training
1.1 In order to meet the requirements of the multi-crew pilot licence in the aeroplane category, the applicant shall have completed an approved training course. The training shall be competency-based and conducted in a multi-crew operational environment.

1.2 During the training, the applicant shall have acquired the knowledge, skills and attitudes required as the underpinning attributes for performing as a co-pilot of a turbine-powered air transport aeroplane certificated for operation with a minimum crew of at least two pilots.

2. Assessment level
The applicant for the multi-crew pilot licence in the aeroplane category shall have satisfactorily demonstrated performance in all the nine competency units specified in 3, at the advanced level of competency as defined in the Level of Competency.

3. Competency units
The nine competency units that an applicant has to demonstrate are as follows:
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.

4. Simulated flight
4.1 The flight simulation training devices used to gain the experience specified in regulation 58 shall have been approved by the Authority.

4.2 Flight simulation training devices shall be categorized as follows:
a) Type I. E-training and part tasking devices approved by the Authority that have the following characteristics:
— involve accessories beyond those normally associated with desktop computers, such as functional replicas of a throttle quadrant, a sidestick controller, or an FMS keypad; and
— involve psychomotor activity with appropriate application of force and timing of responses.

b) Type II. A flight simulation training device that represents a generic turbine-powered aeroplane.

c) Type III. A flight simulation training device that represents a multi-engined turbine-powered aeroplane certificated for a crew of two pilots with enhanced daylight visual system and equipped with an autopilot.

d) Type IV. Fully equivalent to a Level D flight simulator or to a Level C flight simulator with an enhanced daylight visual system.
MULTI-CREW PILOT LICENCE — AEROPLANE LEVELS OF COMPETENCY

1. Core flying skills
The level of competency at which the applicant shall have complied with the requirements for the private pilot licence, 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 multicrew, 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 ab initio 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)
The 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/personal development plans will be agreed and the details recorded. Applicants will be continuously assessed as to their suitability to progress to further training and assessment in successive phases.

3. Level 2 (Intermediate)
The 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)
The level of competency required to operate and interact as a copilot 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.
FOURTH SCHEDULE

REGULATION 119

KNOWLEDGE AND SKILL REQUIREMENTS FOR AIRCRAFT MAINTENANCE ENGINEERS LICENSING

1. The subjects relevant to the knowledge and skill requirements for all Licence Categories specified in regulation 5(8) are presented in this Schedule in a Modular format.

2. The examinations for each Category of Licence, and its Sub-Divisions where appropriate, shall be based on a number of the Modules as indicated in the Module/Category relationship set out in the Table below.

3. From the Table it will be noted that the modular arrangements recognise that major areas of the subjects are common to more than one Licence Category or its Sub-Divisions. Thus, when an existing Licence is to be extended to include another Category or Sub-Division, those Modules that have been satisfied by previous examinations may be excluded.

4. Each module is numbered and contains a series of syllabus subject headings. Each subject is then further expanded in more detail against ‘level numbers’ corresponding to Licence Without Type Rating (LWTR) and Type Rating (TR). This expansion of detail provides an indication of the degree/level of knowledge, experience, competence and skill in aeronautical engineering required by the Regulations.

5. There are three level numbers and they are defined as follows:
   (a) Level 1: General appreciation of principles and familiarisation of the subject;
   (b) Level 2: Comprehension of principles and salient features with a practical ability to assess operational condition;
   (c) Level 3: Detailed knowledge of all aspects of the subject.

6. In applying the above levels to the subjects which, in particular relate to aircraft, engines, systems and items of equipment, the following aspects shall be taken into account:
   (a) theoretical principles;
   (b) constructional arrangements, functional and design features;
   (c) maintenance practices;
   (d) normal, deteriorated and failed conditions.
### Schedule: MODULE / CATEGORY RELATIONSHIP

<table>
<thead>
<tr>
<th>Category Module</th>
<th>A- Aeroplanes</th>
<th>'C' - Engines</th>
<th>'A' &amp; 'C'</th>
<th>'A' &amp; 'C'</th>
<th>- X -</th>
<th>'R' - Radio</th>
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## MODULAR KNOWLEDGE AND SKILL SUBJECTS
### FOR AIRCRAFT MAINTENANCE ENGINEER

