Republic of South Sudan

Laws of South Sudan

CIVIL AVIATION AUTHORITY PERSONNEL LICENSING REGULATIONS, 2026

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ARRANGMENT OF REGULATIONS

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

CHAPTER IV
VALIDATION, CONVERSION OF FOREIGN AIRCRAFT MAINTENANCE ENGINEERS LICENCE, RECOGNITION OF MILITARY AIRCRAFT MAINTENANCE PERSONNEL QUALIFICATIONS AND CONVERSON OF FLIGHT OPERATIONS OFFICERS' LICENCE

CHAPTER V
GENERAL REQUIREMENTS FOR TRAINING AND TESTING FOR PILOTS LICENCES, RATINGS AND AUTHORISATIONS

CHAPTER VI
LICENCES AND RATINGS FOR PILOTS

6.1 General

55. Requirements for the Issue of Class and Type Ratings
56. Use of a Flight Simulation Training Device for Acquisition of Experience and Demonstration of Skill
57. Requirements for Instrument Rating.
58. Requirements for Authorization to Conduct Instructions.
59. Crediting of Flight Time and Theoretical Knowledge
60. Curtailment of Privileges of Pilots

6.2 Student Pilot Licence

61. Eligibility Requirements for Student Pilot Licence
62. Solo Flight Requirements
63. Privileges and Limitations
64. Solo Flight Cross-Country Requirements
65. Renewal Requirements

6.3 Private Pilot Licence

66. Eligibility Requirements for Private Pilot Licence
67. Aeronautical Knowledge and Skills Requirements For PPL
68. Privileges And Limitations of The Holder of PPL
69. Specific Requirements for The Issuance of Aeroplane Category Rating Flight Instructions
70. Aeronautical Experience and Skill Requirements for PPL with an Aeroplane Category Rating
71. Specific Requirements for The Issue of The Helicopter Category Rating – Experience and Flight Instructions
72. Specific Requirements for The Issue of The Powered-Lift Category Rating – Experience and Flight Instructions
73. Specific Requirements for The Issue of The Airship Category Rating
74. Renewal Requirements

6.4 Commercial Pilot Licence

75. Eligibility Requirements for Commercial Pilot Licence Or CPL
76. Aeronautical Knowledge Requirements For CPL
77. Specific Requirements for The Issue of The Aeroplane Category Rating –Experience and Flight Instructions
78. Specific Requirements for The Issue of The Helicopter Category Rating – Experience and Flight Instructions
79. Specific Requirements for The Issue of The Powered-Lift Category Rating – Experience and Flight Instructions
80. Specific Requirements for The Issue of The Airship Category Rating – Experience and Dual Instructions
81. Specific Requirements for The Issue of The Lighter Than Air or Balloon Category Rating – Experience and Dual Instructions
82. Privileges and Limitations

6.5 Multi-Crew Pilot Licence

6.6 Airline Transport Pilot Licence

6.7 Instrument Rating

6.8 Flight Instructor Rating

6.9 Glider Pilot Licence

200. Issue of Medical Certificate
201. Denial of Medical Certificate
202. Medical Confidentiality
203. Issue of Medical Certificate with a Limitation
204. Duration of Medical Certificate
205. Renewal of Medical Certificate
206. Medical Assessments
207. Medical Requirements
208. Requirements for Medical Assessments
209. Physical and Mental Requirements
210. Colour Perception Requirements
211. Hearing Test Requirements
212. Issue of Medical Certificate for Persons Under Oral Drugs
213. Visual Requirements-General
214. Vision Testing Requirements
215. Acceptability of Correcting Lenses
216. Distance Vision Requirements
217. Near Vision Requirements
218. Ear and Related Structures
219. Hearing Requirements
220. Cardiovascular General
221. Blood Pressure and Circulation
222. Electro-Cardiography Examination
223. Neurological Requirements
224. Respiratory Capability
225. Radiology (X-Ray) Evaluation
226. Vestibular Apparatus
227. Bones, Muscles and Tendons
228. Endocrine System
229. Diabetic Applicant
230. Gastrointestinal and Digestive Tract
231. Kidneys and Urinary Tract
232. Lymphatic Glands or Disease of The Blood
233. Gynaecological Conditions
234. Pregnancy.
235. Speech Defects
236. Acquired Immunodeficiency Syndrome

Class 1 Medical Assessment

237. Class 1 Medical Assessment
238. Physical and Mental Requirements
239. Visual Requirements
240. Hearing Requirements

SCHEDULES

FIRST SCHEDULE SPECIFICATIONS FOR PERSONNEL LICENCES

SECOND SCHEDULE LANGUAGE PROFICIENCY REQUIREMENTS

THIRD SCHEDULE REQUIREMENTS FOR THE ISSUE OF THE MULTI CREW PILOT LICENSE

FOURTH SCHEDULE KNOWLEDGE AND SKILL REQUIREMENTS FOR AIRCRAFT MAINTENANCE ENGINEERS LICENSING

FIFTH SCHEDULE OFFENSES AND PENALTIES

CIVIL AVIATION AUTHORITY PERSONNEL LICENSING REGULATIONS, 2026

In exercise of the powers conferred upon me under the provisions of section 99 of the South Sudan Civil Aviation Authority Act, 2012 (as amended) of the Ministry of Transport, I do hereby issue the following Regulations:

CHAPTER I
PRELIMINARY PROVISIONS

1. Title and Commencement

These Regulations may be cited as the **"South Sudan Civil Aviation Authority Personnel Licensing Regulations, 2026"** and shall come into force on the date of its signature by the Minister.

2. Purpose

The purpose of this regulation is to provide for a legal framework to regulate the Personnel Licensing Procedures in the Republic of South Sudan.

3. Authority and Application

(1) These regulations is drafted in accordance with the provision of (99) of the South Sudan Civil Aviation Act, 2012 (as amended).

(2) These Regulations shall apply to personnel licensed by the Authority or persons engaged in any operations governed by any part contained herein.

4. Interpretation

In these Regulations, unless the context otherwise requires, the following words and expressions shall carry the meaning assigned to them respectively:

"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;

"Certify as Airworthy" means to certify that an aircraft or parts thereof comply with current airworthiness requirements after maintenance has been performed on the aircraft or parts thereof.

"Adopted Competency" means a group of competencies with their associated description and performance criteria adopted from ICAO competency framework that an organization uses to develop competency-based training and assessment for a given role.

"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;

"Appropriate Airworthiness Requirements" means the comprehensive and detailed airworthiness codes established, adopted or accepted by a contracting state for the class of aircraft, engine or propeller under consideration.

"Airmanship" means the consistent use of good judgment and well-developed knowledge, skills and attitudes to accomplish flight objectives;

"Air Traffic Control Service" means a service provided for the purpose of:

(a) preventing collisions:

(i) between aircraft; and

(ii) on the maneuvering area, between aircraft and obstructions; and

(b) expediting and maintaining an orderly flow of traffic;

"Air Traffic Control Unit" a generic term meaning variously, area control canter, 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 surface;

"Aircraft Avionics" means any electronic device, including its electrical part for use in an aircraft, including radio, automatic flight control and instrument systems;

"Aircraft Category" means the classification of aircraft according to specified basic characteristics such as aeroplane, rotorcraft, glider and lighter-than-air and powered-lift aircraft;

"Aircraft Certificated for Single-Pilot Operation" means a type of aircraft which the State of Registry has determined, during the certification process, can be operated safely with a minimum crew of one pilot;

"Aircraft Required to Be Operated 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 by the air operator certificate;

"Airship" means a power-driven lighter –than-air aircraft;

"Aircraft type" means all aircraft of the same basic design;

"Aircraft Type Of" means all aircraft of the same basic design including all modifications thereto except those modifications which result in a change in handling or flight characteristics;

"Airframe" means the fuselage, booms, nacelles, cowlings, fairings, air foil surfaces including rotors, but excluding propellers and rotating air foils of a power plant, landing gear of an aircraft, accessories and controls;

"Appliance" means any instrument, mechanism, equipment, part, apparatus, appurtenance, or accessory, including communications equipment, that is:

(a) used or intended to be used in operating or controlling an aircraft in flight:
(b) installed in or attached to the aircraft, and
(c) not part of an airframe, powerplant, or propeller.

"Appropriate Airworthiness Requirements" means the comprehensive and detailed airworthiness codes established, adopted or accepted by a contracting state for the class of aircraft, engine or propeller under consideration.

"Approved Maintenance Organisation or 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 a training conducted under special curricula and supervision approved by the Authority;

"Approved Training Organization" means an organization approved by and operating under the supervision of the Authority in accordance with the Civil Aviation (Approved Training Organizations) Regulations and these Regulations to perform approved training;

"ATS Surveillance Service" means a service provided directly by means of an ATS surveillance system;

"ATS Surveillance System" is a generic term meaning variously, ADS-B, PSR, SSR or any comparable ground-based system that enables the identification of aircraft;

"Authorised Instructor" means a person who:

(a) holds a valid approved instructor licence, endorsement or authorization 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 Regulation;

"Authority" means South Sudan Civil Aviation Authority;

"Automatic Validation of a Licence" means rendering a licence provided for in valid pursuant to a formal agreement between Contracting States under common licensing regulations

"Aviation Repair Specialist or 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 specialty area for which the aviation repair specialist is authorised but only in connection with employment by an Approved Maintenance Organization;

"Balloon" means a non-power-driven lighter-than-air aircraft;

"Basic Training" means fundamental knowledge and skills appropriate to disciplines pursued in the traffic safety surveillance system environment;

"Cabin Crew Member" means a crew member who performs in the interest of safety and comfort of passengers, duties assigned by the operator or the PIC of the aircraft, but who shall not act as a flight crew member;

"Certify as Airworthy" means to certify that an aircraft or parts thereof comply with current airworthiness requirements after maintenance has been performed on the aircraft or parts thereof;

"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;

"CNS-ATM Facility" means communication, navigation, and surveillance or air traffic management facilities used in provision of air navigation services;

"Command and Control (C2) Link" mean the data link between the remotely piloted aircraft and the remote pilot station for the purposes of managing the flight;

"Commercial Air Transport Operation" means an aircraft operation involving the transport of passengers, cargo or mail for remuneration or hire;

"Competency" means a dimension of human performance that is used to reliably predict successful performance on the job, manifested and observed through behaviours that mobilize the relevant knowledge, skills and attitudes to carry out activities or tasks under specified condition;

"Competency-Based Training and Assessment" means training and assessment that are characterized by a performance orientation, emphasis on standards of performance and their measurement, and the development of training to the specified performance standards.

"Competency Standard" means a level of performance that is defined as acceptable when assessing whether or not competency has been achieved.

"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;

"Conditions" means anything that may qualify a specific environment in which performance will be demonstrated.

"Credit" means recognition of alternative means or prior qualifications;

"Contracting State" means a State that is signatory to the Convention on International Civil Aviation;

"Co-pilot" means a licensed pilot serving in a piloting capacity other than as pilot in command, 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 licence, rating, qualification, authorisation, or recurrency required under the Civil Aviation Approved Training Organizations Regulation and these Regulations;

"Crew Resource Management or 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;

"Detect and Avoid" means the capability to see, sense or detect conflicting traffic or other hazards and take the appropriate action;

"Designated Medical Examiner" means a person qualified and licenced 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 these Regulations;

"Dual Instruction Time" means flight time during which a person is receiving flight instruction from a properly authorized pilot on board the aircraft or from a properly authorized remote pilot using the remote pilot station during a remotely piloted aircraft flight;

"Equipment" means portion of a system that performs a function that contributes to a system output;

"Error" means an action or inaction by an operational person that leads to deviations from organizational or the operational person's intentions or expectations;

"Error Management" means the process of detecting errors and responding to them with countermeasures that reduce or eliminate the consequences of errors and mitigate the probability of further errors or undesired states;

"Evaluator" means a person employed by an 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, or modifications of any article;

"Flight Crew Member" means a licenced crew member charged with duties essential to the operation of an aircraft during flight duty period;

"Flight Plan" means specified information relative to an intended flight or portion of a flight of an aircraft;

Note 1— the term flight plan may be prefixed by the words "preliminary", "filed", "current" or "operational" to indicate the context and different stages of a flight.

Note 2— When the word "message" is used as a suffix to this term, it denotes the content and format of the flight plan data as transmitted.

"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 helicopter rotor blades start turning until the moment the 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;

"Flight Simulation Training Device" means any one of the following three types of apparatus in which flight conditions are simulated on the ground:

(a) a flight simulator, which provides an accurate representation of the cockpit of a particular aircraft type or an accurate representation of the remotely piloted aircraft system or RPAS to the extent that the mechanical, electrical, electronic, aircraft systems control functions, the normal environment of flight crew members, and the performance and flight characteristics of that type of aircraft are realistically simulated;

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

(c) a basic instrument flight trainer, which is equipped with appropriate instruments, and simulates the cockpit environment of an aircraft or the RPAS environment in flight in instrument flight conditions;

"Flight Time-Remotely Piloted Aircraft System" means the total time from the moment a command and control (C2) link is established between the remote pilot station (RPS) and the remotely piloted aircraft (RPS) for the purpose of taking-off or from the movement the remote pilot receivers control following handover until the movement the remote pilot completes a handover or the C2 link between the RPS and the RPA is terminated at the end of the flight.

"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;

"Glider Flight Time" means the total time occupied in flight, whether being towed or not, from the moment the glider first moves for the purpose of taking off until the moment it comes to rest at the end of the flight;

"Handover" means the act of passing piloting control from one remote pilot station to another

"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;

"**ICAO Competency Framework**" means a competency framework, developed by ICAO, is a selected group of competencies for a given aviation discipline where each competency has an associated description and observable behaviours.

"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, where a landing is not completed, to a position at which holding or enroute obstacle clearance criteria apply;

"Instrument Flight Time" means the time during which a pilot is piloting an aircraft solely by reference to instruments and without external reference points or a remote pilot is piloting a remotely piloted aircraft, solely by reference to instruments and without external reference points;

"Instrument Ground Time" means the time during which a pilot is practicing, on the ground, simulated instrument flight in a flight simulation training device approved by the Authority;

"Instrument Time" means time in which cockpit instruments are used as the sole means for navigation and control;

"Instrument Training" means training which is received from an authorised instructor under actual or simulated instrument meteorological conditions;

"Knowledge Test" means a test on the aeronautical knowledge areas required for a licence or rating that can be administered in written form or by a computer;

"Licenced Aircraft Maintenance Engines LAME Course" means a training course for maintenance licence ratings in airframe, power plant and avionics;

"Licensing Authority" means the Authority designated by a Contracting State as responsible for the licensing of personnel

"Licenced 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

"Maintenance" means the performance of tasks required to ensure the continuing airworthiness of an aircraft, including any one or combination of overhaul, inspection, replacement, defect rectification, and the embodiment of a modification or repair;

"Medical Assessor" means a physician, appointed by the Authority, qualified and experienced in the practice of aviation medicine and competent in evaluating and assessing medical conditions of flight safety significance;

"Medical Certificate or Medical Assessment" means the evidence issued by the Authority confirming 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;

"Monitoring" means a cognitive process to compare an actual to an expected state;

"Night" means the hours between the end of evening civil twilight and the beginning of morning civil twilight where Civil twilight ends in the evening when the centre of the sun's disc is 6 degrees below the horizon and begins in the morning when the centre of the sun's disc is 6 degrees below the horizon;

"NOTAM" means Notice to Airmen;

"**Observable Behavior or OB"** means single role-related behaviour that can be observed and may or may not be measurable;

Pilot or To Pilot To" means to manipulate the flight controls of an aircraft during flight time;

"Performance Criteria" means statements used to assess whether the required levels of performance have been achieved for a competency where performance criterion consists of an observable behaviour, condition or conditions and a competency standard;

"Pilot Flying or PF" means the pilot whose primary task is to control and manage the flight path and the secondary tasks are to perform non-flight path related actions such as radio communications, aircraft systems, other operational activities and to monitor other crewmembers;

"Pilot Monitoring or PM" means a pilot whose primary task is to monitor the flight path and its management by the PF and the secondary tasks are to perform non–flight path related actions such as radio communications, aircraft systems, other operational activities and to monitor other crewmembers;

"Pilot-In-Command or 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- in- Command Under Supervision" means a co-pilot performing under the supervision of the pilot-in-command, the duties and functions of a pilot-in-command, in accordance with the method of supervision acceptable to the Authority;

"Pilot Time" means that time a person:

(a) serves as a required pilot;
(b) receives training from an authorised instructor in an aircraft, or approved synthetic flight trainer; or
(c) gives training as an authorised instructor in an aircraft, or approved synthetic flight trainer;

"Powered-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 lift during these flight regimes and on non-rotating air foil (s) for lift during horizontal flight;

"Power Plant" 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;

"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 aerofoils 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 10,000ft 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 or 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 a device for propelling an aircraft that has blades on a power plant 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 air foils of power plants;

"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;

"Qualification Training" means job category related knowledge, attitude and skills appropriate to the discipline to be pursued;

"Rated Air Traffic Controller" means an air traffic controller holding a licence and valid ratings appropriate to the privileges to be exercised;

"**Rating**" means an authorisation entered on or associated with a licence or certificate and forming part thereof, stating special conditions, privileges or limitations pertaining to such licence or certificate;

"Rated Air Traffics Service Equipment Personnel or ATSEP" means air traffic personnel holding valid rating(s) appropriate to the privileged to be exercised;

"Remote Co-Pilot" means a licenced remote pilot serving in any piloting capacity other than as remote pilot-in-command but excluding a remote pilot who is in the remote pilot station for the sole purpose of receiving flight instruction;

"Remote Flight Crew Member" means a licenced flight crew member charged with duties essential to the operation of a remotely piloted aircraft system during a flight duty period;

"Remote Pilot" means a person charged by the operator with duties essential to the operation of a remotely piloted aircraft and who manipulates the flight controls, as appropriate, during flight time;

"Remote Pilot-In-Command" means the remote pilot designated by the operator as being in command and charged with the safe conduct of a flight;

"Remote Pilot Station or RPS" means the component of the remotely piloted aircraft system containing the equipment used to pilot the remotely piloted aircraft;

"Remotely Piloted Aircraft or RPA" means an unmanned aircraft which is piloted from a remote pilot station;

"Remotely Piloted Aircraft System or RPAS" means a remotely piloted aircraft, its associated remote pilot station or stations, the required command and control links and any other components as specified in the type design;

"Rendering a Licence Valid or Validation" means the action taken by the Authority, as an alternative to issuing its own licence, in

accepting a licence issued by any other Contracting State as the equivalent of its own licence;

"Repair" means 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 crew members, aircraft maintenance personnel and air traffic controllers;

"Sign a Maintenance Release or to Sign a Maintenance Release" means to certify that maintenance work has been completed satisfactorily in accordance with appropriate airworthiness requirements, by issuing the maintenance release in the case of a release not issued by an approved maintenance organization or in the case of a release issued by an approved maintenance organization;

"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;

"Solo Flight Time Flight Time — Remotely Piloted Aircraft Systems" means Flight time during which a student remote pilot is controlling the remotely piloted aircraft system, acting solo;

"Specific Operating Provisions" means a document describing the ratings, class or limited containing reference material and process specifications used in performing repair work, along with any limitations applied to an AMO;

"State of Registry" means the State on whose register the aircraft is entered.

"State Safety Programme or (SSP)" means an integrated set of regulations and activities aimed at improving safety;

"Substance" means alcohol, sedatives, hypnotics, anxiolytics, hallucinogens, opioids, cannabis, inhalants, central

nervous system stimulants such as cocaine, amphetamines, and similarly acting sympathomimetic, phencyclidine or similarly acting arylcyclohexylamines, and other psychoactive drugs and chemicals;

"Substance Abuse" means any of the following:

(a) the use of a substance in a situation in which that use was physically hazardous, if there has been at any other time an instance of the use of a substance also in a situation in which that use was physically hazardous; or

(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 licence 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:

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

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

(c) a basic instrument flight trainer, which is equipped with appropriate instruments, and which simulates the cockpit environment of an aircraft in flight in instrument flight conditions;

"System" means one or more types of electronic equipment and ancillary devices functioning to provide a service;

"System or Equipment Rating Training" means system or equipment knowledge, attitude and skills leading to recognized competency;

"Threat" means events or errors that occur beyond the influence of an operational person, increasing operational complexity and must be managed to maintain the margin of safety;

"Threat Management" means the process of detecting threats and responding to them with countermeasures that reduce or eliminate the consequences of threats and mitigate the probability of errors or undesired states;

"Training Program" means a program that consists of a course or courses courseware, facilities, 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; and

"VMC" means minimum control speed with critical engine inoperative

CHAPTER II
LICENCES, CERTIFICATES, RATINGS AND AUTHORISATIONS

5. License and Certificates Issued

(1) This regulation is established for licensing of the following personnel's:

(a) Flight crew:

(i) Student Pilot Licence or SPL;
(ii) private pilot or PPL — aeroplane, airship, helicopter or powered-lift;
(iii) commercial pilot or CPL— aeroplane, airship, helicopter or powered-lift;
(iv) multi-crew pilot or MPL — aeroplane;
(v) airline transport pilot or ATPL— aeroplane, helicopter or powered-lift
(vi) glider pilot;
(vii) free balloon pilot;
(viii) flight navigator;
(ix) flight engineer or FE; and
(x) remote pilot for aeroplane, airship, glider, rotorcraft, powered-lift or free balloon;

(b) Other personnel:

(i) aircraft maintenance engineer;
(ii) air traffic controller;
(iii) flight operations officer or flight dispatcher;
(iv) flight radio telephone operator;
(v) aeronautical station operator;
(vi) ground instructor; and
(vii) cabin crew member.

(2) Where the applicant does not meet the specific requirements for the issuance of the particular flight crew licence, he or she shall obtain a student pilot licence to enable him or her fulfil the eligibility requirements for pilot licence issued under this regulation.

(3) Personnel licences and certificates issued by the Authority shall conform to the specifications prescribed in the First Schedule to this Regulation and the applicable technical guidance materials

6. Ratings Issued

(1) The Authority may issue the following ratings for pilots:

(a) category ratings for:

(i) aeroplane;
(ii) rotorcraft;
(iii) glider;
(iv) free balloon;
(v) powered-lift;
(vi) airship of a volume of more than 4600 cubic metres;
(vii) remotely piloted aircraft CAT B; and remotely piloted aircraft CAT C

(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) helicopters certificated for single pilot operations and which have comparable handling, performance and other characteristics;
(iii) powered-lift category;
(iv) any aircraft considered acceptable by the Authority in accordance with the applicable technical guidance material;

(f) instrument ratings in the following aircraft:

(i) instrument – single engine aeroplane;
(ii) instrument – multi engine aeroplane;
(iii) instrument – single engine helicopter;
(iv) instrument – multi engine helicopter.

(g) night rating;

(h) flight instructor rating;

(i) ground instructor ratings:

(i) basic;
(ii) advanced; and
(iii) instrument.

(2) When the holder of a pilot licence seeks a licence for an additional category of aircraft, the Authority shall issue the licence holder with an additional pilot licence for the new category rating in accordance with sub-regulation (1) and any other requirements in this Regulation.

(3) For the powered lift category:

(a) the Authority may endorse a type rating for aircraft of the powered-lift category on an aeroplane or helicopter pilot licence provided the applicant meets the training requirement prescribed in Regulation 53 to this Regulation;

(b) the endorsement of the rating on the licence shall indicate that the aircraft is part of the powered-lift category.

(c) the training for the type rating in the powered lift category shall be completed during a course of approved training, shall take into account the previous experience of the applicant in an aeroplane or a helicopter as appropriate and incorporate all relevant aspects of operating an aircraft of the powered-lift category.

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

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

(6) 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 South Sudan.

(7) 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.

(8) The Authority may issue the following ratings for air traffic controllers:

(a) aerodrome control rating;
(b) approach control procedural rating;
(c) approach control surveillance rating;
(d) approach precision radar control rating;
(e) area control procedural rating; and
(f) area control surveillance rating

(9) The Authority may issue the following categories without type ratings for Aircraft Maintenance Engineer Licence:

(a) Category A;
(b) Category B1;
(c) Category B2;
(d) Category C

(10) The Authority may issue the specific or group type rating for Aircraft Maintenance Engineer Licence which may be granted for the following specific aircraft or engines:

(a) A1 Fixed Wing -Aeroplane Turbine;
(b) A2 Fixed wing -Aeroplane Piston;
(c) A3 -Helicopters Turbine;
(d) A4 -Helicopters -Piston;
(e) B1.1- Fixed Wing -Aeroplane Turbine
(f) B1.2-Fixed wing -Aeroplane Piston
(g) B1.3-Helicopter -turbine
(h) B1.4- Helicopter -piston
(i) B2 Avionics - fitted to all aircraft.

7. Aircraft Maintenance Engineers License or (AMEL) - for Holders of Licence Category A, C, A & C, X.

(1) For holders of aircraft maintenance engineers' licenses under category A, C, A & C, X and R, their licenses shall be converted by the Authority and issued the appropriate equivalent under the B1 or B2 category. upon request by the applicant.

(2) Conversion or issuance of AME licence referred to in sub-regulation (1) shall be subject to fulfilment of the relevant knowledge and skill requirements associated with the licence and privileges sought, in accordance with the procedures prescribed in the Fourth Schedule Part C

8. Authorizations and Designations Issued

(1) Authorization; The Authority may issue authorisations to personnel who meet the training and experience requirements as prescribed under this Regulation:

(a) flight engineer Instructor;
(b) type rating instructor;
(c) cabin crew member instructor; and
(e) aviation repair specialist or 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.

(3) Designation: The authority may designate personnel who meet the appropriate qualification, experience and competency requirements of this Regulation in the following areas for purposes of licensing, certification, Authorizations and approvals in accordance with the applicable technical guidance materials.

(a) knowledge test examiner;
(b) flight test examiner;
(c) aircraft maintenance practical(skill) test examiner;
(d) flight operations officer/flight dispatcher practical(skill) test examiner;
(e) air traffic control practical(skill) test examiner; and
(f) aviation medical examiner

(4) The authorizations and designations granted under this Regulation shall be valid for a period of a 12 months, unless the Authority determines otherwise according to the technical guidance material.

(5) Renewal or extension of an authorization or designation shall be subject to currency in the practice and provided the personnel exhibits consistence with regulatory and procedural requirements in accordance with the applicable technical guidance material.

9. Special Authorization for Non-Passenger Carrying Flights

(1) A holder of a flight crew licence shall not act either as pilot-in- command or co-pilot of an aeroplane, an airship, a helicopter or a powered- lift aircraft unless the holder has received authorization as follows:

(a) the appropriate class rating specified in Regulation 6(1)(b); or
(b) a type rating when required in accordance with the provisions of Regulation 6(1)(e).

(2) When a type rating is issued limiting the privileges to act as co-pilot, or limiting the privileges to act as pilot only during the cruise phase of the flight, such limitation shall be endorsed on the rating.

(3) For the purpose of training, testing, or specific special purpose non-revenue or non-passenger carrying flights, special authorization may be provided in writing to the licence holder by the Authority in place of issuing the class or type rating in accordance with this Regulation.

(4) Subject to sub- Regulation (3) authorization shall be limited in validity to the time needed to complete the specific flight.

10. Authority To Act as a Flight Crew Member and Remote Flight Crew Member

(1) A person shall not act as a flight crew member of an aircraft unless he or she holds a valid licence issued by the Authority showing compliance with the specifications of this Regulation and appropriate to the duties to be performed by that person.

(2) A person shall not act as a remote flight crew member of a Remotely Piloted Aircraft unless he or she holds a valid licence issued by the Authority showing compliance with the specifications of this Regulation and the Unmanned Aircraft Systems (UAS) Regulation appropriable to the scope of duties to be performed.

(3) All flight crew members shall carry their appropriate licences on board every aircraft engaged in international and domestic operations.

11. Validation of a License Issued by an ICAO Contracting State

(1) The Authority may render valid a licence issued by another ICAO contracting State as an alternative to the issuance of its own licence and shall after verification issue a certificate of validation to be carried with the foreign licence accepting it as the equivalent of its own licence.

(2) Where the Authority limits the authorization to specific privileges, the certificate of validation shall specify the privileges of the licence which are to be accepted as its equivalent.

(3) The duration of the validation shall not extend beyond the period of validity of the licence.

(4) The authorization ceases to be valid when the licence upon which it was issued is revoked or suspended by the issuing state.

12. Validation of a License Pursuant to a Formal Agreement Between East African Community (EAC) Partner States

(1) Notwithstanding the provisions in Regulation 11, the Authority shall automatically render valid a licence issued by another EAC Partner State provided that the State of issue of that licence:

(a) Has adopted common licensing Regulation;
(b) Is party to the formal agreement recognizing the automatic validation process;
(c) has implemented the harmonized EAC surveillance system to ensure the continuing implementation of the common licensing Regulation; and
(d) the state of licence issue is party to the agreement registered with ICAO pursuant to Article 83 of the Convention on International Civil Aviation.

(2) When issuing a licence subject to sub- Regulation (1), the Authority shall endorse on the licence to render it automatically valid in the EAC Partner States under the agreement, quoting the ICAO registration number and shall include a list of all States that are party to the agreement.

(3) For the purpose of this Regulation, common licensing Regulation refers to a common licensing regulatory framework that:

(a) is legally binding and directly applicable to the EAC Partner States party to the agreement recognizing the automatic validation process; and
(b) contains identical requirements for licence issuance, maintenance of competency and recent experience.

(4) Subject to the provision of sub- Regulation (1), the Authority shall automatically render valid the following licences within the EAC Partner States:

(a) flight crew licences
(b) aircraft maintenance engineers' licences
(c) air traffic control licences

13. Privileges of a Licence Holder

A holder of a licence issued by the Authority shall not exercise privileges other than those granted by that licence.

14. Medical Fitness

(1) An applicant for a licence shall, hold a medical certificate issued in accordance with the provisions of Chapter X of this Regulation

(2) The Authority shall as part of the State safety programme, apply basic safety management principles to the medical assessment process of licence holders that as a minimum include:

(a) routine analysis of in-flight incapacitation events and medical findings during medical assessments to identify areas of increased medical risk; and
(b) continuous re-evaluation of the medical assessment process to concentrate on identified areas of increased medical risk.

(3) Subject to Medical Assessments, and medical audits, the Authority shall in accordance with the applicable approved technical guidance materials, conduct

aviation-related health promotions for licence holders, to reduce future medical risks to flight safety

(4) Subject to sub-regulation (3) the Authority shall enhance awareness of trigger factors by:

(a) Sensitization of aviation personnel on the medical conditions that influence incapacitation through Aviation Medical Seminars

(b) Refresher training for aviation medical examiners and assessors on the process of identification and investigation of personnel medical problems that are associated with incapacitation.

(5) For applicants under 40 years of age, medical examiners may to omit certain routine examination items related to the assessment of physical fitness, on a case-by-case basis, whilst increasing the emphasis on health education and prevention of ill health.

15. Validity of a Medical Assessment Certificate

(1) The period of validity of a Medical Assessment certificate shall begin on the day the medical examination is performed.