### Module 1 Regulations

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<th>Syllabus Subject</th>
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<td>Maintenance Engineers’ Licences &amp; Authorisations</td>
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<td>Civil Aviation Regulations requirements</td>
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<td>Penalties – under statutory law and resulting from civil law suits</td>
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<td>Categories - applicability</td>
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<td>Overlap of category applicability</td>
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<td>Relevant Airworthiness Notices and other Authority guidance manuals</td>
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<td>External, and internal markings and signs, e.g. nationality and registration no smoking and fasten seat belt, placards and requirements, doors and exits</td>
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<td>Aerial work, including parachuting, glider towing etc – certification</td>
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<td>Maintenance Schedules/ programmes</td>
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<td>AOC and AMO interface</td>
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**Module 2  Basic Engineering Practices**

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<td>Engineering Drawings and Technical Information</td>
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<td>Drawing details-common practices: plan, elevations, isometric, sections, scale, dimensional and indicating presentation</td>
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<td>Use, validity control, interpretation</td>
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<td>Service bulletin and modification data</td>
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<td>Mathematics</td>
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<td>Simple calculations: measurements, angles, graphs, metric/imperial, volume, forces, moments, centre of gravity</td>
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<td>Transposition of formulae, Powers of numbers, Binary notation, Simple equations, Conversion of units</td>
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<td>Resolution of forces</td>
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<td>Pressure/volume/temperature of gases</td>
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<td>Density, specific gravity, Pressure</td>
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<td>Hydraulics: basic principles, liquids in flow and static conditions</td>
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<td>Basic principles of motion, acceleration, centrifugal, centripetal forces, friction</td>
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<td><strong>Landing Gear and Brakes</strong></td>
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<td>Wheels, tyres, shock absorbers, castering, steering methods</td>
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<td>2 Simple hydraulic brakes, i.e. master cylinder to wheel-brake unit</td>
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<td><strong>Refurbish/Overhaul of Aircraft</strong></td>
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<td>Preparation of the aircraft–cleaning, access dismantling, jacking and trestling, furnishing removal</td>
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<td>Preparation of inspection reports and establishment of work required</td>
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<td>Final inspection – preparation of final reports and records/log book entries</td>
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<td>Mandatory modifications, Inspections, Service bulletins, Airworthiness Directives applicable to the type rating sought</td>
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<td><strong>Overhaul/Repair of Parts/components</strong></td>
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<td>Overhaul data – requirements, documentation, work sheets, inspection stages, testing</td>
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<td>Use and control of workshop inspection aids including non-destructive test equipment</td>
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<td>Overhaul and testing procedures for component parts of pneumatic, hydraulic, air conditions, oxygen, anti-icing, de-icing, fire extinguishing and rotorcraft transmission systems</td>
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<td>Assembly procedures and approved repair schemes applicable to major components</td>
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<td>Inspections necessary before, during and after repair, including checking of alignment and symmetry</td>
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<td>Repair, inspection and testing of tanks, heat exchangers, fuel and oil systems, and all types of control systems relevant to the Licence category sought</td>
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<td><strong>Facilities</strong></td>
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<td>- Diseases – environmental effects</td>
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<td>- Plywoods</td>
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<td>- Tautening, heat shrinking</td>
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<td>- Flap systems – pneumatic</td>
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<td>- 2 Simple asymmetric protection</td>
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<td>- 2 Hydraulic</td>
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<tr>
<td>- Stall sensing and warning – simple systems, e.g. vane or reed types</td>
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<td>- Basic auto pilots – simple systems</td>
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<td>- Inputs into main controls- function testing – attitude, heading</td>
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**MODULE 4(b) CATEGORY ‘A’ – AEROPLANES**

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<td>Shock wave</td>
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<td>Wing: box/integral tank construction</td>
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<td>Pressure-loaded skin, bulkheads, windows, windscreens, doors</td>
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<td><strong>Large aircraft paint and protective Finishing processes</strong></td>
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<td><strong>Cargo holds</strong></td>
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<td><strong>Venting and draining</strong></td>
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<td><strong>Sound proofing</strong></td>
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Materials – non-Metal:

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<th><strong>Furnishings</strong></th>
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<tbody>
<tr>
<td><strong>Upholstery</strong></td>
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<tr>
<td><strong>Toilet and galley partitioning</strong></td>
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<td><strong>Carpets and Curtains</strong></td>
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<td><strong>Particle boards and plastic laminates</strong></td>
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<tr>
<td><strong>Fire resistance/escape requirements</strong></td>
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<td><strong>Passenger seats</strong></td>
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<td><strong>Crew seats – cabin and flight crew</strong></td>
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Systems:

(1) Flight Control

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<tr>
<td><strong>Powered controls</strong></td>
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<tr>
<td><strong>Spoiler, air/speed brake, lift dump</strong></td>
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<tr>
<td><strong>Lift augmentation-LE droop, slats/flaps</strong></td>
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<tr>
<td><strong>Flap operating systems – large transport aircraft</strong></td>
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<td><strong>Flap asymmetric and alternate operation</strong></td>
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<td><strong>Stall sensing-stick shake</strong></td>
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<td><strong>Stick push/nudge</strong></td>
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<td><strong>Electronic control system</strong></td>
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<td><strong>Fly by wire</strong></td>
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(2) Hydraulic

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<td><strong>Variable delivery systems</strong></td>
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<td><strong>Accumulator/cut-out dependent system</strong></td>
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<td><strong>Pressure/volume control</strong></td>
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<td><strong>Pressure-reducing valves</strong></td>
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<td><strong>Fire-resistant fluids-temperature, contamination, compatibility</strong></td>
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<td><strong>Pressurised reservoirs</strong></td>
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<td><strong>Multiple system provision</strong></td>
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<td><strong>Alternate systems-HYRAT/hydraulic motors</strong></td>
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<td><strong>Electrically-powered and air –driven systems</strong></td>
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<td><strong>Leak protection systems – system isolation, ‘fused’ systems, priority control</strong></td>
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<td><strong>Internal leakage – cause and effects – acceptability</strong></td>
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(3) Landing Gear

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<td><strong>Multiple axles and wheels</strong></td>
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<td><strong>Bogey beams</strong></td>
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<td><strong>Door sequencing</strong></td>
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<td><strong>Main and alternate brake provision</strong></td>
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<td><strong>Anti-skid system-electronic and mechanical-aquaplaning</strong></td>
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<td><strong>Landing gear unsafe protection</strong></td>
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<td><strong>Alternate lowering</strong></td>
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<td><strong>Weight on/weight off sensing</strong></td>
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<td><strong>Powered steering – retraction self centring</strong></td>
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(4) Pneumatic (ATA 36)

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<td>6.4 Toilets, Waste and Water, Galley Services</td>
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Module 6  Category ‘C’ – Piston Engines in Aeroplanes, Rotorcraft and Airships