(2) The period of validity of a medical assessment certificate shall be in accordance with the provisions of Regulation 22 and may be extended, at the discretion of the Authority, up to 45 days.

(3) The day on which the medical assessment certificate expires shall remain constant by allowing the expiry date of the current medical assessment certificate to be the beginning of the new validity period, provided that the medical examination takes place within 45 days before expiry of the current medical assessment certificate.

(4) Except when deferred in accordance with Regulation 23, a flight crew member or remote flight crew member and air traffic controller shall not exercise the privileges of their licence unless he or she holds a valid medical assessment certificate of fitness appropriate to the licence.

16. Medical Examiners

(1) The Authority shall designate medical examiners who have received training in aviation medicine and demonstrated competency in aviation medicine.

(2) Pursuant to regulation 195 of this regulation, the designated medical examiners shall receive refresher training at regular intervals and have practical knowledge and experience of the conditions in which the holders of licences and ratings carry out their duties

(3) The competence of the designated medical examiner shall be evaluated periodically by the medical assessor.

(4) The Authority shall designate medical examiners, qualified and licensed in the practice of medicine, to conduct medical examinations of fitness of applicants for the issue or renewal of the licences.

(5) Before designation, medical examiners shall have received training in aviation medicine and demonstrated adequate competency in aviation medicine and shall receive refresher training at regular intervals.

17. Application Requirements for Medical Examination

(1) Applicants for licences or ratings for which medical fitness is prescribed shall sign and furnish the medical examiner with a declaration stating whether they have previously undergone such an examination and, if so, the date, place and result of the last examination.

(2) The applicant shall indicate to the examiner whether his or her medical assessment certificate has previously been refused, revoked or suspended and, if so, the reason for such refusal, revocation or suspension

(3) Any false declaration to a medical examiner made by an applicant for a licence or rating shall be reported to the Authority for such action as may be considered appropriate.

18. Medical Reports

(1) A medical examiner shall, upon completion of the medical examination of the applicant, coordinate the results of the examination and submit a signed report, or equivalent to the Authority, in accordance with this regulation and procedures prescribed in the applicable technical guidance material, detailing the results of the examination and evaluating the findings with regard to medical fitness

(2) The Authority shall, where the medical examination is carried out by two (2) or more medical examiners, appoint one of the medical examiners to be responsible for coordinating the results of the examination, evaluating the findings with regard to medical fitness, and signing the report.

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

19. Medical Report Audits

(1) The Authority shall use the services of a medical assessor to evaluate reports submitted to the Authority by medical examiners.

(2) A medical examiner shall submit sufficient information to the Authority to enable the Authority undertake medical assessment audits.

(3) The Authority shall carry out audits to ensure that medical examiners meet the requirements of this regulation and the applicable technical guidance materials for good medical practice and aeromedical risk assessment.

20. Failure to Meet Medical Requirements

Where the medical requirements for a particular licence under this regulation is not met, the appropriate medical certificate shall not be issued or renewed unless the following conditions are fulfilled:

(a) 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;

(b) relevant ability, skill and experience of the applicant and operational conditions have been given due consideration; and

(c) the licence is endorsed with applicable special limitation or limitations when the safe performance of the licence holder's duties is dependent on compliance with such limitation or limitations.

21. Confidentiality of Medical Reports

(1) Medical Reports shall be kept confidential at all times.

(2) All medical reports and records shall be securely held with accessibility restricted to authorized personnel.

(3) When justified by operational considerations, the medical assessor shall, with reference to prescribed technical guidance material determine to what extent pertinent medical information is presented to relevant officials of the Authority.

22. Validity of Licences

(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 in this regulation and the applicable technical guidance materials.

(2) Where a licence was issued by another Contracting State, the Authority shall confirm the validity of the licence in accordance with the applicable technical guidance materials.

(3) The maintenance of competency and recent experience requirements for pilot licences and ratings, based on a systematic approach to accident prevention established, shall include a risk assessment process and analysis of current operations, including accident and incident data appropriate to that State.

(4) The maintenance of competency of flight crew members or remote flight crew members engaged in commercial air transport operations may be satisfactorily established by demonstration of skill during proficiency flight checks completed in accordance with the applicable Civil Aviation Operation of Aircraft Regulations.

(5) Maintenance of competency may be satisfactorily recorded in the operator's records and in the flight crew members or remote flight crew member's personal logbook.

(6) A flight crew member or remote flight crew member may, in lieu of maintaining competency in an aircraft, demonstrate continuing competency in synthetic flight training devices approved by the Authority.

(7) A report of medical fitness obtained in accordance with this regulation shall be valid from the date of the medical examination for a period not greater than:

(a) 24 months for PPL aeroplane;
(b) 24 months for PPL helicopter or gyroplane;
(c) 24 months for PPL airship or balloon;
(d) 24 months for PPL glider;
(e) 12 months for the CPL aeroplane;
(f) 12 months for CPL helicopter or gyroplane;
(g) 12 months for CPL airship or balloon;
(h) 12 months for ATPL aeroplane;
(i) 12 months for MPL aeroplane;

(j) 12 months for ATPL helicopter;
(k) 12 months for the flight engineer licence;
(l) 24 months for the ATC licence;
(m) 12 months for the cabin crew certificate; and
(n) 24 months for the Remote Pilot Licence.

(8) The period of validity of a Medical Assessment may be reduced when clinically indicated as assessed by the DME.

(9) When the holders of airline transport pilot licences — aeroplane, helicopter and powered-lift, and commercial pilot licences — aeroplane, airship, helicopter and powered-lift, who are engaged in single-crew commercial air transport operations carrying passengers, have passed their 40th birthday, the period of validity specified in sub- regulation (7) shall be reduced to 6 months.

(10) Where a holder of private pilot licence for aeroplane, airship, helicopter and powered-lift, free balloon pilot licence, glider pilot licence, remote pilot licence and air traffic controller licence has passed their 40th birthday, the period of validity specified in sub- regulation (7) shall be reduced to 12 months.

(11) Where the holders of airline transport pilot licences — aeroplane, helicopter and powered-lift, commercial pilot licences — aeroplane, airship, helicopter and powered-lift, and multi-crew pilot licences — aeroplane, who are engaged in commercial air transport operations, have passed their 40th birthday, the period of validity specified in sub- regulation (7) shall be reduced to 6 months.

(12) Where the holders of private pilot licences — aeroplane, airship, helicopter and powered lift, remote pilot licences — aeroplane, airship, glider, rotorcraft, powered-lift or free balloon, free balloon pilot licences, glider pilot licences and air traffic controller licences have passed their 50th birthday, the period of validity specified in sub- regulation (7) should be further reduced to 6 months.

(13) 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.

23. Deferral of Medical Examination

(1) The prescribed re-examination of a licence holder operating in an area distant from South Sudan designated medical examiner's 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 6 months in the case of a flight crew member of an aircraft engaged in non-commercial operations; or
(b) 2 consecutive periods each of 3 months in the case of a flight crew member of an aircraft engaged in commercial operations provided that in each case a favourable medical report is obtained after examination by a designated medical examiner of the area concerned; and
(c) in the case of a private pilot, a single period not exceeding 12 months where the medical examination is carried out by an examiner designated by Contracting State in which the applicant is temporarily located.
(d) 2 consecutive periods each of 3 months in case of a remote flight crew member

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

24. Decrease in Medical Fitness

(1) A holder of a licence provided for in this regulation shall not exercise the privileges of his or her licences and related ratings at any time when he or she aware of any decrease in his or her medical fitness which might render the holder unable to safely and properly exercise these privileges.

(2) A licence holder who conceives shall inform the Authority as soon as she confirms the pregnancy and the provisions of regulation 234 shall apply as applicable

(3) A licence holder shall inform the Authority of any decrease in medical fitness which requires continued treatment with prescribed medication or which requires hospital treatment.

(4) The Authority will 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.

(5) The suspension referenced in sub-regulation (4) 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.

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

(7) In the event of an accident or incident, the licence holder shall be required to undergo a medical assessment.

25. Extension of Validity of Medical Certificate

The period of validity of a medical certificate may be extended by the Authority as prescribed in the applicable technical guidance material, up to 45 days.

26. Use of Psychoactive Substances

(1) A holder of a licence provided for in this regulation shall not exercise the privileges of his or her licence and related ratings while under the influence of any psychoactive substance which might render him or her unable to safely and properly exercise these privileges.

(2) A holder of a licence provided for in this regulation shall not engage in any problematic use of substances and when found, shall be removed from their safety critical functions.

(3) The Authority may, after successful treatment and medical assessment or where no treatment is necessary, after cessation of the problematic use of substances and upon determination that the licence holder's continued performance of the function is unlikely to jeopardize safety, consider return of the licence holder to the safety critical functions.

27. Language Proficiency

(1) Holders of the following licences shall demonstrate the ability to speak and understand the English language used for radio telephony communications to the level specified in the language proficiency requirements as provided for in the Second Schedule to this Regulations.

(a) aeroplane, airship, helicopter and powered-lift pilot licence;
(b) aeroplane, airship, glider, rotorcraft, powered-lift pilot or free balloon remote pilots;
(c) air traffic controllers;
(d) aeronautical station operators;
(e) ground instructors;
(f) flight operations officers /flight dispatchers;
(g) Flight engineers;
(h) Flight Radio Telephony operators
(i) Flight navigators
(j) All remote pilots

(2) Licensed personnel specified in sub- regulation (1) who demonstrates language proficiency below the expert Level or Level 6 shall be evaluated at intervals in accordance with an individual's demonstrated proficiency level as follows:

(a) those demonstrating language proficiency at the operational Level or Level 4 shall be evaluated once every three years;
(b) and those demonstrating language proficiency at the extended Level or Level 5 shall be evaluated once every 6 years.

28. Approved Training and Approved Training Organizations

(1) The Authority may approve training organizations that demonstrating compliance with the requirements of the Civil Aviation Approved Training Organizations Regulation and the relevant provisions contained in the Civil Aviation safety Management Regulation, to provide approved training leading to issuance of the personnel licences specified in this regulation.

(2) Approved training for flight crew, remote flight crew and air traffic controllers shall be conducted within an approved training organization

(3) The approved training considered in sub-regulation (2) relates primarily to approve training for the issuance of personnel licence or rating. It is not intended to include approved training for the maintenance of competence or for an operational qualification after the initial issuance of a licence or rating, as may be required for air traffic controllers, or for flight crew or remote flight crew, such as the approved training under an operator.

(4) Competency-based approved training for the following personnel shall be conducted within an Approved Training Organization.

(a) aircraft maintenance
(b) remotely piloted aircraft systems maintenance;
(c) remote flight crew;
(d) Flight operations officer/flight dispatch personnel

29. Duration of Licences, Certificates, Ratings, and Authorisations

(1) The Authority shall issue licences with a specific expiry date except as specifically provided for by this regulation.

(2) Except for an aviation repair specialist authorisation, all authorisations and ratings issued under this regulation shall be valid for the term prescribed by the Authority in the authorization but in any case, not more than 12 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 or 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 24 four months validity of the holder's medical certificate; or

(b) for a holder who is 40 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 12 months validity of the holder's medical certificate.

(5) A PPL with an aeroplane or rotorcraft or glider category rating shall be valid:

(a) for a holder who is less than 40 years of age, from the date the licence is issued or renewed by the Authority for a period of the remainder of the 24 four months validity of the holder's medical certificate; or

(b) for a holder who is 40 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 12 months validity of the holder's medical certificate.

(6) A CPL with an aeroplane or rotorcraft category rating shall be valid:

(a) for a holder who is less than 40 years of age, from the date the licence is issued or renewed by the Authority for a period of the remainder of the 12 months validity of the holder's medical certificate; or

(b) for a holder who is 40 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 6month validity of the holder's medical certificate.

(7) An instrument rating is valid for a period of 12 months from the date of the initial or renewal flight test.

(8) A night rating is valid for a period of 12 months from the date of the initial issue or renewal of the rating.

(9) 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 12-month validity of the holder's medical certificate.

(10) A flight radio telephone operator Licence is valid for a period of 24 from the date of issue or renewal.

(11) A Flight operation officer or dispatcher licence is valid for a period of 24 months from the date of issue or renewal.

(12) A cabin crew member certificate is valid for 12 months from the date of issue or renewal.

(13) Aircraft Maintenance Engineer Licence is valid for a period of 24 months from the date of issue or renewal.

(14) A Flight Instructor Rating is valid for a period of 12 months from the date of the instructor flight test or renewal.

(15) A Ground Instructor Licence is valid for a period of 24 months from the date of issue or renewal.

(16) An Air Traffic Controller Licence shall, in the case of a holder who is:

(a) less than 40 years of age, be valid from the date the licence is issued or renewed for a period of the remainder of 24 months validity of the holder's Medical Certificate; or

(b) 40 years of age or more, be valid from the date the licence is issued or renewed for a period of the remainder of 12 months validity of the holder's Medical Certificate.

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

30. General Requirements for Validation

(1) A person who holds a current and valid pilot licence issued by another Contracting State in accordance with International Civil Aviation Organization Annex 1 may apply for a validation of such licence for use on an aircraft registered in Republic of South Sudan

(2) The applicant for the validation certificate shall present to the Authority:

(a) the foreign licence and evidence of the experience required by presenting the record in the personal flying logbook;
(b) evidence that he or she holds a current medical certificate issued by the Contracting State; and
(c) evidence of language proficiency in English as specified in the Second Schedule to this Regulation or shall demonstrate to the Authority the English language proficiency skills.

(3) The Authority may allow the applicant to use his foreign medical certificate with the validation certificate provided that the medical certification requirements on which the foreign medical certificate was issued meet the requirements of this regulation, relevant to the licence held.

(4) The Authority will verify the authenticity of the licence, ratings and the medical certificate by contacting the state that issued the licence prior to the issuance of the validation certificate.

(5) The Authority may issue a validation certificate which shall be valid for one year, provided the foreign licence, ratings and the medical certificate remain valid.

31. Validation Certificate with PPL Privileges

Subject to Regulation 29, the applicant for the validation certificate with Private Pilot Licence privileges shall have a valid foreign licence with at least private pilot Licence privileges.

32. Validation Certificate with Privileges of Private Pilot's Licence with Instrument Rating, Commercial Pilots, Commercial Pilot's Licence with Instrument Rating, Multi Crew Pilot's Licence, Airline Transport Pilot Licence and Flight Engineer

(1) Subject to the requirements in Regulation 22, the applicant for a validation certificate for PPL/IR, CPL, CPL/IR, MPL, ATPL or FE privileges, shall have the relevant equivalent foreign licence and meet the following requirements:

(a) except for ferry flight or test flight or as the Authority shall require, the applicant to pass a knowledge test on the following:

(i) Air Law;
(ii) Meteorology;
(iii) Operational procedures;
(iv) Radiotelephony; and

(b) Where the Authority finds it necessary, the applicant may be required to undergo a skill test for the relevant licence and ratings sought to be validated, relevant to the privileges of the licence held.

(2) The Authority may endorse on the certificate of validation privileges limited those granted by a foreign licence.

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

(4) 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 Republic of South Sudan; and

(c) not exercise the privileges of the certificate when the person’s foreign licence has been revoked and suspended

33. Recognition of Military or Former Military Flight Crew Qualifications

(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, commercial pilot licence 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 a type rating, if appropriate.

(2) Subject to regulations 29 and 31 of this regulation, 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 South Sudan in the aircraft type he or she is rated within twelve months preceding the date of application;
(b) at least 10 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 12 months preceding the date of application; and
(d) at least 10 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 commercial pilot Licence where the pilot has, within the 12 months 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 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 Republic of South Sudan

(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 12 months before the date of the application as appropriate.

34. Conversion of South Sudan Military Pilot's Qualification

(1) A person who holds a current South Sudan Military pilot Category A, B, C and D qualification may apply for a South Sudan PPL or 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 this regulation;
(c) holds a valid medical certificate issued by South Sudan 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 Second Schedule to this Regulation.

(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) a 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 where the rating is to be included in the licence.

(b) for PPL:

(i) an examination for the class 2 medical certificate;
(ii) a composite paper comprising of air law, meteorology, aircraft general knowledge, navigation, flight and performance, human performance, operational procedures, principles of flight, radiotelephony knowledge and meteorology.

(5) An applicant for a CPL shall not be eligible for grant of the licence unless he or she meets the knowledge and skill requirements for the aircraft category and type.

(6) The aircraft category and type rating shall be endorsed on the licence as either pilot-in-command or co-pilot.

(7) 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 applicant's military personal logbook where applicable;
(b) the pilot is current on the aircraft type; and
(c) the type of aircraft is registered in South Sudan.

(8) an applicant shall meet the minimum passing grades prescribed by the Authority in the applicable technical guidance materials for the knowledge test.

(9) An applicant for conversion who fails the knowledge test in 3 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.

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

35. Conversion of Foreign Pilot Licence

(1) A person who holds a current pilot licence issued by another Contracting State may apply for 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 Annex 1 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 this Regulation.

(2) An applicant for a pilot licence under this regulation shall submit his or her 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 have met the applicable aeronautical experience requirements prescribed in this regulation for the licence sought.

(4) In addition to the requirements of sub-regulations (1), (2) and (3), the applicant is required to pass:

(a) for ATPL or MPL:

(i) the Class 1 medical certificate;
(ii) a composite paper comprising of air law, Meteorology, Aircraft General Knowledge, Flight Planning and performance, Navigation, Human Performance, Operational Procedures, Principles of flight and radiotelephony knowledge; and
(iii) an initial instrument rating flight test;

(b) 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 and performance, navigation, 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 PPL;

(i) an examination for the class 2 medical certificate;
(ii) the composite paper comprising of air law, meteorology, aircraft general knowledge, flight planning and performance, navigation, human performance, operational procedures, principles of flight and radiotelephony knowledge and meteorology;

(iii) for lighter-than-air- the requirements prescribed in paragraph (b) or (c) as appropriate, and a class 2 medical certificate.

(5) An applicant for a CPL, ATPL or MPL shall not be eligible for grant of the licence unless he or she meets the knowledge and skill requirements for the aircraft category and type.

(6) The aircraft category and type rating shall be endorsed on the licence as either pilot-in-command or co-pilot.

(7) 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 South Sudan

(8) The applicant shall be required to have passed the composite paper for conversion of a foreign licence within a period of 6 months preceding the date of the application for the licence.

(9) The applicant shall meet the minimum passing grades prescribed by the Authority in the applicable technical guidance materials for the knowledge test.

(10) An applicant for conversion who fails the knowledge test in 3 consecutive attempts shall be disqualified for further testing until a period of 1 month has elapsed from the date on which the last test was made.

(11) The Authority will verify the authenticity of the foreign licence, ratings and authorisations presented for conversion with the state of issuance upon receiving the applicant.

36. Conversion of Flight Engineer Licence

(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 Annex 1 standards for that licence;
(c) holds a valid 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 Second Schedule to this South Sudan

(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 signed by an official or representative of the foreign authority that issued that licence.

(3) The applicant shall meet the aeronautical experience requirements prescribed in this Regulation for the flight engineer's licence.

(4) In addition to the requirements of sub-Regulations (1), (2) and (3) the applicant shall have passed the composite examination for conversion of a foreign licence within a period of 6 months preceding the date of the application for the licence in the following subjects:

(a) South Sudan air law,
(b) meteorology,
(c) aircraft general knowledge,
(d) flight performance and performance,
(e) human performance,
(f) operational procedures,
(g) principles of flight; and
(h) radiotelephony.

(5) an applicant shall meet the minimum passing grades prescribed by the Authority in the applicable technical guidance materials for the knowledge test.

(6) An applicant for conversion who fails the knowledge test in 3 consecutive attempts shall be disqualified from further testing until a period of 1 month has elapsed from the date on which the last test was made.

(7) The Authority will verify the authenticity of the foreign licence, ratings and authorisations presented for conversion with the State of issuance upon receiving the application.

(8) 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 South Sudan

CHAPTER IV
VALIDATION, CONVERSION OF FOREIGN AIRCRAFT MAINTENANCE ENGINEERS LICENCE, RECOGNITION OF MILITARY AIRCRAFT MAINTENANCE PERSONNEL QUALIFICATIONS AND CONVERSION OF FLIGHT OPERATIONS OFFICER'S/FLIGHT DISPATCHERS LICENCE

37. Validation of Aircraft Maintenance Engineer Licence or AMEL

(1) A person who holds a current and valid aircraft maintenance engineer Licence or AMEL issued by another Contracting State may apply for issue of a certificate of validation with the appropriate ratings, 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 ICAO Annex 1standards;
(c) does not currently hold a licence issued by the Authority;

(2) 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 South Sudan; and

(c) not exercise the privileges of the certificate when the person's foreign licence has been revoked and suspended

(3) The Authority may endorse on the certificate of validation privileges limited those granted by the foreign licence.

(4) An applicant for a certificate of validation shall present to the Authority the foreign licence that meets the ICAO Annex 1 standards and proof of relevant experience.

(5) The certificate of validation shall be valid for a period not exceeding 6 months, provided the foreign licence remains valid.

(6) An applicant for a certificate of validation shall pass a knowledge test in Air law.

(7) The Authority will verify the authenticity of the foreign licence, ratings and authorisations presented for validation with the state of issuance.

38. Conversion of Foreign Aircraft Maintenance Engineer's Licence

(1) A person who holds a current aircraft maintenance engineer's licence issued by another Contracting State may apply for issue of 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 issuing State; and

(b) holds a licence which meets all the ICAO Annex 1 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 minimum experience requirements for initial issue as prescribed in Regulation 165 to this Regulation.

(4) In addition to the requirements of sub-regulations (1), (2) and (3) the applicant shall pass a knowledge test in:

(a) air law;

(b) applicable Airworthiness requirements governing certification and continuing airworthiness;

(c) approved maintenance organisations and procedures; and

(d) human factors.

(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 South Sudan.

(6) The applicant shall meet the minimum passing grades prescribed by the Authority in the applicable technical guidance materials for the knowledge test

(7) An applicant for conversion who fails the knowledge test in 3 consecutive attempts shall be disqualified for further testing until a period of 1 month has elapsed from the date on which the last test was made.

(8) The Authority will verify the authenticity of the foreign licence, ratings and authorisations presented for conversion with the state of issuance upon receiving the applicant.

39. Recognition of Military Aircraft Maintenance Personnel Qualifications

(1) A military aircraft maintenance personnel may apply to the Authority for issue of aircraft maintenance engineer's licence 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 6 years in aircraft maintenance, with 6 months of regency experience having been acquired within 1 month preceding the application; and
(c) a certificate, diploma or such other document showing proof of approved training in aircraft maintenance.

(3) Subject to the requirements of sub-Regulation (2), the applicant shall demonstrate the knowledge and skill requirements for AMEL in accordance with this Regulation.

40. Conversion of Flight Operations Officer or Flight Dispatcher Licence

(1) A person who holds a current flight operations officer licence issued by another Contracting State may apply and be issued with an equivalent licence if that person:

(a) has a licence which is not under an order of revocation or suspension by the State that issued the licence;

(b) holds a flight dispatcher's licence which meets all the ICAO Annex 1 standards; and

(c) demonstrates the ability to read, speak, write, and understand the English language, including English language proficiency used for radio telephony communications to the level specified in the language proficiency requirements as provided for in the Second Schedule to this Regulation.

(2) An applicant for a flight operations officer's licence pursuant to this Regulation shall submit the licence in the English language or accompanied by an English language translation signed by an official or representative of the foreign authority that issued that licence.

(3) In addition to the requirements of sub-regulations (1) and (2) the applicant shall have passed the composite examination for conversion of a foreign flight operations officer's licence within a period of 6 months preceding the date of the application for the licence in the following subjects:

(a) South Sudan air law,
(b) meteorology,
(c) aircraft general knowledge,
(d) flight planning and performance,
(e) human performance,
(f) operational procedures,
(g) principles of flight; and
(h) radiotelephony.

(4) An applicant for conversion who fails the knowledge test in 3 consecutive attempts shall be disqualified from further testing until a period of 1 month has elapsed from the date on which the last test was made.

(5) An applicant who holds a flight operations officer's licence issued by an East African Community member shall not be required to undergo the examinations specified in sub-regulation (4)

(6) The Authority will verify the authenticity of the foreign licence, presented for conversion with the State of issuance upon receiving the application.

(7) The applicant shall be required to serve under the supervision of a flight operations officer for at least 60 days under operations in the Republic of South Sudan Registered AOC holder within 6 months preceding the application for conversion.

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

41. Authority to Act as a Flight Crew Member

(1) A person shall not act as a flight crew member of an aircraft unless the person has a valid licence issued by the Authority and appropriate to the duties to be performed by that person.

(2) The licence shall have been issued by the State of Registry of that aircraft or by any other Contracting State and rendered valid by the State of Registry of that aircraft

(3) A flight crew member shall carry their appropriate licences on board every aircraft engaged in international air navigation.

42. Knowledge Test- Prerequisites and Passing Grades

(1) An applicant for a knowledge test shall have:

(a) received an endorsement from an authorised instructor certifying that the applicant has accomplished approved-training in accordance with the Civil Aviation (Approved Training Organizations) Regulations and this Regulation 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 National identification or passport

(2) The applicant shall meet the minimum passing grades prescribed by the Authority in the applicable technical guidance materials for the knowledge test

(3) An applicant who fails the knowledge test in 3 consecutive attempts shall be disqualified for further testing for a period prescribed in the applicable technical guidance materials.

(4) The validity of the knowledge test results for an applicant for a pilot licence shall be as follows:

(a) PPL - 12 months after passing the test;
(b) CPL -18 months after passing the test;
(c) ATPL - 5 years after passing the test; and
(d) MPL - 5 years after passing the test

43. Practical Tests- Prerequisites for Flight Crew

(1) To be eligible for a practical test, an applicant shall meet all applicable requirements for the licence or rating sought.

(2) where 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 60 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 (3), to be eligible for a practical test for a licence or rating issued under this regulation, an applicant for a practical test shall:

(a) pass the required knowledge test or tests for the type rating within 6 months preceding the month the applicant completes the practical test;
(b) present the applicable knowledge test report or reports at the time of application for the practical test, where a knowledge test is required;
(c) have satisfactorily accomplished the approved skill training and obtained the required aeronautical experience prescribed by this regulation for the licence or rating sought;
(d) meet the prescribed age requirement of this regulation for the issue of the licence or rating sought; and
(e) have an endorsement in the applicant's logbook signed by an authorised instructor who certifies that the applicant:
(i) has received and logged training time within 60 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 all subject areas.

(4) An applicant for an ATPL may take the practical test for that licence within 2 years of the expiration of a knowledge test, provided the applicant:

(a) has been continuously employed as a flight crew member by an air operator certificate or AOC holder from the time the knowledge test expired; and

(b) has satisfactorily accomplished the 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.

44. Practical Tests- General Requirements for Flight Crew

(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 test standards prescribed in this Regulation;

(b) demonstrate mastery of the aircraft with the successful outcome of each task regarding-

(i) PPL and CPL tests; and
(ii) ATPL 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) Where a practical test is discontinued, the Authority may give the applicant credit for those areas of operation already passed, provided the applicant:

(a) passes the remainder of the practical test within 60 days after the date the practical test was begun;
(b) presents to the examiner for the re-test the original test report or discontinuance form in the manner prescribed by the Authority in the applicable technical guidance material.
(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 6 months after passing the test.

45. Practical Tests- Required Aircraft and Equipment

(1) Except when permitted to accomplish the entire flight increment of the practical test in an approved flight simulator, an applicant for a licence or rating issued under this Regulation shall provide an aircraft registered in South Sudan for each required test that:

(a) is of the category, class, and type applicable to the licence or rating sought; and
(b) has a valid 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 2 pilot stations with adequate visibility for each person to operate the aircraft safely; and 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.

46. Retesting After Failure

(1) An applicant for a knowledge or practical test who fails that test may re-apply 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.

47. Records of Training Time

(1) A person shall document and record the following time in a form or log book and manner prescribed by the Authority in the applicable technical guidance material:

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

(b) the aeronautical experience required to show recent flight experience requirements of this Regulation.

(2) For the purposes of meeting the requirements of this Regulation, 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 applicable Civil Aviation (Operation of Aircraft) Regulations; and
(vi) the name of the authorised instructor where required.

(b) type of pilot experience or training:

(i) solo;
(ii) pilot-in-command or PIC;
(iii) pilot in command under supervision or PCUS
(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 this Regulation; or

(b) satisfy the recent flight experience requirements of the applicable Civil Aviation (Operation of Aircraft) Regulations.

(4) Except for a student pilot acting as PIC of an airship requiring more than one flight crew member, 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 licence

(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 applicable Civil Aviation (Operation of Aircraft) Regulations, and occupies a crew member 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 where 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 applicable Civil Aviation (Operation of Aircraft) Regulations, the following information shall be recorded in a person's logbook:

(a) the location and type of each instrument approach accomplished; and
(b) 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, the instructor's signature, licence number and licence expiry date

48. Recording of Flight Time of a Holder of Pilot Licence

(1) A student pilot or the holder of a pilot licence shall be credited in full with all solo, dual instruction and pilot-in-command flight time towards the total flight

time required for the initial issue of a pilot licence or the issue of a higher grade of pilot licence.

(2) The holder of a pilot licence, when acting as co-pilot at a pilot station of an aircraft certificated to be operated with a co-pilot, shall be credited in full with this flight time towards the total flight time required for a higher grade of pilot licence.

(3) The holder of a pilot licence, when acting as pilot-in-command under supervision, shall be credited in full with this flight time towards the total flight time required for a higher grade of pilot licence.

49. Limitations on the Use of Synthetic Flight Trainer

A person shall not receive credit for use of any 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 crew member function performed; and

(c) the representation of the specific category, class and type of aircraft, particular variation within the type or set of aircraft for certain flight training devices.

50. Use of Synthetic Flight Trainers for Demonstrations of Skill

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

(2) A flight crew member may demonstrate his or her skills during proficiency flight checks in a synthetic flight trainer approved under sub- Regulation (1) to maintain the competence required by this Regulation.

51. General Requirements for Pilot Licences, Ratings and Authorisations

(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 due of physical limitations, or for other reasons, a licence, rating, or authorisation with appropriate limitations for operations only within the Republic South Sudan where:

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

(b) physical limitation, 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 where 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.

(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) 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 for that aircraft.

(5) Sub-regulation (4) shall not apply to 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 received an endorsement in the pilot's logbook from an authorised instructor who certifies that the person is proficient to operate that aircraft.

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

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

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

(8) Approved training shall be conducted within an approved training organization.

CHAPTER VI
LICENCES AND RATINGS FOR PILOTS
6.1 General

52. General Licensing Specifications

(1) A person shall not act either as pilot-in-command or as co-pilot of an aircraft in any of the following categories unless that person is the holder of a pilot licence issued in accordance with the provisions of this Regulation:

(a) aeroplane;
(b) airship of a volume of more than 4 600 cubic metres;
(c) free balloon;
(d) glider;
(e) rotorcraft;
(f) powered-lift;
(g) remotely piloted aircraft.

(2) The category of aircraft shall be included in the title of the licence.

(3) A holder of a pilot licence who seeks an additional category of aircraft, will be issued with an additional pilot licence for that category of aircraft.

(4) An applicant shall, before being issued with any pilot licence or rating, meet all requirements in respect of age, knowledge, experience, flight instruction, skill and medical fitness, applicable to that licence or rating.

(5) An applicant for any pilot licence or rating shall demonstrate, the knowledge and skill for that licence or rating as specified in this Regulation.

53. Transitional Measures Related to Powered-Lift Category

(1) The Authority may endorse a type rating for aircraft of the powered-lift category on an aeroplane or helicopter pilot licence and the endorsement of the rating on the licence shall indicate that the aircraft is part of the powered-lift category.

(2) The Authority shall, when endorsing under sub- regulation (1), take into account the previous experience of the applicant in an aeroplane or a helicopter as appropriate and shall incorporate in the endorsement all relevant aspects of operating an aircraft of the powered-lift category where the training for the type rating in the powered-lift category is completed during the approved training.

54. Requirements for Class and Type Ratings

(1) A holder of a pilot licence shall not act either as pilot-in-command or as co-pilot of an aeroplane, an airship, a helicopter or a powered-lift unless the holder has received authorization as follows:

(a) the appropriate class rating specified in Regulation 6 (b) or
(b) a type rating when required in accordance with the provisions of Regulation 6(e) to this Regulation.

(2) When a type rating is issued limiting the privileges to act as co-pilot, or limiting the privileges to act as pilot-in-command only during the cruise phase of the flight, such limitation shall be endorsed on the rating.

(3) The Authority shall, for the purpose of training, testing, or specific special purpose non-revenue, non-passenger carrying flights, issue special authorization to the licence holder in accordance with the applicable Civil Aviation (Operation of Aircraft) Regulations and these Regulations in accordance with this Regulation, and the authorization shall be limited in validity to the time needed to complete the specific flight.

55. Requirements for the Issue of Class and Type Ratings

(1) The applicant for issue of a class or type rating shall demonstrated sufficient skills appropriate to the licence in an aircraft of the class for which the rating is sought in accordance with Regulation 6 (b).

(2) For purposes of type rating, the applicant shall have:

(a) gained, under appropriate supervision, and experience in the applicable type of aircraft or flight simulator in the following:

(i) normal flight procedures and manoeuvres during all phases of flight;
(ii) abnormal and emergency procedures and manoeuvres in the event of failures and malfunctions of equipment, such as engine, systems and airframe;

(iii) where applicable, instrument procedures, including instrument approach, missed approach and landing procedures under normal, abnormal and emergency conditions, including simulated engine failure;

(iv) for the issue of an aeroplane category type rating, upset prevention and recovery training; and

(v) procedures for crew incapacitation and crew coordination including allocation of pilot tasks, crew cooperation and use of checklists; and

(b) demonstrated the skill and knowledge required for the safe operation of the applicable type of aircraft, relevant to the duties of a pilot-in-command or a co-pilot as applicable;

(3) Notwithstanding sub-regulation (2), the applicant shall have demonstrated the skill and knowledge required for the safe operation of the applicable type of aircraft, relevant to the licensing requirements and piloting functions of the applicant.

56. Use of a Flight Simulation Training Device for Acquisition of Experience and Demonstration of Skill

A person shall not use a flight simulation training device for acquiring the experience or performing any manoeuvre required during the demonstration of skill for the issue of a licence or rating, unless the flight simulation training device has been approved by the Authority.

57. Requirements for Instrument Rating

(1) A holder of a licence shall not act as either pilot in command or as co-pilot of an aircraft under instrument flight rules or IFR, unless such holder has received proper authorization from the Authority, comprising of an instrument rating appropriate to the aircraft category

(2) Subject to sub-regulation (1), the authorization shall not preclude the issue of a licence having the instrument rating as an integral part thereof.

58. Requirements for Authorization to Conduct Instructions

(1) A holder of a pilot license shall not carry out, flight instruction required for the issue of a pilot licence or rating, unless he or she has received proper authorization from the Authority.

(2) Subject to sub-regulation (1), proper authorization shall comprise:

(a) a flight instructor rating on the holder's licence; or
(b) the authority to act as a check pilot to carry out flight instruction for the purposes of type rating endorsement; or
(c) a specific authorization granted by the Authority.

(3) A license holder shall not carry out instruction on a flight simulation training device required for the issue of a pilot licence or rating unless such person holds or has held an appropriate licence or has appropriate flight training and flight experience and has received proper authorization from the Authority.

59. Crediting of Flight Time and Theoretical Knowledge

(1) A student pilot or holder of a pilot licence shall be credited in full with all solo, dual instruction and pilot-in-command flight time towards the total flight time required for the initial issue of a pilot licence or the issue of a higher grade of pilot licence.

(2) A holder of a pilot licence, when acting as co-pilot at a pilot station of an aircraft certificated for operation by a single pilot but required by the Authority to be operated with a co-pilot, shall be credited with not more than 50% of the co-pilot flight time towards the total flight time required for a higher grade of pilot licence.

(3) Subject to sub-regulation (1) flight time may be credited in full towards the total flight time required if the aircraft is equipped to be operated by a co-pilot and the aircraft is operated in a multi-crew operation.

(4) A holder of a pilot licence, when acting as co-pilot at a pilot station of an aircraft certificated to be operated with a co-pilot, shall be credited in full with the flight time towards the total flight time required for a higher grade of pilot licence.

(5) A holder of a pilot licence, when acting as pilot-in-command under supervision, shall be credited in full with the flight time towards the total flight time required for a higher grade of pilot licence.

60. Curtailment of Privileges of Pilots

(1) Subject to sub- regulations (2) and (3) a person shall not act as a pilot of an aircraft engaged in international commercial air transport operations if:

(a) He or she has attained his60th birthday; or

(b) in the case of operations with more than one pilot, he or she has attained his or her 65th birthday

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

(3) 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.

(4) A holder of CPL or ATPL with instructor rating may after attaining age 65 continue exercising the privileges of his or her licence limited to only instructing in an Approved Training Organization provided that the person holds a valid class one medical certificate.

(5) A holder of a pilot licence who has attained the age of 65 years shall except as provided for in sub-regulation (4) operate only under the privilege of a PPL.

6.2 Student Pilot

61. Eligibility requirements for Student Pilot Licence

(1) A person shall not receive and log flight instructions, unless he or she is in possession of a valid Student Pilot Licence or SPL

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

(a) be at least 16 years of age;
(b) have the ability to read, speak, write, and understand the English language; and
(c) possess a valid class 2 medical certificate issued under this Regulation

(3) The student pilot shall comply with the requirements of Regulation 59 to ensure he or she does not constitute a hazard to air navigation.

62. Solo Flight Requirements

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

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

(a) applicable regulation of this Regulations and the applicable Civil Aviation Operation of Aircraft Regulation;
(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;
(b) at the conclusion of the test, review all incorrect answers with the student before authorising that student to conduct a solo flight; and
(c) notify the air traffic services before the student commences such solo flight.

(4) To conduct a solo flight, a student pilot shall have:

(a) received and logged flight training for the manoeuvres and procedures that are appropriate to the make and model of aircraft to be flown;
(b) demonstrated satisfactory proficiency and safety, as determined by an authorised instructor, on the manoeuvres and procedures required by sub-regulations (5) and (6) in the make and model of aircraft or similar make and model of aircraft to be flown; and
(c) demonstrated ability to speak and understand the English language used for radiotelephony communications.

(5) A student pilot shall not fly solo unless under the supervision of, or with the authority of an authorized flight instructor.

(6) A student pilot shall not fly solo in an aircraft on an international flight unless by special or general arrangement between the Contracting States concerned.

(7) A student pilot who is preparing for solo flight shall have received and logged 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, wind shear 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;
(p) after landing and taxiing instructions; and
(q) go-arounds.

(8) A holder of student pilot licence receiving training for solo flight shall log flight training for the following additional manoeuvres and procedures, as applicable, as indicated for the 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, wind shear 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 auto rotational 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.

63. Privileges and Limitations

(1) A holder of a SPL 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 SPL shall not act as pilot in command 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 or VMC as specified under the applicable Civil Aviation (Rules of the Air) Regulations and Civil Aviation (Air Traffic Control) Regulations; or in a manner contrary to any limitations placed in the pilot's logbook by an authorised instructor.

(3) A holder of an SPL shall not act as a required flight crew member on any aircraft for which more than one pilot is required by the aircraft type certificate or by this Regulation under which the flight is conducted, except when receiving flight training from an authorised instructor on board an airship, and no person other than a required flight crew member 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 authorised 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 authorised instructor that he is capable of communicating with air traffic control on radiotelephony.

64. Solo Flight Cross-Country Requirements

(1) Except as provided in sub-regulation (4), a holder of an SPL shall meet the requirements of this Regulation before:

(a) conducting a solo cross-country flight, or any flight greater than 25 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 authorised instructor on the manoeuvres and procedures required by this Regulation, 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 authorised 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 authorised instructor on the cross-country manoeuvres and procedures listed in this Regulation, appropriate to the aircraft to be flown.

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

(a) a student pilot may make solo flights to another airport that is within 25 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, with take-offs and landings at the other airport;
(ii) the student pilot has a current solo flight endorsement in accordance with this Regulation;
(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 take-offs and landings at that other airport;

(b) a student pilot may make repeated specific solo cross-country flights to another airport within 50 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, take-offs, with landings at the airport to be used;
(ii) the student has current solo flight endorsements in accordance with this Regulation, 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 shall 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 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;
(iv) use of radios for VFR navigation and two-way communications;
(v) 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 manouvres and procedure specified in sub-regulation (6)(a), as applicable;
(ii) landings accomplished without the use of the altimeter from at least 2000 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.

65. Renewal Requirements

A holder of an SPL may apply for renewal of the licence where the holder has passed a class II medical examination.

6.3 Private Pilot Licence

66. Eligibility requirements for Private Pilot Licence

(1) An applicant for a PPL, shall:

(a) be at least 17 years of age for a licence other than the operation of glider or balloon;
(b) be at least 16 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 this Regulation;
(d) receive an endorsement for the knowledge test from an authorised instructor who shall:
(i) confirm that the applicant has undergone training on the aeronautical knowledge areas listed in Regulation 67, that apply to the aircraft category sought; and
(ii) certify that the person is prepared for the required knowledge test.
(e) be in possession of a valid class 2 Medical Certificate issued under this Regulation;
(f) pass the required knowledge test on the aeronautical knowledge areas listed in Regulation 67 to this Regulation;

(g) receive flight training and a logbook endorsement from an authorised instructor who shall:
    (i) confirm that the applicant has undergone the training in the areas of operation prescribed in Regulation 69, that apply to the aircraft category and class rating sought; and
    (ii) certify 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 70 that apply to the aircraft category and class rating sought; and.
(j) comply with the appropriate provisions of this Regulation that apply to the aircraft category and class rating sought.

67. Aeronautical knowledge and Skills Requirements for PPL

(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:
    (i) rules and regulations relevant to the holder of a private pilot licence;
    (ii) rules of the air;
    (iii) altimeter setting procedures,
    (iv) appropriate air traffic services practices and procedures for aeroplane, helicopter, powered-lift and airship;

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

(c) flight performance, planning and loading:
    (i) effects of loading and mass distribution on flight characteristics; 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 private operations under visual flight rules;
    (iv) preparation and filing of air traffic services flight plans;
    (v) appropriate air traffic services procedures;
    (vi) position reporting procedures; and
    (vii) altimeter setting procedures; operations in areas of high-density traffic.

(d) human performance- human performance including threats and error management and communicable diseases and public health emergency preparedness and response:

(i) Recognition of disease symptoms
(ii) Assessment, care and reporting
(iii) International health regulations

(e) meteorology:

(i) application of elementary aeronautical meteorology;
(ii) use of and procedures for obtaining meteorological information;
(iii) altimetry; and
(iv) hazardous weather conditions;

(f) navigation:

(i) practical aspects of air navigation and dead-reckoning techniques; and
(ii) use of aeronautical charts.

(g) operational procedures:

(i) use of aeronautical documentation such as Aeronautical Information Publication, 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;

(iv) altimeter setting procedures;

(v) in case of the helicopter, and if applicable, powered-lift, settling with power, ground resonance; retreating blade stall;

(vi) dynamic roll-over and other operational hazards; and

(vii) safety procedures, associated with flight in visual meteorological conditions.

(h) principles of flight;

(i) radiotelephony:

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

(2) The aeronautical knowledge areas applicable to any relevant rotorcraft category and class rating shall include all areas covered under sub-regulation (1) and settling with power, ground resonance, roll over and other operating hazards.

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

(a) air law:

(i) rules and regulations relevant to the holder of a lighter than air category;
(ii) rules of the air;
(iii) 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 visual flight rules, appropriate air traffic services procedures; and
(iv) altimeter setting procedures and operations in areas of high-density traffic.

(d) human performance:

human performance relevant to the private pilot including principles of threat and error management and communicable diseases and public health emergency preparedness and response in regard to:

(i) Recognition of disease symptoms
(ii) Assessment, care and reporting
(iii) International health regulations

(e) meteorology:

(i) application of elementary aeronautical meteorology, use of and procedures for obtaining meteorological information and altimetry;
(ii) 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 aeronautical information publication, 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; and
(v) safety procedures, associated with flight in visual meteorological conditions.
(vi) principles of flight relating to lighter than aircraft category.

68. Privileges and Limitations of the Holder of PPL

(1) Subject to compliance with the requirements specified in Regulations 14, 22, 24(1), 25 and 49, the privileges of the holder of a private pilot licence shall permit him or her fly act, except for remuneration, as pilot-in-command or co-pilot of aircraft within the appropriate aircraft category engaged in non-revenue flights.

(2) Before exercising the privileges at night, the licence holder shall have received dual instruction in aircraft within the appropriate category of aircraft in night flying, including take-off, landing and navigation.

69. Specific Requirements for the Issuance of Aeroplane Category Rating Flight Instructions

(1) The applicant for a PPL shall have received dual instruction in aeroplanes appropriate to the class rating sought, from an authorized flight instructor.

(2) The instructor shall ensure that the applicant has operational experience in at least the following areas to the level of performance required for the private pilot:

(a) recognize and manage threats and errors;
(b) pre-flight operations, including mass and balance determination, aeroplane inspection and servicing;
(c) aerodrome and traffic pattern operations, collision avoidance precautions and procedures;
(d) control of the aeroplane by external visual reference;
(e) flight at critically slow airspeeds;
(f) recognition of, and recovery from, incipient and full stalls;
(g) flight at critically high airspeeds;
(h) recognition of, and recovery from, spiral dives;
(i) normal and crosswind take-offs and landings;
(j) maximum performance short field and obstacle clearance take-offs;
(k) short-field landings;
(l) flight by reference solely to instruments, including the completion of a level 180° turn;
(m) cross-country flying using visual reference, dead reckoning and, where available, radio navigation aids;
(n) emergency operations, including simulated aeroplane equipment malfunctions;
(o) operations to, from and transiting controlled aerodromes, compliance with air traffic services procedures; and
(p) communication procedures and phraseology.

70. Aeronautical Experience and Skill Requirements for PPL with an Aeroplane Category Rating

(1) An applicant for a 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, or 35 hours if completed during approved training as pilot of aeroplane a total of 5 hours may have been completed in a flight simulator; 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 or 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 43.

(2) An applicant for a PPL with a balloon class rating shall have completed 16 hours which consist 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 2 hours each that consist of one training flight within 60 days prior to application for the rating on the areas of operation for a gas balloon;

(ii) 5 hours of solo flight in a gas balloon under supervision of an authorised instructor; and

(iii) one flight involving a controlled ascent to 3000 feet above the launch site;

(b) where the training is being performed in a balloon with an airborne heater:

(i) 2 flights of 1 hour each within 60 days prior to application for the rating on areas of operation appropriate to a balloon with an airborne heater;

(ii) 5 hours solo flight in a balloon with an airborne heater under an supervision of an authorised instructor; and

(iii) one flight involving a controlled ascent to 3000 feet above the launch site.

71. Specific Requirements for The Issue of the Helicopter Category Rating - Experience and Flight Instructions

(1) An applicant shall have completed not less than 40 hours of flight time, or 35 hours if completed during approved training, as a pilot of helicopters, of which

a maximum of 5 hours may have been completed in a flight simulation training device or FSTD.

(2) The applicant shall have completed in helicopters 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 totaling not less than 180 km or 100 NM in the course of which landings at two different points shall be made.

(3) The applicant shall have received not less than 20 hours of dual instruction time in helicopters from an authorized flight instructor.

(4) The instructor shall ensure that the applicant has operational experience in at least the following areas to the level of performance required for the private pilot:

(a) recognize and manage threats and errors;
(b) pre-flight operations, including mass and balance determination, helicopter inspection and servicing;
(c) aerodrome and traffic pattern operations, collision avoidance precautions and procedures;
(d) control of the helicopter by external visual reference;
(e) recovery at the incipient stage from settling with power;
(f) recovery techniques from low-rotor rpm within the normal range of engine rpm;
(g) ground maneuverings and run-ups;
(h) hovering;
(i) take-offs and landings - normal, out of wind and sloping ground;
(j) take-offs and landings with minimum necessary power; maximum performance take-off and landing techniques;
(k) restricted site operations;
(l) quick stops;
(m) cross-country flying using visual reference, dead reckoning and, where available, radio navigation aids, including a flight of at least one hour;
(n) emergency operations, including simulated helicopter equipment malfunctions;
(o) autorotative approach;
(p) operations to and from and transiting controlled aerodromes;
(q) compliance with air traffic services procedures;
(r) communication procedures and phraseology; and
(s) operational experience in flight by reference solely to instruments, including the completion of a level 180° turn, in a suitably instrumented helicopter.

(5) ` Notwithstanding the instrument experience specified in sub-regulation (l) and the night flying dual instruction a holder of PPL shall not fly helicopters under instrument flight rules or IFR.

72. Specific Requirements for the Issue of The Powered-Lift Category Rating – Experience and Flight Instructions

(1) An applicant for a PPL with a powered-lift category rating shall have completed:

(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 totaling not less than 270 km or150 NM in the course of which full stop landing at two different aerodromes shall be made.

(2) 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.

(3) The applicant shall have received not less than 20 hours of dual instruction time in powered-lifts from an authorized flight instructor.

(4) The instructor shall ensure that the applicant has operational experience in at least the following areas to the level of performance required for the private pilot:

(a) recognize and manage threats and errors;
(b) pre-flight operations, including mass and balance determination, powered-lift inspection and servicing
(c) aerodrome and traffic pattern operations, collision avoidance precautions and procedures;
(d) control of the powered-lift by external visual reference;
(e) ground manoeuvring and run-ups;
(f) hover and rolling take-offs and climb-out;
(g) hover and rolling approach and landings — normal, out of wind and sloping ground;
(h) take-offs and landings with minimum necessary power;
(i) maximum performance take-off and landing techniques;
(j) restricted site operations; quick stops;
(k) flight by reference solely to instruments, including the completion of a level 180° turn;
(l) recovery at the incipient stage from settling with power;
(m) recovery techniques from low-rotor rpm within the normal range of engine rpm;
(n) cross-country flying using visual reference, dead reckoning and, where available, radio navigation aids, including a flight of at least one hour;
(o) emergency operations, including simulated powered-lift equipment malfunctions;
(p) power of reconversion to autorotation and autorotative approach, where applicable;
(q) transmission and interconnect driveshaft failure, where applicable;
(r) operations to and from and transiting controlled aerodromes, compliance with air traffic services procedures; and
(s) communication procedures and phraseology.

(5) 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 40 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 10 launches and landings have been performed

(6) An applicant shall have demonstrated the ability to perform as pilot-in command of a glider, the procedures and manoeuvres described in regulation 114, 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.

73. Specific Requirements for the Issue of the Airship Category Rating

(1) Experience: An applicant for a PPL with an airship class rating shall have completed 25 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) 3 hours of cross-country flight training in an airship with a cross country flight totalling not less than 5 km or 25 nautical miles total distance; and
(ii) 5 take offs and 5 landings to a full stop and at an aerodrome, with each landing involving a flight in the traffic pattern, at an aerodrome;
(iii) 3 hours of instrument time; and

(b) 5 hours as pilot assuming duties o the pilot in command under the supervision of the pilot in command.

(2) Flight instruction: The applicant shall have received dual instruction in airships from an authorized flight instructor.

(3) The instructor shall ensure that the applicant has received instruction in at least the following areas:

(a) recognize and manage threats and errors;
(b) pre-flight operations, including mass and balance determination, airship inspection and servicing;
(c) ground reference manoeuvres;
(d) aerodrome and traffic pattern operations, collision avoidance precautions and procedures;
(e) techniques and procedures for the take-off, including appropriate limitations, emergency procedures and signals used;
(f) control of the airship by external visual reference;

(g) take-offs, landings and go-arounds;
(h) maximum performance obstacle clearance take-offs;
(i) flight by reference solely to instruments, including the completion of a level 180o turn;
(j) navigation, cross-country flying using visual reference, dead reckoning and radio navigation aids;
(k) emergency operations recognition of leaks including simulated airship equipment malfunctions; and
(l) communication procedures and phraseology.

(3) The instrument experience specified in sub- regulation (3) (i) and the night flying dual instruction specified in regulation 69(2) and (l) shall not entitle the holder of a private pilot license to pilot airships under IFR.

74. Renewal Requirements

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 12 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.

6.4 Commercial Pilot Licence

75. Eligibility requirements for Commercial Pilot Licence or CPL

An applicant for a commercial pilot licence or CPL shall:

(a) be at least 18 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 this Regulation;

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

(i) confirm that the applicant has undergone the required ground training on the aeronautical knowledge areas listed in Regulation 76, that apply to the aircraft category and class rating sought; and
(ii) certify 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 76;

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

(i) confirm that the applicant has undergone the training on the areas of operation that apply to the applicable aircraft category and class rating sought as specified in regulations 77 or 78 or 79 or 80 or 81; 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 this Regulation;

(g) meet the aeronautical experience requirements of the applicable provisions of this Regulation 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 77(4) that apply to the aircraft category and class rating sought;

(i) hold a PPL issued under this Regulation or meet the requirements of regulation 35, pertaining to military licences; and

(j) comply with all requirements of this regulation which apply to the aircraft category and class rating sought.

76. Aeronautical Knowledge Requirements for CPL

(1) An applicant for a CPL 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 subjects specified in sub-regulation (2).

(2) The aeronautical knowledge areas applicable to any relevant aircraft category and class rating are:

(a) air law:

(i) rules and regulations relevant to the holder of a CPL;
(ii) rules of the air; and
(iii) 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 or power-trains where applicable; and
(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 visual flight rules;
(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 and communicable diseases and public health emergency preparedness and response:

(i) Recognition of disease symptoms
(ii) Assessment, care and reporting
(iii) International health regulations

(e) meteorology:

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

(f) navigation:

(i) air navigation, including the use of aeronautical charts, instruments and navigation aids;
(ii) understanding of the principles and characteristics of appropriate navigation systems; and
(iii) operation of air borne equipment;

(g) operation procedures:

(i) use of aeronautical documentation such as aeronautica information publications or IP, notice to airmen of NOTAM, aeronautical codes and abbreviations;
(ii) appropriate precautionary and emergency procedures;
(iii) operational procedures for carriage of freight;
(iv) potential hazards associated with dangerous goods;
(v) requirements and practices for safety briefing to passengers, including precautions to be observed when embarking and disembarking from aircraft;
(vi) night and high altitude;
(vii) application of threats and error management principles to operational performance.
(viii) altimeter setting procedures;
(ix) in the case of the helicopter, and if applicable, powered-lift settling with power: ground resonance;
(x) retreating blade stall;

(xi) roll-over and other operation hazards; safety procedures, associated with flight in visual meteorological conditions or VMC;

(h) principles of flight:

principles of flight relating to aircraft;

(i) radiotelephony:
(i) communication procedures and phraseology as applied to visual flight rules operations; and
(ii) 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 in sub-regulation (2) in addition to the following areas:

(a) powerplants;
(b) transmissions or power trains;
(c) external loads on helicopter handling;
(d) settling with power, ground resonance, roll-over and other operating hazards; and
(e) 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:

(i) rules and regulations relevant to the holder of a free balloon pilot licence;
(ii) rules of the air; and
(iii) 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;
(iii) relevant operational information from the flight manual or other appropriate document;
(iv) 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 visual flight rules; and
(iv) appropriate air traffic services procedures and altimeter setting procedures;
(v) operations in areas of high-density traffic.

(d) human performance:

human performance relevant to the free balloon pilot and communicable diseases and public health emergency preparedness and response in regard to:

(i) Recognition of disease symptoms
(ii) Assessment, care and reporting
(iii) International health regulations

(e) meteorology:

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

(f) navigation:

(i) practical aspects of air navigation and dead-reckoning techniques;
(ii) 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; and
(iii) application of threats and error management principles to operational performance;

(h) principles of flight

principles of flight relating to free balloons.

(i) 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; and
(iii) principles and characteristics of self-contained and external referenced navigation systems and operation of airborne equipment.

77. Specific Requirements for the Issue of the Aeroplane Category Rating – Experience and Flight Instructions

(1) An applicant for a CPL aeroplane shall obtain the following hours of aeronautical experience:

(a) not less than 200 hours of flight time, or 150 hours were completed during an integrated course of approved training provided for in an Approved Training Organisation under the Civil Aviation Approved Training Organisation Regulation, as a pilot of aeroplanes, of which 20 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 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 or 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) in a powered-lift not less than:

(i) 50 hours as pilot-in-command;

(ii) 10 hours of cross-country flying as pilot-in-command including a cross-country flight totaling not less than 540 km or 300NM in the course of which full-stop landings at two different aerodromes shall be made;

(iii) 10 hours of instrument instruction 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 landings as pilot-in-command.

(2) A holder of a pilot licence in another category may be credited towards the 200 hours of flight time as follows:

(a) 10 hours as PIC in a category other than helicopters; or

(b) 30 hours as PIC holding a PPL on helicopters; or

(c) 100 hours as PIC holding a CPL on helicopters.

(3) The applicant shall have received dual instruction in aeroplanes appropriate to the class or type rating sought from an authorized flight instructor.

(4) The instructor shall ensure that the applicant has operational experience in at least the following areas to the level of performance required for the commercial pilot:

(a) recognize and manage threats and errors;
(b) pre-flight operations, including mass and balance determination, aeroplane inspection and servicing;
(c) aerodrome and traffic pattern operations, collision avoidance precautions and procedures;
(d) control of the aeroplane by external visual reference;
(e) flight at critically slow airspeeds;
(f) spin avoidance; recognition of, and recovery from, incipient and full stalls;
(g) flight with asymmetrical power for multi-engine class or type ratings;
(h) flight at critically high airspeeds;
(i) recognition of, and recovery from, spiral dives;
(j) normal and crosswind take-offs and landings;
(k) maximum performance short field and obstacle clearance take-offs; short-field landings;
(l) basic flight manoeuvres and recovery from unusual attitudes by reference solely to basic flight instruments;

(m) cross-country flying using visual reference, dead reckoning and radio navigation aids;
(n) diversion procedures;
(o) abnormal and emergency procedures and manoeuvres including simulated aeroplane equipment malfunctions;
(p) operations to, from and transiting controlled aerodromes, compliance with air traffic services procedures; and
(q) communication procedures and phraseology.

(5) The applicant shall have received, in actual flight, upset prevention and recovery training approved by the Authority.

78. Specific Requirements for The Issue of The Helicopter Category Rating – Experience and Flight Instructions

(1) 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 Regulation, 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.

(2) The applicant shall have received dual instruction in helicopters 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 commercial pilot:

(a) recognize and manage threats and errors;
(b) pre-flight operations, including mass and balance determination, helicopter inspection and servicing;
(c) aerodrome and traffic pattern operations, collision avoidance precautions and procedures;
(d) control of the helicopter by external visual reference;
(e) recovery at the incipient stage from settling with power; recovery techniques from low-rotor rpm within the normal range of engine rpm;

(f) ground maneuvering and run-ups; hovering; take-offs and landings — normal, out of wind and sloping ground;
(g) steep approaches;
(h) take-offs and landings with minimum necessary power;
(i) maximum performance take-off and landing techniques;
(j) restricted site operations;
(k) quick stops;
(l) hovering out of ground effect;
(m) operations with external load, if applicable;
(n) flight at high altitude;
(o) basic flight manoeuvres and recovery from unusual attitudes by reference solely to basic flight instruments;
(p) cross-country flying using visual reference, dead reckoning and radio navigation aids;
(q) diversion procedures;
(r) abnormal and emergency procedures, including simulated helicopter equipment malfunctions, autorotative approach and landing;
(s) operations to, from and transiting controlled aerodromes, compliance with air traffic services procedures; and
(t) communication procedures and phraseology.

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

(a) 150 hours of flight time as a pilot, including at least 100 hours in powered aircraft, of which 25 hours shall be in gyroplanes;

(b) 100 hours of PIC flight time, including at least:

(i) 10 hours in gyroplanes; and
(ii) 3 hours in cross-country flight in gyroplanes; and

(c) 20 hours of training on the areas of operation listed in regulation 45, including at least:

(i) 5 hours of instrument training in an aircraft; and
(ii) one cross-country flight of at least 2 hours in a gyroplane in day VFR conditions, consisting of a total straight-line distance of more than 50 nautical miles from the original point of departure; and

(d) 10 hours of solo flight in a gyroplane on the areas of operation listed in Regulation 77(4), including at least:

(i) one cross-country flight with landings at a minimum of three points, with one segment consisting of a straight-line distance of at least 50 nautical miles from the original point of departure; and

(ii) 5 hours in night visual flight rules conditions with 10 takeoffs and 10 landings with each landing involving a flight in the traffic pattern.

79. Specific Requirements for the Issue of the Powered-Lift Category Rating – Experience and Flight Instructions

(1) An applicant for a CPL powered-lift shall have completed not less than 200 hours of flights in a powered-lift, or 150 hours if completed during an approved training, as a pilot of aircraft.

(2) The applicant shall have experience as a pilot under instruction in a flight simulation training device of the total flight time of 200 hours or 150 hours, as the case may be, including:

(a) 50 hours as a pilot-in-command;

(b) 10 hours of cross-country flying as pilot-in-command including a cross-country flight totalling not less than 540 km or 300 NM in the course of which full-stop landings at two different aerodromes shall be made;

(c) 10 hours of instrument instruction of which not more than 5 hours may be instrument ground time; and

(d) If the privileges of the licence are to be exercised at night, 5 hours of night flight time including 5 take-offs and landings as pilot-in-command.

(3) The applicant shall have received dual instruction in a powered-lift from an authorized flight instructor.