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<th>Syllabus Subject</th>
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<td>Principles, Terminology. Definitions and Laws</td>
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<td>Ground running – principles and problems</td>
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<td>Engine overhaul: General</td>
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<td>Overhaul as a condition control process – its advantages and disadvantages</td>
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<td>Familiarity with the operating environment of piston engines in aircraft</td>
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<td>Sudden stoppage – over-revving, over-boosting, over-heating</td>
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<td>Facilities: shop layout – stores; work environment; equipment for cleaning, inspection, rework and testing</td>
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<td>Control of precision measuring instruments and equipment</td>
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<td>Acceptability of third party work/opinions/reports/recommendations e.g. manufacturers and their agents/other agencies</td>
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<td>Use of experts and expert opinion</td>
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<td><strong>Piston Engine General Consideration</strong></td>
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<td>Crankcase breathing</td>
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<td>Propeller shaft sealing</td>
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<td>Propeller attachment provision</td>
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<td>Camshaft</td>
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<td>Casings, mountings and accessories drive</td>
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<td>Crankshaft, balance weights, main bearings</td>
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<td>Auxiliary drives, internal lubrication provisions</td>
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<td>Seals and sealing materials</td>
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<td>Oil coolers and thermostatic valves</td>
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<td>Oil pumps, filtering, pressure control</td>
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<td>Fuel pumps – engine driven</td>
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<td>Ignition and valve timing provision</td>
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<td>Drive pulleys</td>
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<td>Hardness testing, fits and clearances Dowels and blind holes</td>
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<td>Sequential torque assembly – retorquing requirements</td>
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<td>Cooling baffles – hottest cylinder</td>
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<td>Rear covers</td>
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<td>Gear trains</td>
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</table>
Camshaft and valve operating mechanisms  
Crankshaft, connecting rods – bearings  
Lubrication systems–passages, jets, pumps, pressure relief valves, coolers, thermostatic valves, filters and strainers  
Sealing-slinger rings, and mechanical flow control  
Crank cases, rear covers, sumps  
Engine mounting provisions  
Governor drive provision  
Induction and exhaust manifolds  
Reduction gears, assemblies and housings  
Superchargers/turbochargers  
Carburettor/injection systems  
Hoses and pipes  
Electrical wiring  
Ignition harness  
Non-Destructive Testing  
2 -  
Eddy current/ultrasonic/X-ray/gamma ray/ magnetic particle techniques – status and approval  
Approved NDT organisations  
Interpretation of results  
Certification of inspection completion/acceptability of the condition found  
Welding/Brazing  
2 -  
Preparation – fluxes, welding/brazing rods  
Expansion/contraction effects and control  
Hollow parts – internal protection  
Welding methods: gas/arc/resistance welding  
Brazing/hard soldering methods  
Approval of welders  
Inspection of welded/brazed joints  
Release, Preservation, Storage and Transportation  
2 -  
Log Books: certification, reports, references, recording of parts, limits, concessions, modifications, alternate parts, mandatory modifications and inspections  
Service information leaflets, etc  
Lifed parts, salvage schemes/oversized parts  
Inhibiting: internal, external, injectors, carburettors, turbochargers  
Systems:  
(1) Carburation and induction  
1 2  
Air intake – normal/alternate – filtering  
Manifolds  
Anti-icing provision  
Float type and injection systems  
Engine driven fuel pumps  
Priming systems  
Mixture/idle cut-off/throttle control  
(2) Ignition  
1 2  
Magneto  
Ignition harness  
Spark plugs – reach variations, operating temperature – long life  
Switch control  
Timing (internal/external)  
Advancing and retarding mechanisms  
Screening  
Starting aids – impulse couplings and ignition boosting  
(3) Starting  
1 2  
Starter motors – manuals, Bendix, solenoid, pre-engaged – engagement methods
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<td>Engine condition assessment using oil system analysis</td>
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<td>(9) Engine Instruments</td>
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<td>Pressure and temperature</td>
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<td>Cylinder head temperature</td>
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<td>Exhaust gas temperature</td>
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<td>Electronic Condition Monitoring</td>
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### Module 7  
**Category ‘C’ – Fixed and Variable Pitch Propellers**

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<td>Power conversion</td>
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<td>Aerofoil aerodynamic principles</td>
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<td>Pitch coarse/fine, high/low, reverse</td>
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<td>Feathering</td>
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<td>Pilot control and governor sensing</td>
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### Module 8  
**Category ‘C’– Turbine Engines in Aeroplanes, Rotorcraft and Airships**

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<td>Gas flow path – temperature, velocity and pressure</td>
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<td>Compression</td>
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<th>Constructional Arrangement</th>
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<td>Materials</td>
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<td>Modular construction</td>
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<td>Engine inspection capability and condition assessment provision</td>
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<td>Principles of ‘condition monitored’ and ‘on condition’ maintenance programmes</td>
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<td>Supersonic flight air intake geometry control systems</td>
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<td>Propeller and Shaft Power Provision</td>
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<td>Reduction gearing</td>
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<td>Power and auxiliary drive</td>
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<tr>
<td>Rotational speed and power control, safety systems</td>
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<td>Principles of torque/power/rotational speed in power transmission by rotating shafts</td>
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**Systems:**

(1) **Thrust Reversing**

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<td>General arrangements</td>
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<td>Control/interlocks</td>
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<td>Safety features</td>
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<td>Operating systems – hydraulic/pneumatic mechanical</td>
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<td>Turbine and fan applications</td>
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(2) **APUs**

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(3) **Fuel Control**

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<td>Temperature and power factors</td>
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<td>Burners – primary and secondary provision</td>
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<td>Burners – shaft injection, torch ignition</td>
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### (4) Fuel Systems