(4) The instructor shall ensure that the applicant has operational experience in at least the following areas to the level of performance required for the commercial pilot:

(a) recognize and manage threats and errors;
(b) pre-flight operations, including mass and balance determination, powered-lift inspection and servicing;
(c) aerodrome and traffic pattern operations, collision avoidance precautions and procedures;
(d) control of the powered-lift by external visual reference;
(e) recovery at the incipient stage from settling with power; recovery techniques from low-rotor rpm within the normal range of engine RPM;
(f) ground manoeuvring and run-ups;
(g) hover and rolling take-offs and climb-out;
(h) hover and rolling approach and landings — normal, out of wind and sloping ground;
(i) steep approaches;
(j) take-offs and landings with minimum necessary power; maximum performance take-off and landing techniques;
(k) restricted site operations; quick stops;
(l) hovering out of ground effect;
(m) operations with external load, if applicable; flight at high altitude;
(n) basic flight manoeuvres and recovery from unusual attitudes by reference solely to basic flight instruments;
(o) cross-country flying using visual reference, dead reckoning and, where available, radio navigation aids, including a flight of at least one hour;
(p) emergency operations, including simulated powered-lift equipment malfunctions;

(q) power of reconversion to autorotation and autorotative approach, where applicable;
(r) transmission and interconnect driveshaft failure, where applicable;
(s) operations to, from and transiting controlled aerodromes, compliance with air traffic services procedures; and
(t) communication procedures and phraseology.

80. Specific Requirements for the Issue of the Airship Category Rating – Experience and Dual Instructions

(1) 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:

(i) 10 hours of cross-country flight time; and
(ii) 10 hours of night flight;

(c) 40 hours of instrument time, of which 20 hours shall be in flight and 10 hours in flight in airships; and

(d) 20 hours of flight training in airships in the areas of operation listed in sub- Regulation (3)

(2) The applicant shall have received dual instruction in airships 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 commercial pilot:

(a) recognize and manage threats and errors;
(b) pre-flight operations, including mass and balance determination, airship inspection and servicing;
(c) aerodrome and traffic pattern operations, collision avoidance precautions and procedures;
(d) techniques and procedures for the take-off, including appropriate limitations, emergency procedures and signals used;
(e) control of the airship by external visual reference;
(f) recognition of leaks;
(g) normal take-offs and landings;
(h) maximum performance short field and obstacle clearance take-offs;
(i) short-field landings;
(j) flight under IFR;
(k) cross-country flying using visual reference, dead reckoning and, where available, radio navigation aids;
(l) emergency operations, including simulated airship equipment malfunctions;
(m) operations to, from and transiting controlled aerodromes, compliance with air traffic services procedures; and
(n) communication procedures and phraseology.

81. Specific Requirements for the Issue of the Lighter Than Air, or Balloon Category Rating – Experience and Dual Instructions

(1) An applicant for a CPL lighter than air balloon category shall have completed 35 hours which consist of not less than 20 hours training flights in the areas of operation, that include:

(a) for a gas balloon:

(i) 2 training flights of not less than 2 hours each in the appropriate areas of operation within 60 days prior to application for the rating;
(ii) 10 hours as PIC; and
(iii) two flights involving a controlled ascent to 5,000 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 5000 feet above the launch site.

(c) for a free balloon:

(i) the procedures and manoeuvres described in sub-regulation (3) 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
(vi) Maintain control of the free balloon at all times in a manner such that the successful outcome of a procedure or maneuver is assured.

(2) The applicant shall have received dual instruction in airships 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 commercial pilot:

(a) recognize and manage threats and errors;
(b) pre-flight operations, including mass and balance determination, airship inspection and servicing;
(c) aerodrome and traffic pattern operations, collision avoidance precautions and procedures;
(d) techniques and procedures for the take-off, including appropriate limitations, emergency procedures and signals used;
(e) control of the airship by external visual reference;
(f) recognition of leaks;
(g) normal take-offs and landings;

(h) maximum performance or short field and obstacle clearance take-offs; short-field landings;
(i) flight under IFR;
(j) cross-country flying using visual reference, dead reckoning and, where available, radio navigation aids;
(k) emergency operations, including simulated airship equipment malfunctions;
(l) operations to, from and transiting controlled aerodromes, compliance with air traffic services procedures; and
(m) communication procedures and phraseology.

82. Privileges and Limitations

(1) Subject to compliance with the requirements specified in Regulations 15, 213, 25(1), 26 and 50, the privileges of the holder of a commercial pilot licence shall be:

(a) to exercise all the privileges of the holder of a private pilot licence in an aircraft within the appropriate aircraft category;

(b) to act as pilot-in-command of an aircraft within the appropriate aircraft category engaged in operations other than commercial air transportation;

(c) to act as pilot-in-command, in commercial air transportation, of an aircraft within the appropriate aircraft category and certificated for single-pilot operation;

(d) to act as co-pilot of an aircraft within the appropriate aircraft category required to be operated with a co-pilot; and for the airship category, to pilot an airship under instrument flight rules or IFR.

(2) Before exercising the privileges at night, the licence holder shall have received dual instruction in aircraft within the appropriate category of aircraft in night flying, including take-off, landing and navigation.

83. Renewal Requirements

A holder of a PPL may apply for renewal of the licence if the holder of the licence has logged as PIC or co-pilot within 6 months preceding the date of 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.

6.5 multi-crew pilot licence

84. Eligibility Requirements for Multi-Crew Pilot Licence or MPL

An applicant for Multi-crew Pilot Licence or MPL, shall:

(a) not be less than 18 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 this Regulation;

(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.

(c) meet the applicable aeronautical experience requirements of this sub-part before applying for the practical test;

(d) pass a knowledge test on the applicable aeronautical knowledge areas of Regulation 85 that apply to the aircraft category rating sought;

(e) pass the practical test on the applicable areas of operation specified in Regulation 85(2) that apply to the aircraft category sought; and

(f) have a valid class 1 medical certificate issued under this Regulation.

85. Aeronautical Knowledge and Skill Requirements for Multi-Crew Pilot Licence

(1) The applicant shall have met the requirements specified in the knowledge requirements for the airline transport pilot licence appropriate to the aeroplane category in an approved training course and the additional requirements specified in the Third Schedule to this Regulation.

(2) The applicant shall have demonstrated the underpinning skills required for the competencies of the approved adapted competency model prescribed in the applicable technical guidance materials as pilot flying and pilot monitoring, to the level required to perform as a co-pilot of turbine-powered aeroplanes certificated for operation with a minimum crew of at least 2 pilots under VFR and IFR,

(3) Training in the underpinning knowledge requirements shall be fully integrated with the training of the underpinning skill requirements.

(4) The competency standards to be achieved and the associated performance criteria for the multi-crew pilot licence applicant shall be publicly available in the applicable technical guidance material.

86. Experience and Flight Instruction

(1) An applicant for MPL shall have completed an approved training course, not less than 240 hours as pilot flying and pilot monitoring of actual and simulated flight.

(2) Flight experience in actual flight shall include at least the experience requirements in Regulation 70(2), upset prevention and recovery training, night flying and flight by reference solely to instruments.

(3) In addition to meeting the provisions of sub-regulation (2) , the applicant shall have gained, in a turbine-powered aeroplane certificated for operation with a minimum crew of at least 2 pilots, or in a flight simulation training device approved for that purpose by the Authority in accordance with the Third Schedule to this Regulation the experience necessary to achieve the final competency standard of the approved adapted competency model prescribed in the applicable technical guidance material.

(4) The applicant shall have completed approved training covering the experience requirements specified in this Regulation.

(5) The applicant shall have received dual flight instruction in order to achieve the final competency standard in all competencies of the approved adapted model as specified in the applicable technical guidance material for the issue of the multi-crew pilot licence.

87. Privileges and Limitations

(1) Subject to compliance with the requirements specified in regulations 15, 23 25(1), 26 and 50, the privileges of the holder of a multi-crew pilot licence shall be:

(a) to exercise all the privileges of the holder of a PPL in the aeroplane category provided the requirements of regulation 69 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 co-pilot.

(2) Before exercising the privileges of the instrument rating in a single-pilot operation in aeroplanes, the licence holder shall have demonstrated 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 105(2) appropriate to the aeroplane category.

(3) Before exercising the privileges of a commercial pilot licence in a single-pilot operation in aeroplanes, the licence holder shall 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 totaling 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 specified in regulations 76(2), 78(4), 77(1)(a), with the exception of 77(1)(b) and 78(4) appropriate to the aeroplane category.

88. Renewal Requirements

A holder of a Multicrew Pilots Licence may apply for renewal of the licence if he or she has logged not less than 6 hours as pilot in command or co-pilot and has done 6 take offs and landings within 6 months preceding the date of application for renewal

6.6 Airline Transport pilot licence or ATPL

89. Eligibility Requirements for Airline Transport Pilot Licence or ATPL

An applicant for an Airline Transport Pilot Licence or ATPL shall:

(a) be at least 21 years of age;

(b) demonstrate the ability to , speak, and understand the English language in accordance with the language proficiency requirements contained in the Second Schedule to this Regulation;

(c) meet at least one of the following requirements:

(i) hold a valid and current CPL and an instrument rating; or
(ii) meet the military experience requirements under regulation 35, 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 sub-regulation before applying for the practical test;

(e) pass a knowledge test on the applicable aeronautical knowledge areas of regulation 90 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 91, that apply to the aircraft category and class rating sought; and

(g) have a valid class 1 medical certificate issued under this regulation.

90. Aeronautical Knowledge Requirements For Airline Transport Pilot Licence or ATPL

(1) Subject to sub-regulation (2) an applicant for an Airline Transport Pilot Licence or ATPL, shall receive and record ground training in a manner prescribed by the Authority in the applicable technical guidance material, 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:

(i) rules of the air; and
(ii) appropriate air traffic services practices and procedures.

(b) aircraft general knowledge:

(i). general characteristics and limitations of electrical, hydraulic, pressurization and other aircraft systems;
(ii). flight control systems, including autopilot and stability augmentation;
(iii). principles of operation, handling procedures and operating limitations of aircraft powerplants;
(iv). effects of atmospheric conditions on engine performance;
(v). relevant operational information from the flight manual or other appropriate document;
(vi). operating procedures and limitations of appropriate aircraft;
(vi) effects of atmospheric conditions on aircraft performance;
(viii). use and serviceability checks of equipment and systems of appropriate aircraft;
(ix). 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;

(x). 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;
(ii) mass and balance calculations;
(iii) use and practical application of take-off, landing and other performance data, including procedures for cruise control;
(iv) pre-flight and en- route operational flight planning;
(v) preparation and filing of air traffic services flight plans;
(vi) appropriate air traffic services procedures; and
(vii) altimeter setting procedures;

(d) human performance:

human performance including principles of threat and error management relevant to the airline transport pilot and communicable diseases and public health emergency preparedness and response in regard to:

(i) Recognition of disease symptoms
(ii) Assessment, care and reporting
(iii) International health regulations;

(e) 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;
(i) aeronautical meteorology;
(ii) climatology of relevant areas in respect of the elements having an effect upon aviation;
(iii) the movement of pressure systems;
(iv) the structure of fronts, and the origin and characteristics of significant weather phenomena which affect take-off, en-route and landing conditions;

(f) navigation

(i) air navigation, including the use of aeronautical charts, radio navigation aids and area navigation systems;
(ii) specific navigation requirements for long-range flights;
(iii) use, limitation and serviceability of avionics and instruments necessary for the control and navigation of aircraft;
(iv) use, accuracy and reliability of navigation systems used in departure, en-route, approach and landing phases of flight; identification of radio navigation aids;
(v) principles and characteristics of self-contained and external-referenced navigation systems; operation of airborne equipment;

(g) operational procedures:

(i) application of threat and error management to operational performance;

(ii) interpretation and use of aeronautical documentation such as Aeronautical Information Publishing, NOTAM, aeronautical codes and abbreviations, and
(iii) instrument procedure charts for departure, en-route, descent and approach;
(iv) precautionary and emergency procedures; safety practices associated with flight under Instrument Flight Rules;
(v) operational procedures for carriage of freight and dangerous goods;
(vi) requirements and practices for safety briefing to passengers, including precautions to be observed when embarking and disembarking from aircraft;
(vii) night and high altitude; and
(viii) in the case of helicopters, and if applicable, powered-lifts, settling with power; ground resonance; retreating blade stall; dynamic rollover and other operating hazards; safety procedures, associated with flight in VMC;

(h) principles of flight:

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

(i) radiotelephony:

Radio-telephony 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;
(ii) flight control systems, including autopilot and stability augmentation;
(iii) principles of operation, handling procedures and operating limitations of helicopter power plants;
(iv) transmission (power-trains);
(v) effects of atmospheric conditions on engine performance;
(vi) relevant operational information from the flight manual;
(vii) operating procedures and limitations of appropriate helicopters;
(viii) effects of atmospheric conditions on helicopter performance; and
(ix) 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;
(ii) mass and balance calculations;
(iii) causes, recognition and effects of engine, airframe and rotor, icing; and
(iv) hazardous weather avoidance;

(c) navigation:

(i) use, accuracy and reliability of navigation systems;
(ii) 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;
(iii) settling with power, ground resonance, retreating blade stall, dynamic roll-over and other operating hazards;
(iv) safety practices associated with flight under visual flight rules;
(v) operational procedures for carriage of freight, including external loads, and dangerous goods; and
(vi) 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:

(i) radiotelephony procedures and phraseology as applied to visual flight rules operations; and
(ii) action to be taken in case of communication failure.

91. Skill Requirements for Airline Transport Pilot Licence or ATPL

An applicant for ATPL shall have demonstrated the ability to perform, as pilot-in-command of an aircraft within the appropriate category 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 fight procedures and manoeuvres during all phases of flight;

(c) abnormal and emergency procedures and manoeuvres related to failures and malfunctions of equipment, such as engine, systems and airframe;

(d) procedures for crew incapacitation and crew coordination, including allocation of pilot tasks, crew cooperation and use of checklists;

(e) in the case of aeroplanes and powered-lifts, procedures and manoeuvres for instrument flight described in regulation 101, including simulated engine failure.

92. Specific Requirements for the Issue of The Aeroplane Category Rating – Experience and Flight Instructions

(1) An applicant for ATPL – aeroplane shall have completed not less than 1 500 hours of flight time as a pilot of aeroplanes.

(2) Notwithstanding sub-regulation (1), an applicant who has not completed 1500 hours of flight time, a maximum of 100 hours may be credited to total up the 1500 hours of flight time if the applicant has acquired experience in the FSTD out of which not more than 25 hours shall have been acquired in a flight procedure trainer or a basic instrument flight trainer.

(3) The applicant shall have completed in aeroplanes not less than:

(a) 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 pilot-in-command or as pilot-in-command under supervision;

(c) 75 hours of instrument time, of which not more than 30 hours may be instrument ground time; and

(d) 100 hours of night flight as pilot-in-command or as co-pilot.

(4) The applicant shall have received the dual flight instruction in the applicable category as required by Regulations 77, or 78, or 79, or 80 or 81 for the issue of the commercial pilot licence and regulation 101 the issue of the instrument rating or by regulation 86 for the issue of the multi-crew pilot licence.

(5) An applicant who has flight time as a pilot of aircraft in other categories, shall, notwithstanding the requirement of sub-regulation (1) be credited with flight time from the said category by the Authority as prescribed in the applicable technical guidance material provided that the credited time does not exceed 50%.

93. Specific Requirements for the Issue of the Helicopter Category Rating – Experience and Flight Instructions

(1) The applicant shall have completed not less than 1000 hours of flight time as a pilot of helicopters.

(2) Notwithstanding sub-regulation (1), an applicant who has not completed 1000 hours of flight time, a maximum of 100 hours may be credited to total up the 1000 hours of flight time if the applicant has acquired experience in the FSTD out of which not more than 25 hours shall have been acquired in a flight procedure trainer or a basic instrument flight trainer.

(3) The applicant shall have completed in helicopters not less than:

(a) 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;

(b) 200 hours of cross-country flight time, of which not less than 100 hours shall be as pilot-in-command or as pilot-in-command under supervision;

(c) 30 hours of instrument time, of which not more than 10 hours may be instrument ground time; and

(d) 50 hours of night flight as pilot-in-command or as co-pilot.

(4) The applicant shall have received the flight instruction required for the issue of the commercial pilot licence specified in regulation 78 to this Regulation.

(5) An applicant who has flight time as a pilot of aircraft in other categories, shall, notwithstanding the requirement of sub-regulation (1) be credited with flight time from the said category by the Authority as prescribed in the applicable technical guidance material provided that the credited time does not exceed 50%.

94. Specific Requirements for the Issue of the Powered-Lift Category Rating – Experience and Flight Instructions

(1) The applicant should have completed not less than 1 500 hours of flight time as a pilot of powered-lifts.

(2) The applicant shall have completed in powered-lifts not less than:

(a) 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;

(b) 100 hours of cross-country flight time, of which not less than 50 hours should be as pilot-in-command or as pilot-in-command under supervision;

(c) 75 hours of instrument time, of which not more than 30 hours may be instrument ground time; and

(d) 25 hours of night flight as pilot-in-command or as co-pilot.

(3) An applicant who has flight time as a pilot of aircraft in other categories, shall, notwithstanding the requirement of sub-regulation (1) be credited with flight time from the said category by the Authority as prescribed in the applicable technical guidance material provided that the credited time does not exceed 50%.

(4) The applicant shall have received the dual flight instruction required in regulation 79(4) for the issue of the commercial pilot licence and regulation 101 for the issue of the instrument rating.

95. Privileges and Limitations

(1) Subject to compliance with the requirements specified in regulations 22, 24, 26, 27 and 52, the privileges of the holder of an airline transport pilot licence shall be:

(a) to exercise all the privileges of the holder of a private and commercial pilot licence in an aircraft within the appropriate aircraft category and, in the case of a licence for the aeroplane and powered-lift categories, of the instrument rating; and

(b) to act as pilot-in-command, in commercial air transportation, of an aircraft within the appropriate category and certificated for operation with more than one pilot.

(2) Where the holder of ATPL 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 established in regulations 87(1)(a)10, regulations 87(2) and 87(3)

(3) Any limitation of privileges shall be endorsed on the licence.

96. Additional Aircraft Category, Class and Type Ratings

An applicant who holds a valid ATPL and seeks additional aircraft category, class and type rating shall:

(a) meet the applicable eligibility requirements in accordance with this regulation
(b) pass a knowledge test on the applicable aeronautical knowledge areas;
(c) meet the applicable aeronautical experience requirements this regulation; and:
(d) pass the practical test on the areas of operation specified in this regulation

97. Renewal Requirements

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 6 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.

6.7 Instrument Rating

98. General Eligibility Requirements for Instrument Rating or IR

(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 he or she has an instrument rating appropriate to the aircraft category.

(2) An applicant for an instrument rating shall:

(a) hold a PPL or CPL, 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 of instrument rating, unless the applicant already holds an instrument rating in another category; and

(d) pass an instrument rating 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) have established their hearing acuity on the basis of compliance with the hearing requirements for the issue of a Class 1 Medical Assessment.

(3) The applicant shall have received dual instrument flight instruction from an authorized flight instructor.

(4) The applicant shall have operational experience in flight by reference solely to instruments, including the completion of a level 180° turn, in a suitably instrumented aircraft.

99. Aeronautical Knowledge Skill, and Experience Requirements

(1). 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, 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 Instrument Flight Rules and in instrument meteorological conditions;
(ii) use and limitations of automation;
(iii) compasses, turning and acceleration errors;
(iv) gyroscopic instruments, operational limits and precession effects; and
(v) 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 Instrument Flight Rules;
(ii) operational flight planning; preparation and filing of air traffic services flight plans under Instrument Flight Rules; and
(iii) altimeter setting procedures;

(d) human performance:

human performance relevant to instrument flight in aircraft including principles of threat and error management and communicable diseases and public health emergency preparedness and response:

(i) Recognition of disease symptoms
(ii) Assessment, care and reporting
(iii) International health regulations

(e) meteorology:

(i) application of aeronautical meteorology; interpretation and use of reports, charts and forecasts;
(ii) codes and abbreviations;
(iii) use of, and procedures for obtaining, meteorological information; altimetry;
(iv) causes, recognition and effects of engine and airframe icing; and
(v) frontal zone penetration procedures; hazardous weather avoidance;

(f) navigation:

(i) practical air navigation using navigation system;
(ii) use, accuracy and reliability of navigation systems used in departure, en-route, approach and landing phases of flight; and
(iii) identification of navigation sources;

(g) operational procedures:

(i) interpretation and use of aeronautical documentation such as Aeronautical Information Publishing, 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 Instrument Flight Rules; and

(iii) application of threat and error management to operational performance.

(h) radiotelephony:

(i) radiotelephony procedures and phraseology as applied to aircraft operations under Instrument Flight Rules; and
(ii) action to be taken in case of communication failure Skill

(2) The applicant shall have demonstrated in an aircraft of the category for which the instrument rating is being sought the ability to perform the procedures and manoeuvres described in regulation 101(2) with a degree of competency appropriate to the privileges granted to the holder of an instrument rating, and to:

(a) recognize and manage threats and errors;
(b) operate the aircraft for the appropriate category, 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 aircraft at all times in a manner such that the successful outcome of a procedure or maneuver is assured.

(3) The applicant shall have demonstrated the ability to operate multi-engine aircraft within the appropriate category by reference solely to instruments with one engine inoperative, or simulated inoperative, if the privileges of the instrument rating are to be exercised on such aircraft Experience

(4) The applicant shall hold a pilot licence for the aircraft category being sought

(5) The applicant 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 the aircraft category being sought; and

(b) 40 hours of instrument time in aircraft of which not more than 20 hours, or 30 hours where a flight simulator is used may be instrument ground time under the supervision medical fitness

(6) Applicants who hold a private pilot licence shall have established their hearing acuity on the basis of compliance with the hearing requirements for the issue of a Class 1 medical certificate

(7) The holder of a private pilot licence wishing to have an instrument rating endorsement shall be required to have a class 1 medical certificate.

100. Specific Requirements for Instrument Rating or IR

(1) An applicant for an Instrument Rating shall hold a PPL or a CPLor ATPL for the appropriate aircraft category.

(2) The applicant 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 the aircraft category being sought; and

(b) 40 hours of instrument time in aircraft of which not more than 20 hours, where a flight simulator is used, may be instrument ground time.

(3) The applicant shall complete ground time shall be under the supervision of an authorized instructor.

101. Flight Instruction

(1) The applicant shall have gained not less than 10 hours of the instrument flight time required in regulation 100(2)(b) while receiving dual instrument flight instruction in the appropriate aircraft category, from an authorized flight instructor

(2) 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;
(vii) landings from instrument approaches;

(d) in-flight manoeuvres and particular flight characteristics

(3) The instructor shall ensure that the applicant has operational experience in the operation of the aircraft within the appropriate category by reference solely to instruments with one engine inoperative or simulated inoperative.

102. Privileges and Limitations

(1) Subject to compliance with the requirements specified in regulations 22, 24 and 52, a holder of an instrument rating with a specific aircraft category shall have the privilege to fly that category of aircraft under IFR.

(2) A holder of a licence with instrument rating shall not exercise the privileges of instrument rating on a multi-engine aircraft unless he or she has complied with the requirements of regulation 99(3)

(3) Where the privileges of the instrument rating are to be exercised on multi-engine aircraft, the applicant shall have received dual instrument flight instruction in a multi-engine aircraft within the appropriate category from an authorized flight instructor.

(4) Where the privileges of instrument rating are to be exercised on multi-engine aircraft, out of the 20 hours specified in regulation 98(5)(b), the applicant shall have received 15 hours of dual instrument flight instruction in a multi-engine aircraft within the appropriate category from an authorized flight instructor.

103. Renewal Requirements

(1) An applicant for renewal of instrument rating shall pass a flight test either on an aircraft or asynthetic flight trainer of an aircraft type rating included in the pilot licence which is approved duly approved for that purpose

(2) Recencecy of flight at least 6 hours, not for a single cycle, within 6 months preceding application for renewal.

(3) Have a valid class 1 medical certificate

6.8 Flight Instructor Rating

104. Eligibility Requirements for Flight Instructor Rating

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

(a) be at least 18years 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 multi-engine class rating; and

(bb) an instrument rating;

(c) have received a logbook endorsement from an authorised instructor on the fundamentals of instructing specified in regulation 105(2) appropriate to the required knowledge test;

(d) have passed a knowledge test on the areas specified in regulation 105(2);

(e) have received a logbook endorsement from an authorised instructor on the areas of operation specified in regulation 105, appropriate to the flight instructor rating sought;

(f) have passed the required practical test on the areas of operations listed in regulation 112, 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 Regulation.

(g) have accomplished the following for a flight instructor rating with an aircraft rating: 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

(h) demonstrate instructional proficiency in stall awareness, spin entry, spins, and spin recovery procedures; and

(h) have logged at least 15 hours as PIC in the category, class and type of aircraft appropriate 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) Where 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.

105. Aeronautical Knowledge and Skills Requirements

(1) An applicant for flight instructor rating shall at least met the knowledge requirements for the issue of a CPL as appropriate to the category of aircraft included in the licence.

(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, m
(f) training philosophies and methodologies including competency-based training and assessment;
(g) training programme development;
(h) lesson planning;
(i) classroom instructional techniques;
(j) use of training aids;
(k) analysis and correction of student errors;
(l) human performance relevant to flight instruction; and
(m) hazards involved in simulating system failures and malfunctions in the air

(3) The applicant shall meet the experience requirements for the issue of a commercial pilot licence as specified in this regulation for each aircraft category, as appropriate.

106. Flight Instruction

An applicant for flight instructor rating shall, under the supervision of an authorized flight instructor for that purpose:

(a) receive instruction in flight instructional techniques including demonstration, student practices, recognition and correction of common student errors; and
(b) practice instructional techniques in those flight manoeuvres and procedures in which it is intended to provide flight instruction.

107. Trainees Records

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.

(c) retain the records required by this regulation for at least three years from the date of giving the flight training or ground training.

108. Additional Category

An applicant for an additional category flight instructor rating shall meet the eligibility requirements listed in regulation 104 that apply to the flight instructor

109. Privileges

(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) hold 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.

(4) in order for the applicant to carry out instruction for the multi-crew pilot licence, shall have also met all the instructor qualification requirements

(5) A flight instructor shall not supervise a student on a solo flight (day or night), or release a student on a solo cross-country unless he or she:

(a) has completed 6 months of instructional duties;
(b) has at least 200 hours experience as an instructor;
(c) has a minimum of 400 hours experience as pilot in command; and
(d) has passed a flight instructor rating practical test for removal of limitations 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 flight simulation training device 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 Regulation and the practical test described (d) shall be conducted by a person duly authorized by the Authority.

110. Limitations and Qualifications

(1) A holder of a flight instructor rating shall not exercise the privileges of flight instructor rating in violation of the requirements of this regulation.

(2) A flight instructor shall not conduct flight instructions for more than 8 in any 24 consecutive-hour period.

(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 appropriate category and class rating and flight instructor rating;

(b) where appropriate, a type-rating;

(c) for instrument flight training or for training for a type rating not limited to visual flight rules, 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 this regulation;

(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 48; 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 the Civil Aviation Operation of Aircraft Regulation.

(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 5 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 twelve 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.

111. Renewal Requirements

(1) 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 where applicable; or

(b) presents to the Authority:

(i) a record of training students that shows that within 12 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 12 months, the flight instructor has performed as a flight instructor or company check pilot and has logged not less than 20 instructional hours; or
(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 90 days preceding the date of the expiry of the flight instructor rating.

(2) Notwithstanding the provision of sub-regulation (1) and regulation 109, a holder of a flight instructor rating shall undergo refresher training after a period not exceeding 2 years

112. Renewal of an Expired Flight Instructor Rating

(1) An expired flight instructor rating shall not be renewed unless:

(a) the applicant provides to the Authority satisfactory evidence of at least 20 hours of flight instruction logged within 3 months preceding expiry of the rating and the application for renewal is made within 60 days after expiry; or

(b) the holder passes a practical test for renewal of the flight instructor rating within 60 days after the expiry provided, he or she provides evidence of at least 10 hours of flight instruction within 30 days before expiry of the rating.

(2) Where a flight instructor rating has expired for a period not exceeding 60 days, the applicant may apply for renewal, subject to sub-regulation (1)

(3) Where a flight instructor rating has lapsed beyond 60 days, the applicant shall:

(a) present a certificate showing that he or she has successfully completed an approved flight instructor refresher course consisting of both ground training and flight training, within 60 days preceding the date of the expiry of the flight instructor rating; and

(b) pass a practical test for renewal of the flight instructor rating within 30 days preceding the application for renewal of the flight instructor rating to demonstrate proficiency in the instructor standards prescribed in regulation 105.

6.9 Glider pilot licence

113. General Eligibility Requirement for Glider Pilot Licence

(1) The applicant for Glider pilot licence shall not be less than 16 years of age.

(2) The applicant shall hold a current class 2 medical Assessment.

114. Aeronautical Knowledge and Skill Requirement

(1) The applicant shall have demonstrated a level of knowledge and skills appropriate to the privileges granted to the holder of a glider pilot licence, as follows: Knowledge in;

(a) Air law:

(i) rules and regulations relevant to the holder of a glider pilot licence;

(ii) rules of the air;

(iii) appropriate air traffic services practices and procedures;

(b) Aircraft general knowledge:

(i) principles of operation of glider systems and instruments;
(ii) operating limitations of gliders; relevant operational information from the flight manual or other appropriate document;

(c) Flight performance, planning and loading:

(i) effects of loading and mass distribution on flight characteristics; mass and balance considerations;
(ii) use and practical application of launching, landing and other performance data;
(iii) pre-flight and en-route flight planning appropriate to operations under VFR; appropriate air traffic services procedures; altimeter setting procedures; operations in areas of high-density traffic;

(d) Human performance:

(i) human performance relevant to the glider pilot including principles of TEM and communicable diseases and public health emergency preparedness and response in regard to:
(ii) Recognition of disease symptoms
(iii) Assessment, care and reporting
(iv) International health regulations

(e) Meteorology:

(i) application of elementary aeronautical meteorology;
(ii) use of, and procedures for obtaining, meteorological information;
(ii) altimetry;

(f) Navigation:

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

(g) Operational procedures:

(i) use of aeronautical documentation such as AIP, NOTAM, aeronautical codes and abbreviations;
(ii) different launch methods and associated procedures;
(iii) appropriate precautionary and emergency procedures, including action to be taken to avoid hazardous weather, wake turbulence and other operating hazards;

(h) Principles of flight:

Principles of flight relating to gliders.

(2) The applicant shall have demonstrated a level of knowledge appropriate to the privileges to be granted to the holder of a glider pilot licence, in communication procedures and phraseology as appropriate to VFR operations and on action to be taken in case of communication failure.

(3) The applicant shall have completed not less than 6 hours of flight time as a pilot of gliders including 2 hours of solo flight time during which not less than 20 launches and landings have been performed.

(4) An applicant who has flight time as a pilot of aircraft in other categories, shall be credited with flight time from the said category by the Authority as prescribed in the applicable technical guidance material provided that the credited time does not exceed 50%.

(5) The applicant shall have gained, under appropriate supervision, operational experience in gliders in at least the following areas:

(a) pre-flight operations, including glider assembly and inspection;
(b) techniques and procedures for the launching method used, including appropriate airspeed limitations, emergency procedures and signals used;
(c) traffic pattern operations, collision avoidance precautions and procedures;
(d) control of the glider by external visual reference;
(e) flight throughout the flight envelope;
(f) recognition of, and recovery from, incipient and full stalls and spiral dives;
(g) normal and crosswind launches, approaches and landings; cross-country flying using visual reference and dead reckoning; emergency procedures.

115. Privileges and Limitations

(1) Subject to compliance with the requirements specified in regulations 22, 24, 26 and 52, the privileges of the holder of a glider pilot licence shall be to act as pilot-in-command of any glider provided the licence holder has operational experience in the launching method used

(2) Where passengers are to be carried, the licence holder should have completed not less than 10 hours of flight time as a pilot of gliders.

6.10 Free Balloon Pilot Licence

116. Eligibility Requirements for Free Balloon Pilot Licence

(1) An applicant for free balloon licence shall be 16 years of age.

(2) The applicant shall hold a current class 1 medical assessment certificate.

117. Aeronautical Knowledge and Skill Requirements

(1) The applicant for free balloon pilot licence shall have demonstrated a level of knowledge appropriate to the privileges granted to the holder of a free balloon pilot licence as follows:

(a) Air law:

(i) rules and regulations relevant to the holder of a free balloon pilot licence;
(ii) rules of the air;
(iii) 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;
(iii) relevant operational information from the flight manual or other appropriate document; and
(iv) physical properties and practical application of gases used in free balloons.

(c) Flight performance, planning and loading:

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

(d) Human performance:

human performance relevant to the free balloon pilot including principles of threat and error management and communicable diseases and public health emergency preparedness and response in regard to:

(i) Recognition of disease symptoms
(ii) Assessment, care and reporting
(iii) International health regulations

(e) Meteorology

(i) application of elementary aeronautical meteorology;
(ii) use of, and procedures for obtaining, meteorological information; and
(iii) altimetry;

(f) Navigation

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

(g) Operational procedures

(i) use of aeronautical documentation such as AIP, NOTAM, aeronautical codes and abbreviations; and
(ii) appropriate precautionary and emergency procedures, including action to be taken to avoid hazardous weather, wake turbulence and other operating hazards;

(h) Principles of flight:

(i) principles of flight relating to free balloons.

(2) Where the privileges of the licence are to be exercised at night, the applicant shall have gained, under appropriate supervision, operational experience in free balloons in night flying.

(3) Where passengers are to be carried for remuneration or hire, the licence holder should have completed not less than 35 hours of flight time including 20 hours as a pilot of a free balloon.

118. Privileges and Limitations

(1) Subject to compliance with the requirements specified in regulations 15, 26(1 & 2), 27 and 52 the privileges of the holder of a free balloon pilot licence shall permit him or her to act as pilot-in-command of any free balloon provided that the licence holder has operational experience in hot air or gas balloons as appropriate.

(2) Before exercising the privileges at night, the licence holder shall have complied with the requirements specified in regulation 52.

119. Renewal Requirements

A holder of a Balloon Pilot Licence may apply for renewal of the licence if the holder of the licence has logged 3 hours, including 3 launches and landings, as PIC within the 6 months preceding the date of application for renewal.

6.11 Other Ratings

120. Category Ratings

A pilot seeking a category rating shall:

(a) have received the required training and possess the aeronautical experience prescribed by this regulation for the aircraft category and, where 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, where applicable, class and type rating sought:

(i) aeronautical knowledge areas; and
(ii) areas of operation.

(c) pass the knowledge and practical test that is appropriate to the pilot licence for the aircraft category and, where applicable, the class rating sought.

121. Class Ratings

(1) A pilot or remote pilot seeking an additional class rating:

(a) shall have an endorsement in his or her 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;

(2) The requirement of sub-regulation (1) shall not be applicable to an applicant who holds an aeroplane, rotorcraft or airship category at that pilot

122. Type Ratings

(1) A person shall not act as a pilot in command of the following aircraft unless he or she has type rating for that aircraft:

(a) an aircraft certificated for at least two pilots;
(b) helicopters and powered-lifts certificated for single-pilot operation except where a class rating has been issued;
(c) any aircraft so determined by the Authority; or
(d) remotely piloted aircraft for RPA category 'C' operations

(2) A person shall not act as a commercial pilot in an aeroplane of maximum certificated take-off mass over 2,300 kg unless that person's licence includes an Instrument Rating.

(3) An applicant 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) demonstrate the skill and knowledge required for the safe operation of the applicable type of aircraft, relevant to the licensing requirements and piloting functions of the applicant;

(i) for aeroplanes of maximum certificated take-off mass of 5,700 kilograms or below not less than five hours with six take off and six landings of dual flight time in the aircraft type sought; or

(ii) for aeroplanes of maximum certificated take-off mass of over 5,700 kgs where training is conducted in a flight simulator, not less than 30 hours of flight simulator time and 3 hours of actual flying time in the aircraft type sought;

(b) Level D FSTD of the aircraft type sought approved by the Authority, not less than 36 hours;

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

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

(4) For the purpose of training, testing, or specific special purpose non-revenue, non-passenger carrying flights, special authorization may be provided in writing to the licence holder by the Authority in place of issuing the class or type rating in accordance with sub- regulation (3).

(5) The authorization referred to in sub-regulation (4), shall be limited in validity to the time needed to complete the specific flight.

(6) The applicant shall have:

(a) gained, under appropriate supervision, experience in the applicable type of aircraft or flight simulator in the following:

(i) normal flight procedures and manoeuvres during all phases of flight;

(ii) abnormal and emergency procedures and manoeuvres in the event of failures and malfunctions of equipment, such as engine, systems and airframe;

(iii) where applicable, instrument procedures, including instrument approach, missed approach and landing procedures under normal, abnormal and emergency conditions, including simulated engine failure;

(iv) for the issue of an aeroplane category type rating, upset prevention and recovery training; and

(v) procedures for crew incapacitation and crew coordination including allocation of pilot tasks;

(vi) crew cooperation and use of checklists.

6.12 Balloon ratings

123. Balloon Ratings

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.

6.13 Night rating

124. General Eligibility Requirements

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.

125. Flight Instruction Requirements

An applicant for a night rating shall have received five hours dual instruction under a qualified instructor in night flying, 5 flights as pilot in command including 5 take offs and landings in an aircraft.

126. Privileges and Limitations

A night rating shall entitle a PPL holder to act as a pilot in command of an aircraft at night but shall not entitle the holder to fly an aircraft under IFR conditions.

127. Renewal Requirements

An applicant for a night rating renewal shall have within the immediately preceding 6 months carried out as pilot in command not less than five take offs and five landings at night.

6.14 Flight Examiner Authorization

128. Flight Examiner Authorization Requirements

(1) A flight examiner shall hold:

(a) a licence and rating for which he or she 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 specified in regulation 105.

(4) To qualify for a flight examiner's authorisation, a pilot shall have conducted at least 1 skill test under 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) The privileges of the examiner's authorization are to conduct skill tests and proficiency checks for a licence and ratings.

129. Training Requirements

(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 this regulation; and

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

CHAPTER VII

LICENCES, RATINGS AND AUTHORIZATIONS FOR REMOTE PILOTS

130. General Licensing Specifications

(1) A person shall not act either as remote pilot-in-command or remote co-pilot unless that person is a holder of a remote pilot licence issued in accordance with this regulation.

(2) An applicant who meets the requirements of this regulation shall have the specific RPA category rating endorsed on his or her licence.

(3) An applicant for RPL shall, before being issued with the remote pilot licence or rating, meet such requirements in respect of age, experience, flight instruction, competencies and medical fitness, specified for that remote pilot licence or rating as specified in Regulation 131.

(4) An applicant for a remote pilot licence or rating shall demonstrate, to the Authority sufficient knowledge and skill related to the applicable remote pilot aircraft.

131. Eligibility Requirements

(1) An applicant for remote pilot licence and associated rating(s) shall:

(a) be at least 18 of age;

(b) hold a current class 3 medical certificate;

(c) demonstrate the ability to speak and understand the English Language in accordance with the language proficiency requirements;

(d) pass a skill test to demonstrate the ability to perform, as remote PIC of the appropriate RPA category and associated remote pilot systems (RPS), the relevant procedures and manoeuvres with the competency appropriate to the privileges being sought.

(2) An applicant for remote pilot licence may be required to hold a Class 1 medical certificate based on the complexity of the specific RPA operations, his or her work environment and responsibilities.

(3) The applicant for remote pilot licence shall have completed:

(a) the remote pilot training approved by the Authority;

(b) a flight test conducted by the Authority; and

(c) has demonstrated the competencies required for the safe operation of the applicable type of RPA and associated RPA control station, under standard RPA operating conditions.

132. Category Ratings

(1) The Authority will issue remote pilot licences and ratings as specified in regulation 6(1), for RPA category C (certified category) operations only provided the applicant:

(a) has completed the remote pilot training approved by the Authority in the operation of the remote aircraft category being sought; or

(b) has demonstrated to the authority, the competencies required for the safe operation of the applicable type of RPA and associated RPA control station, under standard RPA operating conditions.

(2) A holder of a remote pilot licence seeking additional category in reference to regulation 6 shall meet the requirements of this regulation regarding RPAS appropriate to the privileges for which the additional category rating is sought.

(3) An applicant for an additional RPA category shall pass a skill test to demonstrate the ability to perform, as remote PIC of the RPA category being sought and associated systems (RPS), the relevant procedures and maneuvers with the competency appropriate to the privileges granted.

133. Class and Type Ratings

(1) An applicant for RPL shall demonstrate competencies for the initial issue of a remote pilot licence, the ratings appropriate to the category, class or type of RPA and associated RPS used in the demonstration before endorsment on that remote pilot licence.

(2) The applicant shall meet the levels of skill performance required in accordance with the regulation 134.

(3) A holder of a remote pilot licence shall observe privileges and limitation endorsed on his remote pilot licence.

(4) A holder of a remote pilot licence shall not act as remote pilot in command or of an RPA of a class and category which is not endorsed on his or her RPL.

(5) For the purpose of training, testing, or specific special purpose non-revenue flights, special authorization may be provided in writing to the remote pilot licence holder by the Authority in place of issuing the class or type rating.

(6) The authorization in sub-regulation (6) shall be limited in validity to the time needed to complete the specific flight.

134. Skill Requirements for the Class and Type Ratings

(1) An applicant shall before being issued a class and type rating have demonstrated the competencies required for the safe operations of an RPA of the class for which the rating is sought.

(2) The applicant shall have:

(a) gained, under appropriate supervision, experience in the applicable type of Remote Pilot Aircraft and associated Remote Pilote Systems or Flight Simulation Training Device in the following:

i. normal flight procedures and manoeuvres during all phases of flight;

ii. abnormal and emergency procedures and manoeuvres in the event of failures and malfunctions of equipment, such as engine, C2 link, systems and airframe;

iii. instrument procedures, including instrument approach, missed approach and landing procedures under normal, abnormal and emergency conditions, including simulated engine failure; and

iv. for the issue of an aeroplane category, upset prevention and recovery training.

v. procedures for crew incapacitation and crew coordination including allocation of remote pilot tasks; crew cooperation and use of checklists;

(b) demonstrated the competencies required for the safe operation of the applicable type of RPA and associated RPS and demonstrated C2 link management skills, relevant to the duties of a remote pilot-in-command or a remote co-pilot as applicable.

135. Use of a Flight Simulation Training Device (FSTD) for Acquisition of Experience and Demonstration of Competencies

A person shall not use or cause to be used, a flight simulator training device (FSTD) for acquiring experience or performing any manoeuvre required during the demonstration of competencies for the issue of a remote pilot licence or rating unless such FSTD is approved by the Authority for that purpose, after the authority has assessed the FSTD as appropriate to the task.

136. Requirements for Authorization to Conduct Remote Pilot Licence Training

(1) A person, shall not carry out remote pilot training required for the issue of a remote pilot licence or rating, on remote aircraft or in an FSTD unless, such a person:

(a) holds a current remote pilot licence;

(b) has RPAS instructor rating endorsed on his or her remote pilot licence;

(c) has authorization to act as an agent of an approved training organization authorized by the Authority to carry out remote pilot training; or

(d) for foreign RPL holders, specific authorization granted by the Contracting State which issued the remote pilot licence.

(2) A person shall not carry out training on a FSTD for the issue of a remote pilot licence or rating unless such FSTD is approved by the Authority for the appropriate task.

137. Crediting of RPAS Flight Time

(1) A student remote pilot shall be credited in full with all solo and dual instruction RPAS flight time towards the total flight time required for the initial issue of a remote pilot licence.

(2) The holder of a remote pilot licence shall be credited in full with all dual instruction RPAS flight time towards the total RPAS flight time required for a remote pilot-in-command upgrade.

(3) The holder of a remote pilot licence shall be credited in full with all solo or dual instruction RPAS flight time, in a new category of RPA or for obtaining a new rating, towards the total RPAS flight time required for that rating.

(4) The holder of a remote pilot licence, when acting as remote co-pilot of an RPA certificated for operation by a single remote pilot but required by the Authority to be operated with a remote co-pilot, shall be credited with not more than 50 per cent of the remote co-pilot RPAS flight time towards the total RPAS flight time required for a remote pilot-in-command upgrade.

(5) The Authority shall credit RPAS flight time in full towards the total RPAS flight time required if the RPAS is equipped to be operated by a remote co-pilot and is operated in a multi-crew operation.

(6) The holder of a remote pilot licence, when acting as remote co-pilot of an RPA certificated to be operated with a remote co-pilot, shall be credited in full with this RPAS flight time towards the total RPAS flight time required for a remote pilot-in-command upgrade.

(7) The holder of a remote pilot licence, when acting as remote pilot-in-command under supervision, shall be credited in full with this RPAS flight time towards the total RPAS flight time required for a remote pilot-in-command upgrade.

(8) The holder of a remote pilot licence applying for a new rating will be credited with RPAS flight time experience after determining the extent of experience acceptability as prescribed in the applicable technical guidance material but in any case, not more than 50%

(9) An applicant who meets the requirement in regulation 131 shall be credited towards the requirements for theoretical knowledge instruction and examination requirements for the remote pilot certificate in accordance with the guidelines specified in the applicable technical guidance material.

138. Privileges and the Conditions to Be Observed in Exercising Such Privileges

(1) Subject to compliance with the requirements specified in regulations 22, 24, 26, and 131 the privileges of the holder of a remote pilot licence shall be:

(a) to act as remote pilot-in-command of an RPA and associated RPS, certificated for remote single-pilot operation;
(b) to act as remote co-pilot of an RPA and associated RPS, required to be operated with a remote co-pilot;
(c) to act as a remote pilot-in-command of an RPA and the associated RPS, required to be operated with a remote co-pilot; and
(d) to act either as remote pilot-in-command or as remote co-pilot of an RPAS under IFR.

(2) A holder of a remote pilot licence shall not exercise the privileges of the licence at night, unless he or she has received dual instruction in an RPA and the associated RPS in night flying, including take-off, landing and navigation and accordingly assessed.

139. Curtailment of Privileges for Remote Pilots

A holder of a Remote Pilot Licence who complies with this regulation and the relevant Civil Aviation Remote Pilot Aircraft Systems regulation shall exercise the privileges of his or her licence provided he or she holds a valid medical certificate appropriate to the privileges of the licence.

7.1 Student remote pilot

140. Student Remote Pilot

(1) To be eligible for issue of Student Remote Pilot an applicant shall:

(a) be at least 16 years of age;
(b) have the ability to read, speak and understand English language; and
(c) possess a valid class 3 medical certificate issued under this regulation.

(2) A student remote pilot shall not fly an RPA solo unless under the supervision of, or with the authority of, an authorized RPAS instructor.

(3) A student remote pilot shall not fly an RPA solo on international RPAS operations unless by special or general arrangement between the States concerned.

141. General Requirements for the Issue of the Remote Pilot Licence - Knowledge and Skill

(1) An applicant for a remote pilot licence, shall demonstrate a level of knowledge and skills appropriate to the privileges granted to the holder of a remote pilot licence and appropriate to the category of RPA and associated RPS intended to be included in the remote pilot licence as follows:

Knowledge:

(a) Air law

(i) rules and regulations relevant to the holder of a remote pilot licence;
(ii) rules of the air;
(iii) appropriate air traffic services practices and procedures;
(iv) rules and regulations relevant to flight under IFR; and
(v) related air traffic services practices and procedures.

(b) General RPAS knowledge

(i) principles of operation and the functioning of engines, systems and instruments;
(ii) operating limitations of the relevant category of RPA and engines;
(iii) relevant operational information from the flight manual or other appropriate document;
(iv) use and serviceability checks of equipment and systems of appropriate RPA;
(v) maintenance procedures for airframes, systems and engines of appropriate RPA;
(vi) for rotorcraft and powered-lifts, transmission or power trains where applicable;
(vii) use, limitation and serviceability of avionics, electronic devices and instruments necessary for the control and navigation of an RPA under IFR and in instrument meteorological conditions;
(viii) flight instruments;
(ix) gyroscopic instruments, operational limits and precession effects; practices and procedures in the event of malfunctions of various flight instruments;
(x) for airships, physical properties and practical application of gases;

(c) RPS general knowledge:

(i) principles of operation and function of systems and instruments;
(ii) use and serviceability checks of equipment and systems of appropriate RPS;
(iii) procedures in the event of malfunctions;
(iv) C2 link general knowledge- different types of C2 links and their operating characteristics and limitations;
(v) use and serviceability checks of C2 link systems;
(vi) procedures in the event of C2 link malfunction;
(vii) detect and avoid capabilities for RPAS;

(d) Flight performance, planning and loading:

(i) effects of loading and mass distribution on RPA handling, flight characteristics and performance;

(ii) mass and balance calculations;
(iii) use and practical application of take-off, landing and other performance data;
(iv) pre-flight and en-route flight planning appropriate to RPAS operations under IFR;
(v) preparation and submission of air traffic services flight plans under IFR;
(vi) appropriate air traffic services procedures; altimeter setting procedures;
(vii) in the case of airships, rotorcraft and powered-lifts, effects of external loading on handling.

(a) Human performance:

human performance relevant to RPAS and instrument flight, including principles of threat and error management or TEM. and communicable diseases and public health emergency preparedness and response in regard to:

(i) Recognition of disease symptoms
(ii) Assessment, care and reporting
(iii) International health regulations

(f) Meteorology:

(i) interpretation and application of aeronautical meteorological reports, charts and forecasts;
(ii) use of, and procedures for obtaining, meteorological information, pre-flight and in-flight; altimetry;
(iii) aeronautical meteorology;
(iv) climatology of relevant areas with respect to the elements having an effect on aviation;
(v) the movement of pressure systems, the structure of fronts, and the origin and characteristics of significant weather phenomena which affect take-off, en-route and landing conditions;
(vi) causes, recognition and effects of icing;
(vii) frontal zone penetration procedures; hazardous weather avoidance;
(viii) in the case of rotorcraft and powered-lifts, effects of rotor icing;
(ix) in the case of high-altitude operations, practical high-altitude meteorology, including interpretation and use of weathers reports, charts and forecasts;
(x) jet streams.

(h) Navigation:

(i) air navigation, including the use of aeronautical charts, instruments and navigation aids;

(ii) an understanding of the principles and characteristics of appropriate navigation systems;
(iii) operation of RPAS equipment;
(iv) use, limitation and serviceability of avionics and instruments necessary for control and navigation;
(v) use, accuracy and reliability of navigation systems used in departure, en-route, approach and landing phases of flight;
(vi) identification of radio navigation aids;
(vii) principles and characteristics of self-contained and external-referenced navigation systems;
(viii) operation of RPAS equipment.

(i) Operational procedures:

(i) application of TEM 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) altimeter setting procedures;
(iv) appropriate precautionary and emergency procedures;
(v) safety practices associated with flight under IFR;
(vi) obstacle clearance criteria;
(vii) operational procedures for carriage of freight;
(viii) potential hazards associated with dangerous goods and their management;
(ix) requirements and practices for safety briefings to remote flight crew members;
(x) in the case of rotorcraft, and where applicable, powered-lifts, settling with power;
(xi) ground resonance;
(xii) retreating blade stall;
(xiii) dynamic rollover and other operating hazards;
(xiv) safety procedures, associated with flight in VMC;
(xv) operational procedures for handovers and coordination;
(xvi) operational procedures for normal and abnormal C2 link operations;

(j) Principles of flight:

(i) Fundamental Aerodynamic Principles for RPA
- Forces of flight
- Stability
- Stalling

(ii) Handling Characteristics of Rotorcraft and Powered-Lift RPA:

(iii) Identifying and Managing Retreating Blade Stall and Dynamic Rollover

(iv) Operating RPA in Variable Meteorological Conditions

(k) Radiotelephony:

(i) communication procedures and phraseology; and
(ii) action to be taken in case of communication failure

(2) Skill:

The applicant shall have demonstrated all the competencies of the adapted competency model approved by the Authority at the level required, to act as remote pilot in command of an RPAS operation within the appropriate category of RPA and associated RPS.

(3) Where the privileges of the remote pilot are to be sought on a multi-engine RPA, the applicant shall have demonstrated the ability to operate under IFR with degraded propulsion capabilities.

142. Specific Requirements for the Issue of Remote Pilot Licence – Experience

The applicant shall have gained experience during training in operating the RPA and associated RPS to successfully demonstrate the competencies required by regulation 143.

143. Remote Pilot Licence Training

(1) An applicant for a remote pilot licence, shall have completed an approved training course.

(2) The training in sub-regulation (1) shall be competency-based and, where applicable, conducted in a multi-crew operational environment.

(3) During the training, the applicant shall have acquired the competencies and underpinning skills required for performing as a remote pilot of an RPA certificated for operation under IFR.

(4) The applicant shall have received dual remote pilot licence training in an RPA and associated RPS, sought from an authorized RPAS instructor.

(5) The authorized RPAS instructor shall ensure that the applicant gains operational experience in all phases of flight and the entire operating envelope of an RPAS, including abnormal and emergency conditions, upset prevention and recovery training for the categories concerned, as well as IFR operations.

(6) Where the privileges of the remote pilot are to be exercised on a multi-engine RPA, the applicant shall have received dual instrument remote pilot licence training in a multi-engine RPA within the appropriate category from an authorized RPAS instructor.

(7) The authorized RPAS instructor shall ensure that the applicant has attained operational experience in the operation of the RPA within the appropriate category with engines inoperative or simulated inoperative.

144. Privileges and Limitations of RPA Licence

(1) A holder of an RPA licence, may be granted any of a combination of RPA pilot privileges provided he or she complies with this regulation in regard to:

(a) the category and specification of the RPA;
(b) the training and experience requirements associated with the privileges in questions; and
(c) the RPA Category C operational requirements

(2) The privileges referred to in sub-regulation (1) will include:

(a) Visual Line of Sight (VLOS)
(b) Beyond Visual Line of Sight (BVLOS)
(c) Night
(d) International IFR flights

(3) A person shall not exercise the privileges referred to in sub-regulation (2) unless the said privileges are endorsed on his or her remote pilot licence

7.2 RPAS Instructor Rating

145. Requirements for the Issue of RPAS Instructor Rating or Authorization

(1) An applicant for RPAS instructor rating or authorization shall demonstrate the ability to effectively assess trainees against the adapted competency model used in the approved training programme.

(2) The applicant shall successfully complete the instructor training and meet the qualifications of an RPAS instructor appropriate to the delivery of competency-based training programmes.

(3) The RPAS instructor training programme shall focus on the development of competence in the following specific areas:

(a) the adapted competency model of the remote pilot training programme according to the defined grading system used by the RPAS operator or approved training organization;
(b) in accordance with the assessment and grading system of the RPAS operator or approved training organization, making assessments by observing behaviours; gathering objective evidence regarding the observable behaviours of the adapted competency model used;
(c) recognizing and highlighting performance that meets competency standards;
(d) determining root causes for deviations below the expected standards of performance; and

(e) identifying situations that could result in unacceptable reductions in safety margins.

(4) The applicant shall have met the competency requirements for the issue of a remote pilot licence as appropriate to the category of RPA and associated RPS.

(5) In addition, the applicant shall have demonstrated a level of competency appropriate to the privileges granted to the holder of an RPAS instructor rating, as follows;

(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) competency-based training principles, including student assessments;
(f) evaluation of the training programme effectiveness;
(g) lesson planning;
(h) classroom instructional techniques;
(i) use of training aids, including FSTDs as appropriate;
(j) analysis and correction of student errors;
(k) human performance relevant to RPAS, instrument flight and remote pilot licence training, including principles of threat and error management or TEM; and communicable diseases and public health emergency preparedness and response in regard to:
    (i) Recognition of disease symptoms
    (ii) Assessment, care and reporting
    (iii) International health regulations;
(l) hazards involved in simulating system failures and malfunctions in the aircraft

146. Skill and Experience Requirements

(1) The applicant shall have successfully performed a formal competency assessment, prior to conducting instruction and assessment within a competency-based training programme.

(2) The competency assessment shall be conducted during a practical training session in the category of RPA and associated RPS for which RPAS instructor privileges are sought, including pre-flight, post-flight and ground instruction as appropriate.

(3) The competency assessment shall be conducted by a person authorized by the Authority.

(4) The applicant shall have met the requirements for the issue of a remote pilot licence, shall maintain competencies and meet the recent experience requirements for the licence.

(5) The applicant shall have sufficient training and experience to attain the required level of proficiency in all of the required tasks, manoeuvres, operations and principles, and methods of instruction required by regulation 147 to this regulation.

147. Remote Pilot Instructor Training

An applicant for remote pilot instructor authorization shall, under the supervision of an RPAS instructor authorized by the Authority for that purpose:

(a) have received training in instructional techniques specified in regulation 145(5); and

(b) have practiced instructional techniques in those flight manoeuvres and procedures in which it is intended to provide remote pilot licence training.

148. Privileges of the Holder of the Rating and the Conditions to Be Observed in Exercising Such Privileges

(1) Subject to compliance with the requirements specified in regulations 22 and 133, the privileges of the holder of an RPAS instructor rating shall be:

(a) to supervise solo flights by student remote pilots; and

(b) to carry out remote pilot training for the issue of a remote pilot licence and an RPAS instructor rating provided that the RPAS instructor:

(i) holds at least the remote pilot licence and rating in the appropriate RPA category and associated RPS for which instruction is to be given; and

(ii) has the RPAS instructor privileges endorsed on the remote pilot licence.

(2) Where the applicant seeks authorization to carry out remote pilot training in a multi crew operational environment, he or she shall have met all the multi crew instructor qualification requirements.

CHAPTER VIII

LICENCES FOR FLIGHT CREW MEMBERS OTHER THAN LICENCES FOR PILOTS

8.1 Flight Engineer's Licence

149. General Eligibility Requirements for a Flight Engineer

(1) An applicant for a flight engineer licence shall, before being issued with a licence, meet the requirements in respect of age, knowledge, experience, skill and medical fitness as are specified for those licences.

(2) An applicant for a flight engineer's licence shall:

(a) be at least 18 years of age;
(b) have the ability to read and write the English language.
(c) comply with all the Regulation that apply to the rating sought; and
(d) possess a valid class 2 medical certificate issued under this regulation.

(3) A person shall not act as a flight engineer of an aircraft registered in South Sudan unless that person holds a flight engineer's licence with appropriate ratings.

150. Aeronautical Knowledge Requirements

(1) An applicant for flight engineer's licence shall have demonstrated a level of knowledge and skills appropriate to the privileges granted to the holder of a flight engineer licence, as follows:

(a) Air law:

(i) rules and regulations relevant to the holder of a flight engineer licence; and
(ii) rules and regulation governing the operation of civil aircraft pertinent to the duties of a flight engineer;

(b) Aircraft general knowledge:

(i) basic principles of engines, gas turbines and/or piston engines;
(ii) characteristics of fuels, fuel systems including fuel control;
(iii) lubricants and lubrication systems;
(iv) afterburners and injection systems, function and operation of engine ignition and starter systems;
(v) principles of operation, handling procedures and operating limitations of aircraft engines;
(vi) effects of atmospheric conditions on engine performance;
(vii) airframes, flight controls, structures, wheel assemblies, brakes and anti-skid units, corrosion and fatigue life;
(viii) identification of structural damage and defects;
(ix) ice and rain protection systems;
(x) pressurization and air-conditioning systems, oxygen systems;
(xi) hydraulic and pneumatic systems;
(xii) basic electrical theory, AC and DC electrical systems, aircraft wiring systems, bonding and screening;
(xiii) principles of operation of instruments, compasses, autopilots, radio communication equipment, radio and radar navigation aids, flight management systems, displays and avionics;
(xiv) limitations of appropriate aircraft;
(xv) fire protection, detection, suppression and extinguishing systems;

(xvi) use and serviceability checks of equipment and systems of appropriate aircraft.

(c) Flight performance, planning and loading:

(i) effects of loading and mass distribution on aircraft handling, flight characteristics and performance;
(ii) mass and balance calculations; and
(iii) 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 TEM and communicable diseases and public health emergency preparedness and response in regard to:

(i) Recognition of disease symptoms
(ii) Assessment, care and reporting
(iii) International health regulations

(e) Operational procedures:

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

(f) Principles of flight:

fundamentals of aerodynamics;

(g) Radiotelephony:

communication procedures and phraseology.

151. Experience Requirements

(1) The applicant for flight engineers' licence shall have operational experience in the performance of the duties of a flight engineer, under the supervision of a flight engineer accepted by the Authority for that purpose, as follows;

(a) Normal procedures

(i) pre-flight inspections
(ii) fueling 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 or 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

(2) The applicant shall have completed, under the supervision of a person accepted by the Authority for that purpose, not less than 100 hours of flight time in the performance of the duties of a flight engineer.

(3) The Authority may accept experience of 50 hours as a flight engineer in a flight simulator, which it has approved, as part of the total flight time of 100 hours.

(4) An applicant who has flight time as a pilot of aircraft, shall, notwithstanding the requirement of this regulation, be credited with flight time provided that the credited time does not exceed 50%.

152. Skill Requirements

(1) The applicant shall have demonstrated the ability to perform as flight engineer of an aircraft, the duties and procedures described in regulation 151 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.

(2) The use of a FSTD for performing any of the procedures required during the demonstration of skill described in sub paragraph (1) shall be approved by the Authority to ensure that the FSTD is appropriate to the task.

153. Privileges and Limitations

(1) Subject to compliance with the requirements specified in regulations 22, 24 and 26, the privileges of the holder of a flight engineer licence shall be to act as flight engineer of any type of aircraft on which the holder has demonstrated a level of knowledge and skill, as determined by the Authority on the basis of those requirements specified in regulation 150(1) and which are applicable to the safe operation of that type of aircraft.

(2) The types of aircraft on which the holder of a flight engineer licence is authorized to exercise the privileges of that licence, shall be either entered on the licence or recorded elsewhere in a manner acceptable to the Authority.

154. Renewal Requirements

A flight engineer's licence shall be renewed in accordance with the refence requirements of these regulations and the applicable technical guidance material.

8.2 Flight radiotelephony operator licence, endorsement or authorization

155. General Eligibility Requirements for Flight Radiotelephony Operator Licence

(1) Except for a holder of a pilot licence, a person required to use radiotelephony apparatus aboard an aircraft shall hold a flight radiotelephony operator licence or authorization.