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<th>Tanks – cells and integral systems</th>
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<tr>
<td>Refueling/defuelling, crossfeed, jettison, venting, transfer</td>
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<tr>
<td>Scavenging – jet pumps</td>
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<td>Boost pumps, backing pumps</td>
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<td>LP/HP valves and control</td>
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<td>Tank selection</td>
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<td>Internal/external pipes, hoses, connectors</td>
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<td>Fuel types</td>
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<td>Static electricity – effects and control</td>
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<td>Leak assessment and control</td>
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<td>Fuel quantity indication – ‘Level Sticks’</td>
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<td>Water contamination – effects and control</td>
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<td>SG/Density/volume/weight</td>
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<td>Filtering and heating</td>
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### (5) Water Injection

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<td>Tankage</td>
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<td>Replenishing/dumping</td>
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<td>Pumps</td>
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### (6) Lubrication

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<td>Filters, screens and magnetic plugs/chip detectors</td>
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<td>Heat exchangers oil/fuel, oil/air</td>
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<td>Sealing-labyrinth seals, carbon seals, etc.</td>
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<td>Overboard drains – drains systems</td>
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<td>Lubrication of mains bearings, accessories and gear trains</td>
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<td>Contamination by hydraulic fluid/fuel</td>
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<td>Types of oil</td>
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<td>Internal/external pipes, hoses and passages – effects of heat</td>
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<td>Use of oil for ice protection – intake and fuel control</td>
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### (7) Cooling, Sealing and Bleed Air Services

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<td>Overboard dump – temperature monitoring</td>
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<td>Off-takes for other services – air conditioning, anti-icing, equipment drive, pressurizing of hydraulic reservoirs, water systems, etc.</td>
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<td>Centrifugal filters</td>
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### (8) Surge Protection and Airflow Control

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<th>1</th>
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<th>Bleed valves – operating systems</th>
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<td>Hot air systems – struts and intakes</td>
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<td>Fire detection</td>
<td>Overheat warning</td>
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<td>(11) Ignition</td>
<td>High energy ignition systems</td>
<td>Torch ignition</td>
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<td>(12) Starting</td>
<td>Starting cycle</td>
<td>Initiation – HP valves, termination, bleed valves, starter valves, power lever, self sustaining speeds</td>
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<td>(13) Controls</td>
<td>Power/throttle/thrust reverse</td>
<td>HP/LP valve controls – manual and electric</td>
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<tr>
<td>(14) Pods, Pylons, Cowlings and Mountings</td>
<td>General arrangements</td>
<td>Services and controls – input/exit</td>
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<td>(15) Electrical</td>
<td>a.c. generators – CSDs/IDGs</td>
<td>Starter/generators</td>
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### Starter motor high current circuits
- CSDs – principles of operation, disconnect/reconnect, lubrication/hydraulic operation, filters, coolers

### (16) Instruments

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<td>Torque indication</td>
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<td>Fuel contents/oil contents- electrical and electronic</td>
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### Ground Handling

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<td>Ground running – noise control – power checking</td>
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<td>Functional checks of engine associated services</td>
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### Module 9

#### Category ‘A’ & ‘C’– Rotorcraft

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#### Systems:

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<td>Collective/cyclic/directional</td>
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<td>Hydraulic</td>
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<td>Rotor heads – main and tail rotor</td>
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<td>Articulated, rigid, semi-rigid, teetering</td>
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<td>Swash plate/spider control input methods</td>
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<td></td>
<td>Blades: construction and materials; balancing: static, dynamic, span wise, chord wise</td>
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<tr>
<td>Tracking: flag and in-flight methods</td>
<td>Tabs/trailing edge bending</td>
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<tr>
<td>Vibration – effects and analysis</td>
<td>BIM indicators</td>
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<td>Automatic Pilots/Autostabilisers – Control interface</td>
<td>System components – component replacement and subsequent testing</td>
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<td>(2) Ice and Rain Protection</td>
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<td>(3) Heating and Ventilation</td>
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<td>Transmission systems</td>
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<td>Tail rotor drive: drive shafts, intermediate gearboxes, tail rotor gearboxes</td>
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<td>Lubrication systems: oils, coolers, cooling fans, filters, magnetic plugs, chip detectors, pumps, pressure control</td>
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**Module 10**  
Category ‘A’ & ‘C’– Airships

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### Module 13  Human Performance

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**Module 24**  
**Automatic Pilots - Aeroplanes Category ‘X’**

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FIFTH SCHEDULE

OFFENCES AND PENALTIES

Regulation 197(8) and (9)

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Minister for …