(2) An applicant for a flight radiotelephony operator licence, endorsement or authorization shall:

(a) be at least 17 years of age;
(b) demonstrate the ability to, speak and understand the English language in accordance with the language proficiency requirements contained in the Second Schedule to this Regulation;
(c) comply with the knowledge and skill requirements, for flight radiotelephone operator as contained in regulation 156; and
(d) demonstrate a level of knowledge appropriate to the privileges granted to a holder of a flight radiotelephone operator licence.

156. Knowledge and Skill Requirements

(1) knowledge:

An applicant for a flight radiotelephony operator licence, endorsement or authorization 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;
(j) radiotelephony procedures and phraseology;

Skill:

(i) ability to use the radio equipment of the type installed in the aircraft; and
(ii) the ability to carry out emergency procedures.

(2) The knowledge test results for a radiotelephony operator licence shall be valid for 24 months after passing the examination.

157. Privileges

A holder of a flight radiotelephony operator licence, endorsement or authorization shall have the privilege to conduct radiotelephone operations:

(a) on board an aircraft; and
(b) in any other authorized environment using approved equipment to communicate with personnel onboard an aircraft

158. Renewal Requirements

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 6 months preceding the date of application.

8.3 Ground Instructor Licence

159. Eligibility Requirements for a Ground Instructor Licence

(1) An applicant for a ground instructor licence shall:

(a) be at least 18 years of age;
(b) have the ability read and write English;
(c) pass a knowledge and skill test on the aeronautical knowledge areas as prescribed 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 the applicable knowledge test on the CPL or ATPL aeronautical knowledge areas specified in regulations 76 and 90 to this Regulation.

(2) A ground instructor licence shall be issued with the following ratings:

(a) basic; or
(b) advanced; or
(c) instrument; or
(d) a combination of (a) and (c) or (b) and (c)

(3) The knowledge test specified in sub-regulation (1)(d) is not required if the applicant holds a flight instructor rating issued under this Regulation.

(4) The knowledge test results for a ground instructor licence shall be valid for 18 months after passing the examination.

(5) The validity period for a ground instructor licence is 24 months.

160. Privileges of a Ground Instructor Licence

(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 or associated ratings;
(ii) ground training required for a private pilot flight check-out; and
(iii) 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 pilot 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).

161. Requirements for Ratings

An applicant for a ground instructor licence is required to hold or have held a CPL or ATPL as appropriate or pass the following:

(a) basic ground instructor rating: aeronautical knowledge requirements for CPL as prescribed in regulation 76;
(b) advanced ground instructor rating: aeronautical knowledge requirements for ATPL as prescribed in regulation 90 ;
(c) 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 99; and
(ii) be a holder of a valid instrument rating.

162. Limitations

(1) A holder of a ground instructor licence shall not perform the duties of a ground instructor unless within the 12 preceding months, the person has served for 3 months as a ground instructor.

(2) A holder of a ground instructor licence shall not conduct training under a rating unless he holds:

(a) a valid pilot licence with the applicable category and class rating and flight instructor rating;

(b) if appropriate, a type-rating; and

(c) for instrument flight training or for training for a type rating not limited to visual flight rules, an appropriate instrument rating on his pilot licence and flight instructor rating.

163. Renewal Requirements

(1) A ground instructor licence may be renewed if the applicant presents to the Authority a record of training students that shows that within 12 months

preceding the date of application for renewal of the licence, the ground instructor has trained students under the appropriate ground instructor rating

(2) The applicant for renewal of a ground instructor licence shall provide to the Authority satisfactory evidence of at least 3 months service as a ground instructor within the past 12 months.

(3) Where the ground instructor licence has expired for a period not exceeding 90 days, the applicant shall apply for renewal, subject to sub-regulation (2)

(4) Where the ground instructor licence has lapsed beyond 90 days the applicant shall apply for re-issue, having completed an appropriate refresher training acceptable to the Authority and shall be re-tested to demonstrate proficiency with the instructor requirements prescribed in this regulation.

(5) Notwithstanding the provisions of sub-regulations (1), (2) and (3) a holder of a ground instructor licence shall undergo a refresher training after a period not exceeding 5 years.

8.4 Flight Simulator Instructor Authorization

164. Authorization for Flight Simulator Instructor

(1) A Current or former holder of a professional pilot licence, having instructional experience can apply for authorisation to provide flight instruction in on flight simulation training device or FSTD, provided the applicant has at least 1year experience as instructor in flight simulation training devices.

(2) **Skill:**

The applicant shall have demonstrated through a skill test, in the category, class and type of aircraft for which instructor authorisation privileges are sought, the ability to instruct in those areas in which instruction is to be given.

(3) **Privileges:**

Subject to compliance with the requirements specified in this regulation privileges of a holder of an authorisation shall include instruction in a flight simulation training device for the issue of a class or type rating in the appropriate aircraft category.

(4) **Validity:**

Subject to compliance with the requirements specified in this regulation, the validity period of an instructor authorisation for flight simulation training is 1 year.

(5) **Renewal:**

A holder of a flight simulator instructor authorization may apply for renewal subject to successful completion of a proficiency check.

(6) **Re-issue**:

Where the authorisation has expired beyond 90 days, the applicant shall complete refresher training and successfully pass a proficiency check on the simulator he applicable category and class or type of aircraft for which instructor authorisation privileges are sought.

CHAPTER IX

LICENCES AND RATINGS FOR PERSONNEL OTHER THAN FLIGHT CREW MEMBERS

9.1 Aircraft Maintenance Personnel

165. General Eligibility Requirements for Aircraft Maintenance Engineer's Licence or AMEL

(1) An applicant for grant of an aircraft maintenance engineer's licence without type rating shall:

(a) be at least 18 years of age;

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

(c) Comply with the knowledge, skill, experience and competency requirements prescribed for the licence sought in the Fourth Schedule to this regulation

(2) A Licences Aircraft Maintenance Engineer applying for type rating shall:

(a) be at least 21 years of age;

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

(c) comply with the knowledge, skill experience and competency requirements for the ratings sought as prescribed in this regulation and the applicable technical guidance material; and

(d) passed the AMEL knowledge examinations relevant to the AMEL category and rating(s) sought, in accordance with the syllabus stipulated in the second schedule Part A to these regulations

(e) Pass the AMEL skill test relevant to the AMEL category and rating (s) sought, in fulfilment of the skill test standards stipulated in the second schedule, Part B

(3) An applicant for AMEL with type rating shall have completed a course of training appropriate to the privileges to be granted.

(4) Competency-based approved training for aircraft maintenance personnel shall be conducted within an approved maintenance organization.

166. Skill and Knowledge Requirements for Aircraft Maintenance Engineer's Licence

An applicant for AMEL shall have demonstrated a level of knowledge and skill relevant to the privileges to be granted and appropriate to the responsibilities of an aircraft maintenance engineer's licence holder, in accordance with the syllabus coverage fourth Schedule to these regulations and the procedures prescribed in the applicable technical guidance material.

167. Experience Requirements for AMEL with or Without Type Rating

(1) An applicant for an aircraft maintenance engineer's licence shall have acquired:

(a) For category A and subcategories B1.2 and B1.4:

(i) 1 year of practical maintenance experience on operating aircraft and completion of an approved basic training course approved in accordance with the Civil Aviation Training Organizations regulations;

(aa) 3 years of practical maintenance experience on operating aircraft where the applicant has no previous relevant technical training in aircraft maintenance, provided the experience is gained in an AMO; or

(bb) 2 years of practical maintenance experience on operating aircraft and completion of training as a skilled worker in a technical trade applicable to the licence sought.

(b) For category B2 and subcategories B1.1 and B1.3;

(i) 2 years of practical maintenance experience on operating aircraft and completion of an approved basic training course approved in accordance with the Civil Aviation Training Organizations Regulation;

(aa) 5 years of practical maintenance experience on operating aircraft where the applicant has no previous relevant technical training provided the experience is gained in an AMO; or

(bb) 3 years of practical maintenance experience on operating aircraft and completion of training as a skilled worker in a technical trade applicable to the licence sought.

(c) For category C with respect to large aircraft:

(i) 3 years of experience exercising category B1.1, B1.3 or B2 privileges on large aircraft or as B1.1, B1.3 or B2 maintenance personnel working on large aircraft, or, a combination of both; or

(ii) 5 years of experience exercising category B1.2 or B1.4 privileges on large aircraft or as B1.2 or B1.4 maintenance personnel working on large aircraft, or a combination of both.

(d) For category C with respect to aircraft other than large aircraft:

3 years of experience exercising category B1 or B2 privileges on aircraft other than large aircraft or as B1 or B2 maintenance personnel working on aircraft other than large aircraft, or a combination of both.

(e) For category C obtained through the academic route:

an academic degree in a technical discipline applicable to the licence sought from a university recognised by the Authority, and 3 years of experience working in a civil aircraft maintenance environment on a representative selection of tasks directly associated with aircraft maintenance, including 6 months of observation of base maintenance tasks.

(2) An applicant for an additional category or subcategory to an aircraft maintenance engineer's licence shall have a minimum civil aircraft maintenance experience requirement appropriate to the additional category or subcategory of licence applied for as specified by the Authority in the applicable technical guidance materials.

(3) An applicant for categories A, B1 and B2 shall have practical experience involving a representative cross regulation of maintenance tasks on operating aircraft as specified in the applicable technical guidance material.

(4) An applicant for category A and subcategories B1.2 and B1.4 shall have at least 1 year of the required practical maintenance experience, including recent maintenance experience on aircraft of the category or subcategory for which the initial aircraft maintenance licence is sought.

(5) An applicant of category B2 and subcategories B1.1 and B1.3, shall have at least 2 years of the required practical maintenance experience, including recent maintenance experience on aircraft of the category or sub-category for which the initial aircraft maintenance licence is sought.

(6) For an applicant of subsequent category or subcategory addition to an existing aircraft maintenance licence, the entire duration of maintenance experience as required in the applicable technical guidance materials shall be recent.

(7) Subject to sub-regulation (6) the required practical maintenance experience shall be dependent upon the difference between the licence category or subcategory held and applied for and all recent practical maintenance experience shall be demonstrated in a manner acceptable to the Authority as specified in the applicable technical guidance materials.

(8) For an applicant of category C having gone through the academic route, the 6 months of observation of base maintenance tasks shall be demonstrated in a manner acceptable to the Authority as specified in the applicable technical guidance materials.

(9) Notwithstanding sub- regulation (1) (a), aircraft maintenance experience gained outside a civil aircraft maintenance environment may be accepted by the Authority when satisfied that such experience is equivalent to that specified in the applicable technical guidance materials and additional recent practical maintenance experience on the maintenance of civil aircraft shall be required to ensure understanding of the civil aircraft maintenance environment.

168. Privileges and Limitation of Aircraft Maintenance Engineers Licence- A, B1, B2 and C

(1) Subject to compliance with the requirements specified in regulations 166 and 167, the privileges of the holder of an AMEL shall include certifying aircraft or parts of the aircraft as airworthy after an authorized repair, modification or installation of an engine, accessory, instrument, or item of equipment, and to sign a maintenance release following inspection, maintenance operations or routine servicing.

(2) The privileges of the holder of an aircraft maintenance licence specified in regulation 163 shall be exercised only in respect of:

(a) aircraft as are entered on the licence in their entirety either specifically or under broad categories; or

(b) airframes and engines and aircraft systems or components entered on the licence either specifically or under aircraft avionic systems or components entered on the licence either specifically or under broad categories.

(3) The AMEL licence holder is familiar with all the relevant information relating to the maintenance and airworthiness of the particular aircraft for which the licence holder is signing a Maintenance Release, or such airframe, engine, aircraft system or component and aircraft avionic system or component which the licence holder is certifying as being airworthy; and

(4) Within the preceding 24 months, the licence holder has either had experience in the inspection, servicing or maintenance of an aircraft or components in accordance with the privileges granted by the licence held for not less than six months, or has met the provision for the issue of a licence with the appropriate privileges, to the satisfaction of the Authority.

(5) The scope of the privileges of the licence holder in terms of the complexity of the tasks to which the certification relates shall be in accordance with this regulation.

(6) Details of the certification privileges should be endorsed on or attached to the licence, either directly or by reference to another document issued by the Authority.

169. Recency and Renewal Requirement

(1) A holder of an AMEL shall apply for renewal of licence at least 2 months before the expiry period in a form and manner prescribed by the Authority in the applicable technical guidance material.

(2) The holder shall have performed work comparable with that required for the grant of the licence for periods totalling at least 6 months during the 24 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 12 months provided that he or she proves that he or she 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 or she has continuously been engaged in practical work during that period shall be required to present evidence of 6 months recent hands-on experience under an AMO and sit for an air law exam before his or her licence is renewed.

(5) A holder of an AMEL shall not exercise the privileges of the licence unless the licence is kept valid as prescribed as prescribe in this regulation.

9.2 Air Traffic Controller Licence

170. General Eligibility Requirements for An Air Traffic Controller Licence

An applicant for an air traffic controller licence or ATC shall:

(a) be at least 21 years of age;
(b) demonstrate the ability to speak, and understand the English language in accordance with the language proficiency requirements contained in the Second Schedule to this Regulation without impediment of speech that would interfere with 2-way radio conversation;
(c) have the ability to read and write English;
(d) comply with the knowledge requirements of regulation 172; and
(e) hold a current class 3 medical certificate.

171. Required Licences and Ratings or Qualifications

(1) A person shall not act as an ATC unless he or she holds an air traffic controller licence issued under this regulation.

(2) A student air traffic controller shall not receive instruction in an operational environment unless that student holds a current class 3 medical assessment.

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

(a) one or more ratings as specified in regulation 173, 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.

(4) Where during a continuous period of 6 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 6 months period.

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

172. Skill and Knowledge Requirements

(1) An applicant for ATC licence shall have demonstrated a level of knowledge and skill appropriate to the holder of an air traffic controller licence, as follows:

(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:
(i) principles of flight;
(ii) principles of operation and functioning of aircraft, RPAS, engines and systems; and
(iii) aircraft performance relevant to air traffic control operations;
(d) Human performance human performance including principles of TEM;
(e) Meteorology:
(i) aeronautical meteorology;
(ii) use and appreciation of meteorological documentation and information;
(iii) origin and characteristics of weather phenomena affecting flight operations and safety;

(iv) altimetry;

(f) Navigation:

(i) principles of air navigation;

(ii) principle, limitation and accuracy of navigation systems and visual aids; and

(g) Operational procedures

(i) air traffic control, communication, radiotelephony and phraseology procedures routine, non-routine and emergency;

(ii) use of the relevant aeronautical documentation; and

(ii) safety practices associated with flight.

(2) 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.

(3) The experience requirements specified for air traffic controller ratings in regulation 175 may be credited as part of the experience specified in this paragraph.

173. Air Traffic Controller Ratings

Air traffic controller ratings shall comprise the following:

(a) aerodrome control rating;
(b) approach control procedural rating;
(c) approach control surveillance rating;
(d) approach precision radar control rating;
(e) area control procedural rating; and
(f) area control surveillance rating.

174. Requirements for Air Traffic Controller Ratings

The applicant shall have demonstrated a level of knowledge appropriate to the privileges granted, in at least the following subjects in so far as they affect the area of responsibility:

(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 procedural and area control procedural 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) (vi)characteristics of air traffic and traffic flow;

(vii) weather phenomena; and
(viii) emergency and search and rescue plans; and

(c) approach control surveillance, approach precision radar control and area control surveillance ratings: The 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 applicable ATS surveillance systems and associated equipment; and
(ii) procedures for the provision of ATS surveillance service, as appropriate, including procedures to ensure appropriate terrain clearance.

175. Experience and Skill Requirements

(1) The applicant shall have:

(a) satisfactorily completed an approved training course and demonstrated the required competency, having completed not less 3 months of satisfactory service engaged in the actual control of air traffic under the supervision of an air traffic control or ATC on the job training instructor or OJT;

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

(c) An air traffic controller acting as an air traffic control on-the-job training instructor shall hold an appropriate rating and be qualified as an air traffic control on-the-job training instructor;

(d) demonstrated the required competence while providing, under the supervision of an air traffic control (ATC) on-the-job training instructor (OJTI), one or more of the following;

(i) 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;
(ii) approach control procedural, approach control surveillance, area control procedural or area control surveillance rating:
the control service for which the rating is sought, for a period of not less than 180 hours or three months, whichever is greater, at the unit for which the rating is sought;
(iii) 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; and
(iv) 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) The application for a rating shall be made within six months from the completion of experience specified in sub-regulation (1) (d).

(2) The experience specified in sub-regulation (1) (b) shall have been completed within the 6-month period immediately preceding application.

(3) When the applicant already holds an air traffic controller rating in another category, or the same rating for another unit, the experience requirement of sub-regulation (1) (b) can be reduced, in accordance with the applicable technical guidance material provided the credited experience does not exceed 50%

(4) Concurrent issuance of two air traffic controller ratings:

when 2 air traffic controller ratings are sought concurrently, the requirements for each rating and these requirements shall not be less than those of the more demanding rating.

176. Privileges and Limitations

(1) Subject to compliance with the requirements specified in regulations 15, 22, 24and 26, the privileges of the holder of an air traffic controller licence endorsed with one or more of the under mentioned 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 procedural 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 thereof, under the jurisdiction of the unit providing approach control service;

(c) approach control surveillance rating:

(i) to provide or supervise the provision of approach control service with the use of applicable ATS surveillance systems for the aerodrome or aerodromes for which the licence holder is rated, within the airspace or portion thereof, under the jurisdiction of the unit providing approach control service;

(ii) subject to compliance with the provisions of regulation 175, privileges shall include the provision of surveillance radar approaches;

(d) approach precision radar control rating:

to provide or supervise the provision of precision approach radar service at the aerodrome for which the licence holder is rated;

(e) area control procedural rating:

to provide 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 or supervise the provision of area control service with the use of an ATS surveillance system, within the control area or portion, for which the licence holder is rated.

(2) A holder of an air traffic controller licence shall not carry out instruction in an operational environment unless such holder has received authorization from the Authority in accordance with the prescription in the technical guidance material.

177. Validity of Ratings

An ATC rating becomes invalid when the holder has ceased to exercise the privileges of the rating for a period of 6 months and shall remain invalid until the controller's ability to exercise the privileges of the rating has been re-established.

178. Maximum Working Hours

(1) Except in an emergency, a licensed air traffic controller shall not perform any duties for 24 consecutive hours during each seven consecutive days.

(2) An air traffic controller shall 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 24 consecutive hours, unless the air traffic controller has had a rest period of at least 8 hours at or before the end of the 10 hours of duty.

179. Responsibilities Over Fatigue

An ATC licence holder shall not act as an air traffic controller nor shall an employer allow a licensed controller, when 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.

180. Prohibition of Unlicensed Air Traffic Controllers

(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 Regulation 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:

(a) he or she has 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) he or she has 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.

(2) A person who acts in the course of duty as a member of South Sudan military or a visiting force shall not be required the ATC licence.

(3) A holder of an ATC licence shall not perform any of the functions specified in regulation 174 in respect of a rating at any of the places referred to in sub-regulation (1) unless:

(a) his or her 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 or she 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 this regulation which authorises him or her to provide at that aerodrome or other place the type of air traffic control service which is being provided.

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

181. Renewal Requirements

An ATC 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 6 months preceding the date of application for renewal.

9.3 Flight operations officer's licence

182. General Eligibility Requirements for Flight Operations Officer Licence

An applicant for a flight operations officer licence shall:

(a) be at least 21 years of age;
(b) demonstrate the ability to speak and understand the English Language in accordance with the language proficiency requirements contained in the Second Schedule to this Regulation;
(c) comply with the training knowledge, experience or training requirements and skill requirements for flight operations officer as contained in regulation.183 to this regulation; and
(d) Pass a knowledge and skill test on the areas specified in regulation 183(a).

183. Knowledge and Skill Requirements

(1) An applicant for flight operations officer's licence shall have demonstrated a level of knowledge and skill appropriate to the privileges granted to the holder of a flight operations officer licence as follows:

(a) Knowledge:

(i) Air law

(aa) rules and regulations relevant for operational control and to the holder of a flight operations officer licence; and
(bb) appropriate air traffic services practices and procedures;

(ii) Aircraft general knowledge:

(aa) principles of operation of aeroplane engines, systems and instruments;
(bb) operating limitations of aeroplanes and engines;

(cc) minimum equipment list and configuration deviation list;

(iii) Flight performance calculation, planning procedures and loading:

(aa) effects of loading and mass distribution on aircraft performance and flight characteristics; mass and balance calculations;
(bb) operational flight planning; fuel consumption and endurance calculations; alternate aerodrome selection procedures;
(cc) en-route cruise control; extended range operation;

(iv) preparation and filing of air traffic services flight plans;

(aa) basic principles of computer-assisted planning systems;
(bb) take off performance including field length, climb and obstacle criteria and limitation;
(cc) cruise performance including minimum altitudes, decompression/engine out/gear down scenario planning; and
(dd) landing performance including approach climb and field length criteria and limitations;

(v) Human performance:

human performance relevant to operational control duties, including principles of threat and error management or TEM and communicable diseases and public health emergency preparedness and response in regard to:

(vi) Recognition of disease symptoms
(vii) Assessment, care and reporting
(viii) International health regulations;
(ix) Meteorology
(aa) aeronautical meteorology;
(bb) the movement of pressure systems;
(cc) the structure of fronts, and the origin and characteristics of significant weather phenomena which affect take-off, en-route and landing conditions;
(dd) interpretation and application of aeronautical meteorological reports, charts and forecasts;
(ee) codes and abbreviations;
(ff) use of, and procedures for obtaining, meteorological information;

(x) Navigation principles of air navigation with particular reference to instrument flight;

(xi) Operational procedures:

(aa) use of aeronautical documentation and standard operating procedures;

(bb) operational procedures for the carriage of freight and dangerous goods;
(cc) procedures relating to aircraft accidents and incidents;
(dd) emergency flight procedures;
(ee) procedures relating to unlawful interference and sabotage of aircraft;

(xii) Principles of flight:

principles of flight relating to the appropriate category of aircraft; and

(xiii) Radio communication:

procedures for communicating with aircraft and relevant ground stations.

(b) Skill:

(i) identify and to retrieve aeronautical data and other information relevant for the analysis of operational situations and risks;
(ii) identify and evaluate the risk factors and the possible consequences for flight operations;
(iii) identify and evaluate actions considering risk, the effect on flight safety and regularity of the operation;
(iv) determine an appropriate course of action based on the responsibilities and policies described in the operation manuals; and
(v) apply appropriate standard and non-standard procedures from the operations manual for the initiation, planning, continuation, diversion or termination of flights in the interest of safety of the aircraft and regularity and efficiency of the operation.
(vi) make an accurate and operationally acceptable weather analysis;
(vii) provide an operationally valid briefing on weather conditions of a specific air route;
(vijj) forecast weather trends pertinent to air transportation with particular reference to destination and alternates;
(ix) identify and apply operational limitations and minimums in relation to the weather, aircraft status and appropriate navigation procedures.

(2) The applicant shall have gained the following experience:

(a) a total of 2 years of service in any one or in any combination of the capacities specified in paragraphs (1) to (3) inclusive, provided that in any combination of experience the period serviced in any capacity shall be at least one year:

(i) a flight crew member in air transportation; or

(ii) a meteorologist in an organization providing operational control to aircraft in air transportation; or
(iii) an air traffic controller; or
(iv) a technical supervisor of flight operations officers or air transportation flight operations systems; or

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

(c) have satisfactorily completed approved training.

(3) Subject to the provision of sub-regulation (2), an applicant for flight operations officers' licence shall have served under the supervision of a flight operations officer for at least 90 working days within the 6 months immediately preceding the application.

184. Privileges and Limitations

Subject to compliance with the requirements of regulation 22, the privileges of the 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 the applicable Civil Aviation Operation of Aircraft Regulation.

185. Renewal Requirements

(1) A flight operations officer licence may be renewed if the holder has performed his duties in the 6 months preceding the date of application for renewal exercising the privileges of the licence.

(2) Notwithstanding the provision of sub-regulation (1), a holder of a flight operations officer's licence shall undergo refresher training after a period not exceeding 2 years.

9.4 Aviation Repair Specialist Authorization

186. Eligibility Requirements for an Aviation Repair Specialist Authorisation

An applicant for an aviation repair specialist authorisation shall:

(a) be at least 18 years of age;

(b) be able to read, speak, write, and understand the English language and interpreted 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 applicable Civil Aviation Approved Maintenance Organisation Regulation;

(e) be recommended for certification by the aviation repair specialist's employer, to the satisfaction of the Authority, as having the ability 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 18 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.

187. Privileges and Limitations of an Aviation Repair Specialist

(1) An applicant for an aviation repair specialist authorisation who is employed by an approved maintenance organization or AMO shall be concurrent with the rating issued to the approved maintenance organisation be limited to the specific job task 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 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 he or she is or authorised and rated, but only in connection with employment by a maintenance organisation approved under the applicable Civil Aviation Approved Maintenance Organisation Regulation.

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

188. Display of Authorization

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

189. Surrender of Authorization

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.

9.5 Cabin Crew Member

190. Required Certificate, Ratings and Qualifications for Cabin Crew Member

(1) A person shall not act as a cabin crew member unless that person holds:

(a) a cabin crew member 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) a current medical certificate class 2;

(2) A person undergoing training to qualify for a cabin crew member certificate or rating shall not-

(a) form a part of the required minimum number of cabin crew member for that aircraft;

(b) be assigned to an operating position that requires a cabin crew member.

(3) In this regulation, operating position means a duty station assigned to the cabin crew member for execution of emergency duties.

191. Eligibility Requirements

An applicant for cabin crew member certificate shall-

(a) be at least 18 years of age

(b) have ability to read, speak and understand the English language sufficiently to adequately carry out the responsibilities of a cabin crew member;

(c) have completed training approved by the Authority and

(d) have passed a knowledge test appropriate to his or her tasks.

192. Knowledge Requirements

(1) An applicant for a cabin crew member certificate shall have demonstrated a level of knowledge and skill appropriate to the privileges granted to the holder of a cabin crew member certificate, as follows;

(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 crew member;

(c) before first operating on an aeroplane fitted with life-rafts or other similar equipment, training shall be given on the use of this equipment, as well as actual practice in water;

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

(e) 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 with particular emphasis on hypoxia;

(f) 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) regulation 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 applicable Civil Aviation Operation of Aircraft Regulation and Civil Aviation Air Operator Certification and Administration Regulation; and

(viii) security procedures, including the provisions of Civil Aviation Operation of Aircraft Regulation, and Civil Aviation Air Operator Certification and Administration Regulation;

(g) 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 crew member with special regard to flight and duty time limitations and rest requirements;

(iii) an awareness of the aviation regulation relating to cabin crew member 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 crew member 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 crew members 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

(h) discipline and responsibilities;

(i) Crew Resource Management to include appropriate provisions of the Civil Aviation Operation of Aircraft regulation in relation to cabin crew member.

(2) The knowledge test results for a cabin crew member certificate shall be valid for twelve months after passing the examination

193. Privileges

A holder of a cabin crew member certificate may:

(a) act as a cabin crew member 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 crew member instructor for issue or renewal of cabin crew certificate and aircraft type ratings.

194. Renewal Requirements

A holder of a cabin crew member certificate may apply for renewal if the holder has successfully completed the annual safety and emergency procedure training approved by the Authority.

CHAPTER X

AVIATION MEDICAL STANDARDS AND CERTIFICATION

195. Aviation Medical Examiner, Designation and Qualifications

(1) The Authority shall designate medical doctors who meet 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 this Regulation.

(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 competence in aviation medicine; and
(d) have practical knowledge and experience of the conditions in which the holders of licences and ratings he or she is to examine carry out their duties.

(3) A medical examiner shall receive refresher training after every 5 years.

196. Evaluation of Medical Examiners Competence

(1) The Authority shall use the services of medical assessors to evaluate reports submitted by medical examiners and making final assessments to issue, renew or deny medical certificates

(2) The Authority shall use the services of medical assessors to evaluate reports submitted by medical examiners.

(3) The medical assessors shall be qualified and experienced in the practice of aviation medicine and competent in evaluating and assessing medical conditions of flight safety significance.

(4) Medical assessors shall receive refresher training after every 3 years.

(5) The medical assessors shall periodically evaluate the competence of medical examiners to ensure that they meet applicable standards for good medical practice and aeromedical risk assessment as prescribed in the applicable technical guidance material.

(6) The medical assessors shall be in charge of Accredited Medical Conclusions.

197. Delegation of Authority

(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 license holders to determine whether the applicants meet the 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 retain the right to reconsider any action of an aviation medical examiner.

Medical Certification Procedures

198. Medical Records

(1) An applicant for a medical certificate shall, in a form and manner prescribed by the Authority in the technical guidance materials.

(a) sign and furnish the medical examiner with a personally certified statement of medical facts concerning personal, familial and hereditary history that is as complete and accurate as the applicant's knowledge permits, the date, place and result of the last examination;

(b) indicate to the Examiner whether a medical assessment has previously been refused, revoked or suspended and, if so, the reason for such refusal, revocation or suspension.

(2) Any false declaration to a Medical Examiner made by an applicant for a license or rating shall be reported to the Authority for such action as may be considered appropriate.

(3) Where an applicant for a medical certificate fails to provide the requested medical information or history, or fails to authorize the release so requested, the Authority shall deny the application as well as either suspend or modify or revoke all medical certificates held by the applicant in accordance with the applicable technical guidance materials.

(4) Where a medical certificate is suspended, revoked or modified under sub-regulation (3), the suspension, revocation 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

199. Aviation Medical Examiner Submission of Signed Medical Evaluation Report

(1) An aviation medical examiner designated under Regulation 16 shall:

(a) sign the required report and medical certificate and submit directly to the Authority the full details in the form and manner prescribed in the applicable technical guidance material;
(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) Medical report submitted to the Authority in electronic format, shall be done in a form and manner prescribed by the Authority in the applicable technical guidance material to ensure authenticity.

200. Issue of a Medical Certificate

(1) A designated medical examiner shall issue the applicable medical certificate to a person who meets the medical standards prescribed in this Regulation, 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 this Regulation.

(3) If the medical examination is carried out by 2 or more medical examiners, the Authority shall appoint one of them 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 medical information to the Authority to enable the Authority to audit medical assessments

201. Denial of Medical Certificate

(1) An applicant for a medical certificate shall be denied a certificate if, upon medical examination, the applicant does not meet the physical and mental standards specified in this Regulation.

(2) The denial of the medical certificate is effective:

(a) the date of the medical evaluation that determined that the applicant did not meet the physical and mental standards specified in this Regulation; 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.

(3) An applicant who is not satisfied with the denial of a medical certificate by aviation designated medical examiner may, within 30 days after the date of the denial, apply in writing to the Authority for reconsideration of the denial.

(4) 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.

(5) Where the applicant does not apply for reconsideration during the 30-day period after the date of the denial, the Authority shall consider that the applicant has withdrawn the application for a medical certificate.

(6) Subject to sub-regulation (4) the period of validity of the medical assessment may be reduced when clinically indicated.

202. Medical Confidentiality

(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 as prescribed in the technical guidance material.

(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 199, is presented to relevant officials of the Authority.

203. Issue of Medical Certificate with a Limitation

(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 medical assessor or aviation designated medical examiner determines the safe performance of the licence holder's duties is dependent on compliance with such a limitation.

204. Duration of Medical Certificate

(1) A class 1 medical certificate issued to an applicant who is:

(a) under the age of 40 years shall be valid for 12 months from the day the medical examination is performed; and

(b) 40 years of age or more shall be valid for 6 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 40 years shall be valid for 24 months from the day the medical examination is performed; and

(b) 40 years of age or more shall be valid for 12 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 40 years shall be valid for 24 months from the day the medical examination is performed; and

(b) 40 years of age or more shall be valid for 12 months from the day the medical examination is performed.

205. Renewal of Medical Certificate

(1) The requirements for the renewal of a medical certificate are the same as those for the initial assessment except where otherwise specifically stated in case of prevailing circumstances in the operational environment

(2) When required to obtain or renew correcting lenses, the applicant for medical examination shall advise the designated 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.

206. Medical Assessments

(1) The Authority may issue classes of medical assessment that are intended to indicate the minimum medical standards as follows

(a) class 1 medical assessment; applies to applicants for, and holders of:

(i) commercial pilot licences — aeroplane, helicopter, airship, remotely pilot, aircraft and powered-lift;

(ii) multi-crew pilot licences — aeroplane; and

(iii) airline transport pilot licences — aeroplane, helicopter and powered-lift.

(b) class 2 medical assessment: applies to applicants for, and holders of:

(i) flight navigator licences;

(ii) flight engineer licences;
(iii) private pilot licences — aeroplane, airship, helicopter and powered-lift;
(iv) glider pilot licences; and
(v) free balloon pilot licences.

(c) class 3 medical assessment; applies to applicants for, and holders of: air traffic controller and remotely pilot licences.

(2) The applicant for a medical assessment shall provide the medical examiner with a personally certified statement of medical facts concerning personal, family and hereditary history.

(3) The applicant shall be made aware of the necessity for giving a statement that is as complete and accurate as the applicant's knowledge permits, and any false statement shall be dealt with in accordance with Regulation 198 to this Regulation.

(4) The medical examiner shall report to the Authority any individual case where, in the examiner's judgement, an applicant's failure to meet any requirement, whether numerical or otherwise, is such that exercise of the privileges of the licence being applied for, or held, is not likely to jeopardize flight safety.

(5) The level of medical fitness to be met for the renewal of a medical certificate shall be the same as that for the initial assessment except where otherwise specifically stated under this Regulation.

(6) The intervals between routine medical examinations for the purpose of renewing a medical certificate shall be as specified in regulation 22 (7) to this Regulation.

207. Medical Requirements

(1) 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.

208. Requirements for Medical Assessments

An applicant for a Medical Assessment issued in accordance with this Regulation shall undergo a medical examination based on the following:

(a) physical and mental;

(b) visual and colour perception; and

(c) hearing.

209. Physical and Mental Requirements

For the purpose of physical and mental requirements, an applicant for any class of Medical Assessment shall be required to 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.

210. Colour Perception Requirements

(1) For the purpose of colour perception requirements, the Authority shall use such methods of examination as will guarantee reliable testing of colour perception.

(2) An applicant shall be required to demonstrate the ability to perceive readily the colour perception of which is necessary for the safe performance of duties.

(3) An applicant shall be tested for the ability to correctly identify a series of pseudoisochromatic plates in daylight or in artificial light of the same colour temperature such as that provided by CIE standard illuminates C or D65 as specified by the International Commission on Illumination or CIE.

(4) An applicant obtaining a satisfactory result as prescribed by the Authority shall be assessed as fit.

(5) An applicant who fails to obtain satisfactory result in the test shall be assessed as unfit unless able to readily distinguish the colours used in air navigation and correctly identify aviation-coloured lights.

(6) Applicants who fails to meet criteria under these regulations shall be assessed as unfit save for class 2 assessment with a restriction of "valid daytime only".

(7) Sunglasses worn during the exercise of the privileges of the licence or rating held shall be non-polarizing and of a neutral grey tint.

211. Hearing Test Requirements

(1) For the purpose of hearing test requirements, the Authority shall use such methods of examination as will guarantee reliable testing of hearing.

(2) An applicant shall demonstrate a hearing performance sufficient for the safe exercise of his licence and rating privileges.

(3) An applicant for class 1 medical Assessments shall be tested by:

(a) pure-tone audiometry at first issue of the assessment, not less than once every five years up to the age of 40 years, and thereafter not less than once every two years; or such other methods providing equivalent results as determined by medical examiner.

(4) An applicant for class 3 medical Assessments shall be tested by:

(a) pure-tone audiometry at first issue of the Assessment, not less than once every four years up to the age of 40 years, and thereafter not less than once every 2 years. Such as other methods providing equivalent results as determined by medical examiner.

(5) An applicant for class 2 Medical Assessment shall be tested by pure-tone audiometry at first issue of the Assessment and, after the age of 50 years, and thereafter not less than once every two years.

(6) An applicant, during medical examinations, where audiometry is not performed, shall be tested in a quiet room by whispered and spoken voice tests.

(7) 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.

(8) 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 2 years.

(9) 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.

(10) At a medical examination where audiometer is not performed, an applicant shall be tested in a quiet room by whispered and spoken voice tests.

212. Issue of Medical Certificate for Persons Under Oral Drugs

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.

213. Visual Requirements- General

(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 jeopardize 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.

214. Vision Testing Requirements

(1) The corrected and uncorrected visual acuity must be measured and recorded at each examination.

(2) 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.

(3) 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.

(4) The Authority may require a separate ophthalmic report before issue of a Medical Certificate.

(5) 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.

215. 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.

216. Distance Vision Requirements

(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.

(5) 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.

(6) 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.

217. Near Vision Requirements

(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.

218. Ear and Related Structures

(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.

219. Hearing Requirements

(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.

(4) An applicant who does not meet the requirements listed above shall undergo further testing in accordance with this regulation.

(5) An applicant for a class 3 medical certificate with a hearing loss greater than the above may be declared fit provided that the applicant has normal hearing performance against a background noise that reproduces or simulates that experienced in a typical air traffic control working environment.

Alternatively, a practical hearing test conducted in an air traffic control environment representative of the one for which the applicant's license and ratings are valid may be used.

220. Cardiovascular- General

(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.

221. Blood Pressure and Circulation

(1) 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.

(2) The use of drugs for control of high blood pressure shall be disqualifying except for those drugs, the use of which is compatible with the safe exercise of the applicant's licence and rating privileges.

222. Electro-Cardiography Examination

(1)

(a) Electrocardiography shall form part of the heart examination for the first issue of a medical certificate.

(b) The purpose of routine electrocardiography is case finding. It does not provide sufficient evidence to justify disqualification without further thorough cardiovascular investigation.

(2) Electrocardiography should be included in re-examinations of applicants between the ages of 30 and 50 no less frequently than every 2 years, except for class 1 medical certificate which shall be annually.

223. Neurological Requirements

(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.

224. Respiratory Capability

(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 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 drug shall be 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 licence 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.

(5) Applicants shall be completely free from those hernias that might give rise to incapacitating symptoms.

(6) Applicants with significant impairment of the function of the gastrointestinal tract or its adnexa shall be assessed as unfit.

(7) Applicants with sequelae of disease of or surgical intervention on any part of the digestive tract or its adnexa, likely to cause incapacitation in flight, in particular any obstruction due to stricture or compression, shall be assessed as unfit.

225. Radiology (X-ray) Evaluation

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 clinal cases.

226. Vestibular Apparatus

(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-interferes with, or is aggravated by, flying or may reasonably be expected to do so; or interferes with, or may reasonably be expected to interfere with clear and effective speech communication;

(i) a disease or condition manifested by, or that may reasonably be expected to be manifested by, vertigo or a disturbance of equilibrium;
(ii) permanent disturbances of the vestibular apparatus; or
(iii) 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.

227. Bones, Muscles and Tendons

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.

228. Endocrine System

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.

229. Diabetic Applicant

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.

230. Gastrointestinal and Digestive Tract

(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.

231. Kidneys and Urinary Tract

(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.

232. Lymphatic Glands or Disease of the Blood

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

233. Gynaecological Conditions

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.

234. Pregnancy

(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 certificates 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 re-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.

(4) The Authority shall take precautions for the timely relief of an air traffic controller in the gestational period in the event of early onset of labour or other complications.

235. Speech Defects

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.

236. Acquired Immunodeficiency Syndrome

(1) An applicant for a medical certificate with acquired immunodeficiency syndrome or AIDS shall be assessed as unfit.

(2) Applicants who are seropositive for human Immunodeficiency virus (HIV) shall be assessed as unfit unless the applicant's condition has been investigated and evaluated in accordance with best medical practice and is assessed as not likely to interfere with the safe exercise of the applicant's licence or rating privileges.

Class 1 Medical Assessment

237. Class 1 Medical Assessment

(1) An applicant for a commercial pilot licence —aeroplane, airship, helicopter or powered-lift, a multi-crew pilot, remote pilot licence — aeroplane, or an airline transport pilot licence — aeroplane, helicopter or powered-lift shall undergo an initial medical examination for the issue of a class 1 medical Assessment.

(2) Except as otherwise provided in this regulation, a holder of:

(a) commercial pilot licence for aeroplane, airship, helicopter or powered-lift;
(b) multi-crew pilot licence for aeroplane; or
(c) airline transport pilot licences for aeroplane, helicopter or powered-lift; shall have his class 1 medical Assessments renewed at intervals as specified in Regulation 22(7)

(3) The Authority shall, in alternate years, for class 1 applicants under 40 years of age, at its discretion, allow medical examiners to omit certain routine examination items related to the assessment of physical fitness, whilst increasing the emphasis on health education and prevention of ill health.

(4) Where the Authority is satisfied that the requirements of this Regulation and provisions of regulation 7 have been met, a class 1 medical Assessment shall be issued to the applicant.

238. Physical and Mental Requirements

(1) An applicant who suffers from any disease or disability which could render that applicant likely to become suddenly unable either to operate an aircraft safely or to perform assigned duties safely shall not operate an aircraft.

(2) An applicant for class 1 medical certificate 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; this includes dependence syndrome induced by alcohol or other psychoactive substances;
(c) schizophrenia or a schizotypal or delusional disorder;
(d) a mood affective disorder;
(e) a neurotic, stress-related or somatoform disorder;
(f) a behavioural syndrome associated with physiological 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.

(3) An applicant with depression, being treated with antidepressant medication, shall be assessed as unfit unless the medical assessor, having access to the details of the case concerned, considers the applicant's condition as unlikely to interfere with the safe exercise of the applicant's licence and rating privileges.

(4) The applicant shall have no established medical history or clinical diagnosis of any of the following:

(a) a progressive or non-progressive disease of the nervous system, the effects of which are likely to interfere with the safe exercise of the applicant's licence and rating privileges;

(b) epilepsy; or any disturbance of consciousness without satisfactory medical explanation of cause.

(5) The applicant shall not have suffered any head injury, the effects of which are likely to interfere with the safe exercise of the applicant's licence and rating privileges.

(6) The applicant shall not possess any abnormality of the heart, congenital or acquired, which is likely to interfere with the safe exercise of the applicant's licence and rating privileges.

(7) An applicant who has undergone coronary bypass grafting or angioplasty (with or without stenting) or other cardiac intervention or who has a history of myocardial infarction or who suffers from any other potentially incapacitating cardiac condition shall be assessed as unfit 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.

(8) An applicant with the following shall be assessed as unfit:

(a) an abnormal cardiac rhythm, unless the cardiac arrhythmia 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;

(b) asthma causing significant symptoms or likely to cause incapacitating symptoms during normal or emergency operations;

(c) active pulmonary tuberculosis;

(d) quiescent or healed lesions which are known to be tuberculous, or are presumably tuberculous in origin

(e) significant impairment of function of the gastrointestinal tract or its adnexa

(f) sequelae of disease of, or surgical intervention on, any part of the digestive tract or its adnexa, likely to cause incapacitation in flight, in particular any obstruction due to stricture or compression;

(g) metabolic, nutritional or endocrine disorders that are likely to interfere with the safe exercise of their licence and rating privileges;

(h) insulin-treated diabetes mellitus;

(i) diseases of the blood or the lymphatic system, unless adequately investigated and their condition found unlikely to interfere with the safe exercise of their licence and rating privileges

(j) 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, until such time as the medical assessor, having access to the details of the operation concerned, considers that the effects of the operation are not likely to cause incapacitation in flight

(k) with chronic obstructive pulmonary disease 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 licence or rating privileges

(l) 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 the applicant's licence and rating privileges.

(m) renal or genitourinary disease, unless adequately investigated and their condition found unlikely to interfere with the safe exercise of their licence and rating privileges

(n) sequelae of disease of or surgical procedures on the kidneys or the genito-urinary tract, in particular obstructions due to stricture or compression, 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 licence or rating privileges

(o) who has undergone nephrectomy unless the condition is well compensated?

(p) who is seropositive for HIV unless the applicant's condition has been investigated and evaluated in accordance with best medical practice and is assessed as not likely to interfere with the safe exercise of the applicant's licence or rating privileges?

(q) who is pregnant unless obstetrical evaluation and continued medical supervision indicate a low-risk uncomplicated pregnancy?

(r) stuttering or other speech defects sufficiently severe to cause impairment of speech communication.

(9) Electrocardiography shall form part of the heart examination for the first issue of a medical assessment.

(10) Electrocardiography shall be included in re-examinations of applicants over the age of 50 no less frequently than annually.

(11) Electrocardiography shall be included in re-examinations of applicants between the ages of 30 and 50 no less frequently than every two years

(12) Routine electrocardiography may be carried out for case finding purposes except that it shall not constitute sufficient evidence to justify disqualification without further thorough cardiovascular investigation.

(13) The systolic and diastolic blood pressures shall be within normal limits.

(14) The use of drugs for control of high blood pressure shall be disqualifying except for those drugs, the use of which is compatible with the safe exercise of the applicant's licence and rating privileges.

(15) There shall be no significant functional nor structural abnormality of the circulatory system

(16) There shall be no acute 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.

(17) Chest radiography shall form part of the initial examination.

(18) Periodic chest radiography may not be necessary but may be of necessity in situations where asymptomatic pulmonary disease can be expected.

(19) An applicant who uses drugs for control of asthma shall be disqualified except for use of drugs which are compatible with the safe exercise of the applicant's licence and rating privileges.

(20) An applicant shall be completely free from those hernias that might give rise to incapacitating symptoms.

(21) Urine examination shall form part of the medical examination and abnormalities shall be adequately investigated.

(22) For applicants with a low-risk uncomplicated pregnancy, evaluated and supervised in accordance with Regulation 234, the "fit" assessment shall be limited to the period from the end of the 12th week until the end of the 26th week of gestation.

(23) Following confinement or termination of pregnancy, the applicant shall not be permitted to exercise the privileges of her licence until she has undergone re-evaluation in accordance with best medical practice and it has been determined that she is able to safely exercise the privileges of her licence and ratings.

(24) An applicant shall not possess 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 and rating privileges.

(25) Any sequelae after lesions affecting the bones, joints, muscles or tendons, and certain anatomical defects will normally require functional assessment to determine fitness.

(26) An applicant shall not possess any abnormality or disease of the ear or related structures which is likely to interfere with the safe exercise of the applicant's licence and rating privileges.

(27) There shall be:

(a) no disturbance of vestibular function;
(b) no significant dysfunction of the Eustachian tubes; and
(c) no unhealed perforation of the tympanic membranes.

(28) A single dry perforation of the tympanic membrane need not render the applicant unfit.

(29) There shall be:

(a) no nasal obstruction; and

(b) no malformation nor 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.

239. Visual Requirements

(1) The medical examination shall be based on the following requirements:

(a) the function of the eyes and their adnexa shall be normal.

(b) there shall be no active pathological condition, acute or chronic, or any sequelae of surgery or trauma of the eyes or their adnexa likely to reduce proper visual function to an extent that would interfere with the safe exercise of the applicant's licence and rating privileges.

(c) distant visual acuity with or without correction shall be 6/9 or better in each eye separately, and binocular visual acuity shall be 6/6 or better and no limits shall apply to uncorrected visual acuity and where the standard, of visual acuity can be obtained only with correcting lenses, the applicant may be assessed as fit provided that:

(i) such correcting lenses are worn during the exercise of the privileges of the licence or rating applied for or held; and

(ii) in addition, a pair of suitable correcting spectacles is kept readily available during the exercise of the privileges of the applicant's licence.

(2) An applicant may use contact lenses to meet the requirement under this regulation provided that:

(a) the lenses are monofocal and non-tinted;

(b) the lenses are well tolerated; and

(c) a pair of suitable correcting spectacles is kept readily available during the exercise of the licence privileges.

(3) An applicant with a large refractive error shall use contact lenses or high-index spectacle lenses.

(4) An applicant whose uncorrected distant visual acuity in either eye is worse than 6/60 shall be required to provide a full ophthalmic report prior to initial Medical Assessment and every five years thereafter.

(5) An applicant who has undergone surgery affecting the refractive status of the eye shall be assessed as unfit unless they are free from those sequelae which are likely to interfere with the safe exercise of their licence and rating privileges.

(6) An applicant shall have the ability to read, while wearing the correcting lenses, if any, required by Regulation 247 (2), the N5 chart or its equivalent at a distance selected by that applicant in the range of 30 to 50 cm and the ability to read the N14 chart or its equivalent at a distance of 100 cm.

(7) If this requirement is met only by the use of near correction, the applicant may be assessed as fit provided that this near correction is added to the spectacle correction already prescribed in accordance with Regulation 247(2) if no such correction is prescribed, a pair of spectacles for near use shall be kept readily available during the exercise of the privileges of the licence. When near correction is required, the applicant shall demonstrate that one pair of spectacles is sufficient to meet both distant and near visual requirements.

(8) An applicant who needs near correction to meet this requirement will require "look-over", bifocal or perhaps multifocal lenses in order to read the

instruments and a chart or manual held in the hand, and also to make use of distant vision, through the windscreen, without removing the lenses. Single-vision near correction (full lenses of one power only, appropriate for reading) significantly reduces distant visual acuity and is therefore not acceptable.

(9) Whenever there is a requirement to obtain or renew correcting lenses, an applicant is expected to advise the refractionist of reading distances for the visual flight deck tasks relevant to the types of aircraft in which the applicant is likely to function.

(10) When near correction is required in accordance with this paragraph, a second pair of near-correction spectacles shall be kept available for immediate use.

(11) An applicant shall be required to have normal binocular function and normal fields of vision.

(12) Reduced stereopsis, abnormal convergence not interfering with near vision, and ocular misalignment where the fusional reserves are sufficient to prevent asthenopia and diplopia need not be disqualifying.

240. Hearing Requirements

(1) An applicant, 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, 1 000 or 2 000 Hz, or more than 50 dB at 3 000 Hz.

(2) An applicant with a hearing loss greater than the above 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) Alternatively, a 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.

Class 2 Medical Assessment

241. Class 2 Medical Assessment

(1) An applicant for a private pilot licence — aeroplane, airship, helicopter or powered-lift, a glider pilot licence, a free balloon pilot licence, a flight engineer licence or a flight navigator licence shall undergo an initial medical examination for the issuance of a class 2 medical Assessment.

(2) Except where otherwise provided in this Regulation, holders of private pilot licences — aeroplane, airship, helicopter or powered-lift, glider pilot licences, free balloon pilot licences, flight engineer licences shall have their class 2 medical Assessments renewed at intervals not exceeding those specified in Regulation 22 (7)

(3) Where the Authority is satisfied that the requirements of this Regulation and the general provisions of Regulation 10 have been met, a class 2 medical assessment shall be issued to the applicant.

242. Physical and Mental Requirements

(1) An applicant who suffers from any disease or disability which could render that applicant likely to become suddenly unable either to operate an aircraft safely or to perform assigned duties safely shall not operate an aircraft.

(2) An applicant shall have no established medical history or clinical diagnosis of:

(i) an organic mental disorder;
(ii) a mental or behavioural disorder due to psychoactive substance use; this includes dependence syndrome induced by
(iii) alcohol or other psychoactive substances;
(iv) schizophrenia or a schizotypal or delusional disorder;
(v) a mood (affective) disorder;
(vi) a neurotic, stress-related or somatoform disorder;
(vii) a behavioural syndrome associated with physiological disturbances or physical factors;
(viii) a disorder of adult personality or behaviour, particularly if manifested by repeated overt acts;
(ix) mental retardation;
(x) a disorder of psychological development;
(xi) a behavioural or emotional disorder, with onset in childhood or adolescence; or
(xii) 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.

(3) An applicant with the following shall be assessed as unfit:

(a) antidepressant medication, unless depression, being treated the medical assessor, having access to the details of the case concerned, considers the applicant's condition as unlikely to interfere with the safe exercise of the applicant's licence and rating privileges;

(b) who has undergone coronary bypass grafting or angioplasty, with or without stenting or other cardiac intervention or who has a history of myocardial infarction or who suffers from any other potentially incapacitating cardiac condition, 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;

(c) an abnormal cardiac rhythm unless the cardiac arrhythmia 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;

(d) chronic obstructive pulmonary disease 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 licence or rating privileges;

(e) asthma causing significant symptoms or likely to cause incapacitating symptoms during normal or emergency operations;

(f) active pulmonary tuberculosis

(g) quiescent or healed lesions, known to be tuberculous or presumably tuberculous in origin;

(h) significant impairment of the function of the gastrointestinal tract or its adnexa;

(i) sequelae of disease of or surgical intervention on any part of the digestive tract or its adnexa, likely to cause incapacitation in flight, in particular any obstruction due to stricture or compression;

(j) 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, until such time as the medical assessor, having access to the details of the operation concerned, considers that the effects of the operation are not likely to cause incapacitation in flight.

(k) metabolic, nutritional or endocrine disorders that are likely to interfere with the safe exercise of their licence and rating privileges

(l) insulin-treated diabetes mellitus

(m) 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 the applicant's licence and rating privileges;

(n) diseases of the blood or the lymphatic system unless adequately investigated and their condition found unlikely to interfere with the safe exercise of their licence and rating privileges

(o) renal or genitourinary disease, unless adequately investigated and their condition found unlikely to interfere with the safe exercise of their licence and rating privileges;

(p) who are seropositive for human immunodeficiency virus or HIV unless the applicant's condition has been investigated and evaluated in accordance with best medical practice and is assessed as not likely to interfere with the safe exercise of the applicant's licence or rating privileges

(q) sequelae of disease of, or surgical procedures on, the kidneys or the genitourinary tract, in particular obstructions due to stricture or compression, 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 licence or rating privileges;

(r) who are pregnant unless obstetrical evaluation and continued medical supervision indicate a low-risk uncomplicated pregnancy;

(s) who have undergone nephrectomy unless the condition is well compensated stuttering and other speech defects sufficiently severe to cause impairment of speech communication.

(4) An applicant shall have no established medical history or clinical diagnosis of any of the following:

(a) a progressive or non-progressive disease of the nervous system, the effects of which are likely to interfere with the safe exercise of the applicant's licence and rating privileges;

(b) epilepsy; any disturbance of consciousness without satisfactory medical explanation of cause.

(5) An applicant shall not have suffered any head injury, the effects of which are likely to interfere with the safe exercise of the applicant's licence and rating privileges.

(6) An applicant shall not possess any abnormality of the heart, congenital or acquired, which is likely to interfere with the safe exercise of the applicant's licence and rating privileges.

(7) Electrocardiography shall form part of the heart examination for the first issue of a Medical Assessment after the age of 40.

(8) Electrocardiography shall be included in re-examinations of applicants after the age of 50 no less than every 2 years.

(9) Electrocardiography should form part of the heart examination for the first issue of a Medical Assessment.

(10) Routine electrocardiography may be carried out for case finding purposes except that it shall not constitute sufficient evidence to justify disqualification without further thorough cardiovascular investigation.

(11) The systolic and diastolic blood pressures shall be within normal limits.

(12) The use of drugs for control of high blood pressure shall be disqualifying except for those drugs, the use of which is compatible with the safe exercise of the applicant's licence and rating privileges.

(13) There shall be no significant functional nor structural abnormality of the circulatory system.

(14) There shall be no disability of the lungs or any active disease of the structures of the lungs, mediastinum or pleura likely to result in incapacitating symptoms during normal or emergency operations.

(15) Chest radiography should form part of the initial and periodic examinations in cases where asymptomatic pulmonary disease can be expected.

(16) The use of drugs for control of asthma shall be disqualifying except for those drugs, the use of which is compatible with the safe exercise of the applicant's licence and rating privileges.

(17) Applicants shall be completely free from those hernias that might give rise to incapacitating symptoms.

(18) Sickle cell trait and other haemoglobinopathic traits are usually compatible with fit assessment.

(19) Urine examination shall form part of the medical examination and abnormalities shall be adequately investigated.

(20) For applicants with a low-risk uncomplicated pregnancy, evaluated and supervised in accordance with Regulation 234 (1) and (2), the fit assessment

shall be limited to the period from the end of the 12th week until the end of the 26th week of gestation.

(21) Following confinement or termination of pregnancy, the applicant shall not be permitted to exercise the privileges of her licence until she has undergone re-evaluation in accordance with best medical practice and it has been determined that she is able to safely exercise the privileges of her licence and ratings.

(22) The applicant shall not possess 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 and rating privileges.

(23) Any sequelae after lesions affecting the bones, joints, muscles or tendons, and certain anatomical defects will normally require functional assessment to determine fitness.

(24) The applicant shall not possess any abnormality or disease of the ear or related structures which is likely to interfere with the safe exercise of the applicant's licence and rating privileges.

(25) There shall be:

(a) no disturbance of the vestibular function;
(b) no significant dysfunction of the Eustachian tubes; and
(c) no unhealed perforation of the tympanic membranes.

(26) A single dry perforation of the tympanic membrane need not render the applicant unfit.

(27) There shall be:

(a) no nasal obstruction; and
(b) no malformation nor 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.

243. Visual Requirements

(1) The medical examination shall be based on the following requirements.

(a) The function of the eyes and their adnexa shall be normal. There shall be no active pathological condition, acute or chronic, nor any sequelae of surgery or trauma of the eyes or their adnexa likely to reduce proper visual function to an extent that would interfere with the safe exercise of the applicant's licence and rating privileges.

(b) Distant visual acuity with or without correction shall be 6/12 or better in each eye separately, and binocular visual acuity shall be 6/9 or better. No limits apply to uncorrected visual acuity. Where this standard of visual acuity can be obtained only with correcting lenses, the applicant may be assessed as fit provided that:

(i) such correcting lenses are worn during the exercise of the privileges of the licence or rating applied for or held; and

(ii) in addition, a pair of suitable correcting spectacles is kept readily available during the exercise of the privileges of the applicant's licence.

(2) An applicant accepted as meeting these provisions is deemed to continue to do so unless there is reason to suspect otherwise, in which case an ophthalmic report is required at the discretion of the Authority.

(3) Both uncorrected and corrected visual acuity are normally measured and recorded at each re-examination. Conditions which indicate a need to obtain an ophthalmic report include: a substantial decrease in the uncorrected visual acuity, any decrease in best corrected visual acuity, and the occurrence of eye disease, eye injury or eye surgery.

(4) Applicants may use contact lenses to meet this requirement provided that:

(a) the lenses are monofocal and non-tinted;

(b) the lenses are well tolerated; and a pair of suitable correcting spectacles is kept readily available during the exercise of the licence privileges.

(5) Applicants who use contact lenses may not need to have their uncorrected visual acuity measured at each re-examination provided the history of their contact lens prescription is known.

(6) Applicants with a large refractive error shall use contact lenses or high-index spectacle lenses.

(7) If spectacles are used, high-index lenses are needed to minimize peripheral field distortion.

(8) Applicants whose uncorrected distant visual acuity in either eye is worse than 6/60

(9) should be required to provide a full ophthalmic report prior to initial Medical Assessment and every five years thereafter.

(10) The purpose of the required ophthalmic examination is (1) to ascertain normal visual performance, and (2) to identify any significant pathology.

(11) Applicants who have undergone surgery affecting the refractive status of the eye shall be assessed as unfit unless they are free from those sequelae which are likely to interfere with the safe exercise of their licence and rating privileges.

(12) The applicant shall have the ability to read, while wearing the correcting lenses, if any, required under Regulation 216, N5 chart or its equivalent at a distance selected by that applicant in the range of 30 to 50 cm.

(13) If this requirement is met only by the use of near correction, the applicant may be assessed as fit provided that this near correction is added to the spectacle correction already prescribed in accordance with sub -regulation (1) (ii); if no such correction is prescribed, a pair of spectacles for near use shall be kept readily available during the exercise of the privileges of the licence.

(14) When near correction is required, the applicant shall demonstrate that one pair of spectacles is sufficient to meet both distant and near visual requirements.

(15) An applicant who needs near correction to meet the requirement will require “look-over”, bifocal or perhaps multifocal lenses in order to read the instruments and a chart or manual held in the hand, and also to make use of distant vision, through the windscreen, without removing the lenses. Single-vision near correction (full lenses of one power only, appropriate for reading) significantly reduces distant visual acuity and is therefore not acceptable.

(16) Whenever there is a requirement to obtain or renew correcting lenses, an applicant is expected to advise the refractionist of the reading distances for the visual flight deck tasks relevant to the types of aircraft in which the applicant is likely to function.

(17) When near correction is required in accordance with this paragraph, a second pair of near-correction spectacles shall be kept available for immediate use.

(18) The applicant shall be required to have normal fields of vision and normal binocular function.

(19) Reduced stereopsis, abnormal convergence not interfering with near vision, and ocular misalignment where the fusional reserves are sufficient to prevent asthenopia and diplopia need not be disqualifying.

244. Hearing Requirements

(1) Applicants who are unable to hear an average conversational voice in a quiet room, using both ears, at a distance of 2 m from the examiner and with the back turned to the examiner, shall be assessed as unfit.

(2) When tested by pure-tone audiometry, an applicant with a hearing loss, in either ear separately, of more than 35 dB at any of the frequencies 500, 1 000 or 2 000 Hz, or more than 50 dB at 3 000 Hz, shall be assessed as unfit.

(3) An applicant who does not meet the requirements of sub regulation (1) or (2) shall undergo further testing as required by Regulation 240 (2).

Class 3 Medical Assessment

245. Class 3 Medical Assessment

(1) An applicant for an air traffic controller licence shall undergo an initial medical examination for the issue of a class 3 medical certificate.

(2) Except where otherwise stated in this Regulation, holders of air traffic controller licences shall have their class 3 medical assessments renewed at intervals not exceeding those specified in Regulation 15 and Regulation 22

(3) When the Licensing Authority is satisfied that the requirements of this Regulation and the general provisions of Regulation 8 have been met, a class 3 medical certificate shall be issued to the applicant.

246. Physical and Mental Requirements

(1) The applicant shall not suffer from any disease or disability which could render that applicant likely to become suddenly unable to perform duties safely.

(2) The applicant shall have no established medical history or clinical diagnosis of:

(a) an organic mental disorder;
(b) a mental or behavioural disorder due to psychoactive substance use; this includes dependence syndrome induced by
(c) alcohol or other psychoactive substances;
(d) schizophrenia or a schizotypal or delusional disorder;
(e) a mood (affective) disorder;
(f) a neurotic, stress-related or somatoform disorder;

(g) a behavioural syndrome associated with physiological disturbances or physical factors;
(h) a disorder of adult personality or behaviour, particularly if manifested by repeated overt acts;
(i) mental retardation;
(j) a disorder of psychological development;
(k) a behavioural or emotional disorder, with onset in childhood or adolescence; or
(l) a mental disorder not otherwise specified;
(m) such as might render the applicant unable to safely exercise the privileges of the licence applied for or held

(3) An applicant with the following shall be assessed as unfit:

(a) depression, being treated with antidepressant medication, unless the medical assessor, having access to the details of the case concerned, considers the applicant's condition as unlikely to interfere with the safe exercise of the applicant's licence and rating privileges;

(b) who has undergone coronary bypass grafting or angioplasty (with or without stenting) or other cardiac intervention or who has a history of myocardial infarction or who suffers from any other potentially incapacitating cardiac condition 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 and rating privileges;

(c) with an abnormal cardiac rhythm unless the cardiac arrhythmia 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 and rating privileges;

(d) with chronic obstructive pulmonary disease 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 licence or rating privileges;

(e) with asthma causing significant symptoms or likely to cause incapacitating symptoms;

(f) active pulmonary tuberculosis

(g) quiescent or healed lesions, known to be tuberculous or presumably tuberculous in origin;

(h) significant impairment of the function of the gastrointestinal tract or its adnexae

(i) sequelae of disease of or surgical intervention on any part of the digestive tract or its adnexa, likely to cause incapacitation, in particular any obstructions due to stricture or compression;

(j) 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 until such time as the medical assessor,

having access to the details of the operation concerned, considers that the effects of the operation are not likely to cause incapacitation;

(k) metabolic, nutritional or endocrine disorders that are likely to interfere with the safe exercise of their licence and rating privileges

(l) non-insulin-treated diabetes unless the condition is shown to be satisfactorily controlled by diet alone or by diet combined with oral anti-diabeti medication, the use of which is compatible with the safe exercise of the applicant's licence and rating privileges;

(m) insulin-treated diabetes mellitus

(n) diseases of the blood and/or the lymphatic system, unless adequately investigated and their condition found unlikely to interfere with the safe exercise of their licence and rating privileges;

(o) renal or genito-urinary disease unless adequately investigated and their condition found unlikely to interfere with the safe exercise of their licence and rating privileges

(p) sequelae of disease of, or surgical procedures on the kidneys or the genito-urinary tract, in particular obstructions due to stricture or compression, 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 licence or rating privileges

(q) who have undergone nephrectomy unless the condition is well compensated.

(r) who are seropositive for HIV unless the applicant's condition has been investigated and evaluated in accordance with best medical practice and is assessed as not likely to interfere with the safe exercise of the applicant's licence or rating privileges;

(s) who are pregnant unless obstetrical evaluation and continued medical supervision indicate a low-risk uncomplicated pregnancy with stuttering or other speech defects sufficiently severe to cause impairment of speech communication.

(4) The applicant shall have no established medical history or clinical diagnosis of any of the following:

(a). a progressive or non-progressive disease of the nervous system, the effects of which are likely to interfere with the safe

(b). exercise of the applicant's licence and rating privileges; epilepsy; or any disturbance of consciousness without satisfactory medical explanation of cause.

(5) The applicant shall not have suffered any head injury, the effects of which are likely to interfere with the safe exercise of the applicant's licence and rating privileges.

(6) The applicant shall not possess any abnormality of the heart, congenital or acquired, which is likely to interfere with the safe exercise of the applicant's licence and rating privileges.

(7) Electrocardiography shall form part of the heart examination for the first issue of a medical assessment.

(8) Electrocardiography shall be included in re-examinations of applicants after the age of 50 no less frequently than every 2 years.

(9) Routine electrocardiography may be carried out for case finding purposes except that it shall not constitute sufficient evidence to justify disqualification without further thorough cardiovascular investigation.

(10) The systolic and diastolic blood pressures shall be within normal limits.

(11) The use of drugs for control of high blood pressure is disqualifying except for those drugs, the use of which is compatible with the safe exercise of the applicant's licence privileges.

(12) There shall be no significant functional nor structural abnormality of the circulatory system.

(13) There shall be no disability of the lungs nor any active disease of the structures of the lungs, mediastinum or pleurae likely to result in incapacitating symptoms.

(14) Chest radiography is usually not necessary but may be indicated in cases where asymptomatic pulmonary disease can be expected.

(15) The use of drugs for control of asthma shall be disqualifying except for those drugs, the use of which is compatible with the safe exercise of the applicant's licence and rating privileges.

(16) Urine examination shall form part of the medical examination and abnormalities shall be adequately investigated.

(17) During the gestational period, precautions should be taken for the timely relief of an air traffic controller in the event of early onset of labour or other complications.

(18) For applicants with a low-risk uncomplicated pregnancy, evaluated and supervised in accordance with Regulation 234, the fit assessment should be limited to the period until the end of the 34th week of gestation.

(19) Following confinement or termination of pregnancy the applicant shall not be permitted to exercise the privileges of her licence until she has undergone re-evaluation in accordance with best medical practice and it has been determined that she is able to safely exercise the privileges of her licence and ratings.

(20) The applicant shall not possess 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 and rating privileges.

(21) Any sequelae after lesions affecting the bones, joints, muscles or tendons, and certain anatomical defects will normally require functional assessment to determine fitness.

(22) The applicant shall not possess any abnormality or disease of the ear or related structures which is likely to interfere with the safe exercise of the applicant's licence and rating privileges.

(23) There shall be no malformation nor any disease of the nose, buccal cavity or upper respiratory tract which is likely to interfere with the safe exercise of the applicant's licence and rating privileges.

247. Visual Requirements

(1) The medical examination shall be based on the following requirements:

(a) The function of the eyes and their adnexa shall be normal; and

(b) There shall be no active pathological condition, acuteor chronic, nor any sequelae of surgery or trauma of the eyes or their adnexa likely to reduce proper visual function to an extent that would interfere with the safe exercise of the applicant's licence and rating privileges.

(2) Distant visual acuity with or without correction shall be 6/9 or better in each eye separately, and binocular visual acuity shall be 6/6 or better. No limits apply to uncorrected visual acuity. Where this standard of visual acuity can be obtained only with correcting lenses, the applicant may be assessed as fit provided that:

(a). such correcting lenses are worn during the exercise of the privileges of the licence or rating applied for or held; and

(b) in addition, a pair of suitable correcting spectacles is kept readily available during the exercise of the privileges of the applicant's licence.

(3) An applicant accepted as meeting these provisions is deemed to continue to do so unless there is reason to suspect otherwise, in which case an ophthalmic report is required at the discretion of the Authority.

(4) Both uncorrected and corrected visual acuity are normally measured and recorded at each re-examination. Conditions which indicate a need to obtain an ophthalmic report include: a substantial decrease in the uncorrected visual acuity, any decrease in best corrected visual acuity, and the occurrence of eye disease, eye injury or eye surgery.

(5) Applicants may use contact lenses to meet this requirement provided that:

(a). the lenses are monofocal and non-tinted;
(b). the lenses are well tolerated; and a pair of suitable correcting spectacles is kept readily available during the exercise of the licence privileges.

(6) Applicants who use contact lenses may not need to have their uncorrected visual acuity measured at each re-examination provided the history of their contact lens prescription is known.

(7) Applicants with a large refractive error shall use contact lenses or high-index spectacle lenses.

(8) Where spectacles are used, high-index lenses are needed to minimize peripheral field distortion.

(9) Applicants whose uncorrected distant visual acuity in either eye is worse than 6/60 shall be required to provide a full ophthalmic report prior to initial Medical Assessment and every five years thereafter.

(10) The purpose of the required ophthalmic examination is (1) to ascertain normal vision performance, and (2) to identify any significant pathology.

(11) Applicants who have undergone surgery affecting the refractive status of the eye shall be assessed as unfit unless they are free from those sequelae which are likely to interfere with the safe exercise of their licence and rating privileges.

(12) The applicant shall have the ability to read, while wearing the correcting lenses, if any, required by sub-regulation (14), the N5 chart or its equivalent at a distance selected by that applicant in the range of 30 to 50 cm and the ability to read the N14 chart or its equivalent at a distance of 100 cm.

(13) Distant visual acuity with or without correction shall be 6/9 or better in each eye separately, and binocular visual acuity shall be 6/6 or better and no limits shall apply to uncorrected visual acuity and where the standard, of visual acuity can be obtained only with correcting lenses, the applicant may be assessed as fit provided that:

(a) such correcting lenses are worn during the exercise of the privileges of the licence or rating applied for or held; and
(b) in addition, a pair of suitable correcting spectacles is kept readily available during the exercise of the privileges of the applicant's licence.

(14) If this requirement is met only by the use of near correction, the applicant may be assessed as fit provided that this near correction is added to the spectacle correction already prescribed in accordance with sub- regulation (14) if no such correction is prescribed, a pair of spectacles for near use shall be kept readily available during the exercise of the privileges of the licence.

(15) When near correction is required, the applicant shall demonstrate that one pair of spectacles is sufficient to meet both distant and near visual requirements.

(16) An applicant who needs near correction to meet the requirement will require "look-over", bifocal or perhaps multi-focal lenses in order to read radar screens, visual displays and written or printed material and also to make use of distant vision, through the windows, without removing the lenses.

(17) Single-vision near correction full lenses of one power only, appropriate for reading may be acceptable for certain air traffic control duties.

(18) However, it should be realized that single-vision near correction significantly reduces distant visual acuity.

(19) Whenever there is a requirement to obtain or renew correcting lenses, an applicant is expected to advise the refractionist of reading distances for the air traffic control duties the applicant is likely to perform.

(20) When near correction is required, a second pair of near-correction spectacles shall be kept available for immediate use.

(21) The applicant shall be required to have normal fields of vision and normal binocular function.

(22) Reduced stereopsis, abnormal convergence not interfering with near vision, and ocular misalignment where the fusional reserves are sufficient to prevent asthenopia and diplopia need not be disqualifying.

248. Hearing Requirements

(1) The applicant, 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, 1 000 or 2 000 Hz, or more than 50 dB at 3 000 Hz.

(2) An applicant with a hearing loss greater than the above may be declared fit provided that the applicant has normal hearing performance against a background noise that reproduces or simulates that experienced in a typical air traffic control working environment.

(3) The frequency composition of the background noise is defined only to the extent that the frequency ranges 600 to 4 800 Hzs peech frequency range is adequately represented.

(4) In the speech material for discrimination testing, both aviation-relevant phrases and phonetically balanced words are normally used.

(5) Alternatively, a practical hearing test conducted in an air traffic control environment representative of the one for which the applicant's licence and ratings are valid may be used.

CHAPTER XI

EXEMPTIONS

249. Requirements for Application

(1) A person may apply to the Authority for exemption from any of the provisions of this Regulation.

(2) A request for exemption shall be made in accordance with the requirements of this Regulation and an application for such exemption shall be submitted and processed in a manner prescribed in the applicable technical guidance material

(3) A request for an exemption shall contain the applicant's:

(a) name;
(b) physical address and mailing address;
(c) telephone number;
(d) fax number where available; and
(e) email address where available.
(f) Description of the exemption sought, sighting the applicable provisions of this Regulation or Regulations

(4) The application shall be accompanied by a fee prescribed by the Authority in the applicable aeronautical information circulars for technical evaluation.

250. Exemption

(1) The Authority may, upon consideration of the circumstances of a particular applicant or holder of a licence, certificate, approval or authorization, issue an exemption providing relief from specified provisions of this Regulation, provided that:

(a). the Authority finds that the circumstances presented warrant the exemption; and

(b) a level of safety shall be maintained equal to that provided by the Regulation or Regulations from which the exemption is sought.

(2) The exemption referred to in sub-regulation (1) may be terminated or amended at any time by the Authority.

CHAPTER XII

GENERAL PROVISIONS

251. Possession of the Licence

(1) A holder of a licence, certificate, approval 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 crew member of a foreign registered aircraft shall hold a valid licence, certificate, approval 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, approval or authorisation.

252. Use of Psychoactive Substances

(1) A holder of a licence, certificate, approval 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, approval or authorisation.

(2) A crew member of a foreign registered aircraft shall hold a valid licence, certificate, approval or authorisation, including an appropriate and current medical certificate, issued by the State of Registry and have it in his or her physical possession or at the work station when exercising the privileges of that licence, certificate or authorisation.

(3) A holder of a licence, rating or a certificate issued under this Regulation 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.

(4) 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.

(5) The person referred to in sub-regulation (1) and (2) shall not engage in any kind of problematic use of substances.

253. Drug and Alcohol Testing and Reporting

(1) A person who performs any function requiring a licence, rating, qualification or authorisation prescribed by this Regulation 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 this Regulation 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 this Regulation 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 this Regulation 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 this 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 this 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 this Regulations suspended or revoked.

254. Inspection of Licences, Certificates, Approvals and Authorisations

A person who holds a licence, certificate, or authorisation required by this Regulation shall present it for inspection upon a request from the Authority or any person authorised by the Authority.

255. Change of Name

(1) A holder of a licence, certificate or authorisation issued under this Regulation 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.

256. Change of Address

A holder of a licence, certificate, approval or authorisation issued under this Regulation 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 14 days in advance;
(b) mailing address upon the change.

257. Replacement of Documents

A person may apply to the Authority in the prescribed form for replacement of documents issued under this Regulation if the documents are lost.

258. Suspension and Revocations of Documents

(1) The Authority may, where it considers it to be in the public interest, suspend provisionally, pending further investigation any licence, certificate, approval, permission, or authorization, or such other document issued, granted or having effect under this 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, approval or authorization, or other document issued or granted under this Regulations.

(3) The Authority may, where it considers it to be in public and safety 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, approval, authorisation or other documents which has been revoked, suspended or varied under this 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, approval, authorisation, or any other document has been granted or issued under this Regulations shall render the document invalid during the continuance of the breach.

259. Use and Retention of Documents and Records

(1) A person shall not:

(a) use any licence, certificate, approval, permission, exemption, authorisation or other document issued or required by or under this 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 this Regulations; or

(c) lend any licence, certificate, approval, permission, exemption, authorisation or other document issued or required by or under this 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 this 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 this 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. All records required to be maintained by or under this Regulations shall be recorded in a permanent and indelible material.

(3) A person shall not issue any certificate, document or exemption under this Regulations unless he is authorised to do so by the Authority.

(4) 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.

260. Reports of Violation

(1) Any person who knows of a violation of the Civil Aviation Act or any Regulations or orders issued there under, 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 in accordance with the applicable technical guidance material.

261. Enforcement of Directives

A person who fails to comply with any directives given to him by the Authority or by any authorised person under this Regulation shall be deemed for the purposes of this Regulations to have contravened that provision.

262. Aeronautical User Fees

The Authority shall Publish the fees to be charged in connection with the issue, validation, renewal, extension or variation of any licence, certificate, approval, authorization 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 this Regulations any orders, notices or proclamations made there under.

263. Application of Regulations to Government and Visiting Forces, Etc

(1) this 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 this Regulation

to the same extent as if the visiting force formed part of the military force of South Sudan.

264. Extra-Territorial Application of Regulations

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 the Republic of South Sudan, 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 Republic of South Sudan

(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 the Republic of South Sudan, 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 the Republic of South Sudan by other persons shall, where such persons are citizens of the Republic of South Sudan, apply to them wherever they may be.

CHAPTER XIII

OFFENCES AND PENALTIES

265. Contravention of Regulations

A person who contravenes any provision of these Regulations may have his licence, certificate, approval, authorisation, exemption or other document revoked or suspended.

266. Penalties

(1) A person who contravenes any provision of these Regulations, orders, notices or proclamations made there under 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 there under 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 there under 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 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 this Regulation by assessing the contravention and requiring the person reasonably suspected of having committed the offence to pay to the Authority a sum equivalent in South Sudanese pounds 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 this Regulation.

(9) If any person contravenes any provision specified in Part B of the Fifth Schedule to this Regulation, upon conviction is liable to a fine not less than the equivalent in South Sudanese pounds of one thousand United States Dollars or to imprisonment for a term of 12 months or to both.

(10) Where any person is aggrieved by any order made under sub-regulation (8), he may, within 21 days of such order being made, appeal against the order to in accordance with the republic of South Sudan appeal procedure.

CHAPTER XIV

TRANSITION, SAVINGS AND REVOCATION

267. Transition, Savings and Revocation

All valid licences, certificates, permits or authorization issued or granted by the Authority before the commencement of this Regulation shall remain operational until their expiry or are revoked, annulled or replaced.

FIRST SCHEDULE

Regulation 5

SPECIFICATIONS FOR PERSONNEL LICENCES

Personnel licences issued by the Authority in accordance with the relevant provisions of these Regulations shall conform to the following specifications as further prescribed in the technical guidance materials:

1. Detail

(a) A [State] Authority, 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
(IV) Date of birth;
(V) Address of holder;
(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 the Authority
(XII) Ratings
(XIII) Remarks 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 deemed neccessary by the Authority.

2. Language:

[State] licences shall be issued in English,

SECOND SCHEDULE

Regulation 27

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 or 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 or 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.

THIRD SCHEDULE

Regulation 84

REQUIREMENTS FOR THE ISSUE OF THE MULTI CREW PILOT LICENSE

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 or 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-engine 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 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 or 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 or 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 or 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

Module & Module description	CATEGORIZATION				
	A or B1 aeroplane with Turbine engine(s): B1.1	A or B1 aeroplane with Piston engine(s): B1.2	A or B1 helicopter with Turbine engine(s): B1.3	A or B1 helicopter with Piston engine(s): B1.4	B2 - Avionics
Module 1 Mathematics	✓	✓	✓	✓	✓
1.1 Arithmetic 1.2 Algebra 1.3 Geometry					
Module 2 Physics	✓	✓	✓	✓	✓
2.1 Matter 2.2 Mechanics 2.2.1 Statics 2.2.2 Kinetics 2.2.3 Dynamics 2.2.4 Fluid dynamics 2.3 Thermodynamics 2.4 Optics (Light) 2.5 Wave Motion and Sound					
Module 3 Electrical Fundamentals	✓	✓	✓	✓	✓
3.1 Electron Theory 3.2 Static Electricity and Conduction 3.3 Electrical Terminology 3.4 Generation of Electricity 3.5 DC Sources of Electricity 3.6 DC Circuits 3.7 Resistance/Resistor 3.8 Power 3.9 Capacitance/Capacitor 3.10 Magnetism 3.11 Inductance/Inductor 3.12 DC Motor/Generator Theory 3.13 AC Theory 3.14 Resistive (R), Capacitive (C) and Inductive (L) Circuits 3.15 Transformers 3.16 Filters 3.17 AC Generators 3.18 AC Motors					
Module 4 Electronic Fundamentals	✓	✓	✓	✓	✓

4.1 Semiconductors 4.1.1 Diodes 4.1.2 Transistors 4.1.3 Integrated Circuits 4.2 Printed Circuit Boards 4.3 Servomechanisms					
Module 5 **Digital Techniques / Electronic Instrument Systems**	✓	✓	✓	✓	✓
5.1 Electronic Instrument Systems 5.2 Numbering Systems 5.3 Data Conversion 5.4 Data Buses 5.5 Logic Circuits 5.6 Basic Computer Structure 5.7 Microprocessors 5.8 Integrated Circuits 5.9 Multiplexing 5.10 Fibre Optics 5.11 Electronic Displays 5.12 Electrostatic Sensitive Devices 5.13 Software Management Control 5.14 Electromagnetic Environment 5.15 Typical Electronic/Digital Aircraft Systems					
Module 6 **Material & Hardware**	✓	✓	✓	✓	✓
6.1 Aircraft Materials — Ferrous 6.2 Aircraft Materials — Non-Ferrous 6.3 Aircraft Materials — Composite and Non-Metallic 6.3.1 Composite and non-metallic other than wood and fabric 6.3.2 Wooden structures 6.3.3 Fabric covering 6.4 Corrosion 6.5 Fasteners 6.5.1 Screw threads 6.5.2 Bolts, studs and screws 6.5.3 Locking devices 6.5.4 Aircraft rivets 6.6 Pipes and Unions 6.7 Springs 6.8 Bearings 6.9 Transmissions 6.10 Control Cables 6.11 Electrical Cables and Connectors					
Module 7	✓	✓	✓	✓	✓

Maintenance Practices					
7.1 Safety Precautions-Aircraft and Workshop 7.2 Workshop Practices 7.3 Tools 7.4 Avionic General Test Equipment 7.5 Engineering Drawings, Diagrams and Standards 7.6 Fits and Clearances 7.7 Electrical Wiring Interconnection System (EWIS) 7.8 Riveting 7.9 Pipes and Hoses 7.10 Springs 7.11 Bearings 7.12 Transmissions 7.13 Control Cables 7.14 Material handling 7.14.2 Composite and non-metallic 7.15 Welding, Brazing, Soldering and Bonding 7.16 Aircraft Weight and Balance 7.17 Aircraft Handling and Storage 7.18 Disassembly, Inspection, Repair and Assembly Techniques 7.19 Abnormal Events 7.20 Maintenance Procedures					
Module 8 Basic Aerodynamics	✓	✓	✓	✓	✓
8.1 Physics of the Atmosphere 8.2 Aerodynamics 8.3 Theory of Flight 8.4 Flight Stability and Dynamics					
Module 9 Human Factors	✓	✓	✓	✓	✓
9.1 General 9.2 Human Performance and Limitations 9.3 Social Psychology 9.4 Factors Affecting Performance 9.5 Physical Environment 9.6 Tasks 9.7 Communication 9.8 Human Error 9.9 Hazards in the Workplace					
Module 10 Aviation Legislations	✓	✓	✓	✓	✓
10.1 Regulatory Framework 10.2 Certifying Staff — Maintenance 10.3 Approved Maintenance Organisations 10.4 Air operations					

10.5 Certification of aircraft, parts and appliances 10.6 Continuing airworthiness 10.7 Applicable National and International Requirements					
Module 11 A Turbine Aeroplane Aerodynamics, Structures & Systems	✓				
11.1 Theory of Flight 11.1.2. High Speed Flight 11.2 Airframe Structures — General Concepts 11.3 Airframe Structures — Aeroplanes 11.3.1 Fuselage (ATA 52/53/56) 11.3.2 Wings (ATA 57) 11.3.3 Stabilisers (ATA 55) 11.3.4 Flight Control Surfaces (ATA 55/57) 11.3.5 Nacelles/Pylons (ATA 54) 11.4 Air Conditioning and Cabin Pressurisation (ATA 21) 11.4.1 Air supply 11.4.2 Air Conditioning 11.4.3 Pressurisation 11.4.4 Safety and warning devices 11.5 Instruments/Avionic Systems 11.5.1 Instrument Systems (ATA 31) 11.5.2 Avionic Systems 11.6 Electrical Power (ATA 24) 11.7 Equipment and Furnishings (ATA 25) 11.8 Fire Protection (ATA 26) 11.9 Flight Controls (ATA 27) 11.10 Fuel Systems (ATA 28) 11.11 Hydraulic Power (ATA 29) 11.12 Ice and Rain Protection (ATA 30) 11.13 Landing Gear (ATA 32) 11.14 Lights (ATA 33) 11.15 Oxygen (ATA 35) 11.16 Pneumatic/Vacuum (ATA 36) 11.17 Water/Waste (ATA 38) 11.18 On Board Maintenance Systems (ATA 45) 11.19 Integrated Modular Avionics (ATA42) 11.20 Cabin Systems (ATA44) 11.21 Information Systems (ATA46)					
Module 11 B Piston Aeroplane Systems Aerodynamics, Structures & Systems		✓			
11.1 Theory of Flight 11.1.2. High Speed Flight					

11.2 Airframe Structures — General Concepts 11.3 Airframe Structures — Aeroplanes 11.3.1 Fuselage (ATA 52/53/56) 11.3.2 Wings (ATA 57) 11.3.3 Stabilisers (ATA 55) 11.3.4 Flight Control Surfaces (ATA 55/57) 11.3.5 Nacelles/Pylons (ATA 54) 11.4 Air Conditioning and Cabin Pressurisation (ATA 21) 11.5 Instruments/Avionic Systems 11.5.1 Instrument Systems (ATA 31) 11.5.2 Avionic Systems 11.6 Electrical Power (ATA 24) 11.7 Equipment and Furnishings (ATA 25) 11.8 Fire Protection (ATA 26) 11.9 Flight Controls (ATA 27) 11.10 Fuel Systems (ATA 28) 11.11 Hydraulic Power (ATA 29) 11.12 Ice and Rain Protection (ATA 30) 11.13 Landing Gear (ATA 32) 11.14 Lights (ATA 33) 11.15 Oxygen (ATA 35) 11.16 Pneumatic/Vacuum (ATA 36) 11.17 Water/Waste (ATA 38)					
Module 12 Helicopter Aerodynamics, Structures & Systems			✓	✓	
12.1 Theory of Flight — Rotary Wing Aerodynamics 12.2 Flight Control Systems 12.3 Blade Tracking and Vibration Analysis 12.4 Transmission 12.5 Airframe Structures 12.6 Air Conditioning (ATA 21) 12.6.1 Air supply 12.6.2 Air conditioning 12.7 Instruments/Avionic Systems 12.7.1 Instrument Systems (ATA 31) 12.7.2 Avionic Systems 12.8 Electrical Power (ATA 24) 12.9 Equipment and Furnishings (ATA 25) 12.10 Fire Protection (ATA 26) 12.11 Fuel Systems (ATA 28) 12.12 Hydraulic Power (ATA 29) 12.13 Ice and Rain Protection (ATA 30) 12.14 Landing Gear (ATA 32) 12.15 Lights (ATA 33) 12.16 Pneumatic/Vacuum (ATA 36) 12.17 Integrated Modular Avionics (ATA42)					

12.18 On Board Maintenance Systems (ATA45) 12.19 Information Systems (ATA46)					
Module 13 Aircraft Aerodynamics, Structures & Systems					✓
13.1 Theory of Flight 13.2 Structures — General Concepts 13.3 Autoflight (ATA 22) 13.4 Communication/Navigation (ATA 23/34) 13.5 Electrical Power (ATA 24) 13.6 Equipment and Furnishings (ATA 25) 13.7 Flight Controls (ATA 27) 13.8 Instruments (ATA 31) 13.9 Lights (ATA 33) 13.10 On Board Maintenance Systems (ATA 45) 13.11 Air Conditioning and Cabin Pressurization (ATA 21) 13.11.1. Air supply 13.11.2. Air Conditioning 13.11.3. Pressurisation 13.11.4. Safety and warning devices 13.12 Fire Protection (ATA 26) 13.13 Fuel Systems (ATA 28) 13.14 Hydraulic Power (ATA 29) 13.15 Ice and Rain Protection (ATA 30) 13.16 Landing Gear (ATA 32) 13.17 Oxygen (ATA 35) 13.18 Pneumatic/Vacuum (ATA 36) 13.19 Water/Waste (ATA 38) 13.20 Integrated Modular Avionics (ATA 42) 13.21 Cabin Systems (ATA 44) 13.22 Information Systems (ATA 46)					
Module 14 Propulsion					✓
14.1 Turbine Engines 14.2 Engine Indicating Systems 14.3 Starting and Ignition Systems					
Module 15 Gas Turbine Engines	✓		✓		
15.1 Fundamentals 15.2 Engine Performance 15.3 Inlet 15.4 Compressors 15.5 Combustion Regulation 15.6 Turbine Regulation 15.7 Exhaust					

15.8 Bearings and Seals 15.9 Lubricants and Fuels 15.10 Lubrication Systems 15.11 Fuel Systems 15.12 Air Systems 15.13 Starting and Ignition Systems 15.14 Engine Indication Systems 15.15 Power Augmentation Systems 15.16 Turbo-prop Engines 15.17 Turbo-shaft Engines 15.18 Auxiliary Power Units (APUs) 15.19 Powerplant Installation 15.20 Fire Protection Systems 15.21 Engine Monitoring and Ground Operation 15.22 Engine Storage and Preservation						
Module 16 **Piston Engines**		✓		✓		
16.1 Fundamentals 16.2 Engine Performance 16.3 Engine Construction 16.4 Engine Fuel Systems 16.4.1 Carburettors 16.4.2 Fuel injection systems 16.4.3 Electronic engine control 16.5 Starting and Ignition Systems 16.6 Induction, Exhaust and Cooling Systems 16.7 Supercharging/Turbocharging 16.8 Lubricants and Fuels 16.9 Lubrication Systems 16.10 Engine Indication Systems 16.11 Powerplant Installation 16.12 Engine Monitoring and Ground Operation 16.13 Engine Storage and Preservation						
Module 17	**Propellers**	✓	✓			
17.1 Fundamentals 17.2 Propeller Construction 17.3 Propeller Pitch Control 17.4 Propeller Synchronising 17.5 Propeller Ice Protection 17.6 Propeller Maintenance 17.7 Propeller Storage and Preservation						

at least 2 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 165-166

FOURTH SCHEDULE-PART A

SOUTH SUDAN- AIRCRAFT MAINTENANCE ENGINEERS SYLLABUS

FOURTH SCHEDULE-PART B

SOUTH SUDAN - AIRCRAFT MAINTENANCE ENGINEERS LICENSING SKILL TEST STANDARDS

Interpretation of Skill Levels

Level I: Basic understanding, define and identify.

Level II: In-depth knowledge, explain functions and perform simple procedures.

Level III: Advanced knowledge, apply in practical situations, inspect, test, and troubleshoot, evaluation of system behaviour

MODULE 1: MATHEMATICS

Topic/Sub-topic	Skill Test Description	A or B1.1	B1.2	B1.3	B1.4	B2
1.1 Arithmetic	Perform basic arithmetic operations (addition, subtraction, multiplication, division) with decimals, fractions, ratios, and percentages. Solve real-world aviation-related numerical problems (e.g., fuel calculations, tolerances).	I	I	I	I	I
	Convert between units (e.g., inches to millimeters, pounds to kilograms).	I	I	I	I	I
	Apply order of operations and use scientific notation.	I	I	I	I	I
1.2 Algebra	Solve linear equations and rearrange formulas relevant to aircraft systems and component calculations.	II	II	II	II	II
	Apply algebraic methods to solve problems involving resistors in series/parallel, Ohm's Law, or power formulas.	II	II	II	II	II
1.3 Geometry	Calculate area, volume, perimeter of geometric shapes used in aircraft structures and components (e.g., skin panels, fuel tanks).	I	I	I	I	I
	Apply Pythagoras' Theorem and trigonometric functions in determining unknown lengths or angles in structural maintenance.	II	II	II	II	II

Topic/Sub-topic	Skill Test Description	A or B1.1	B1.2	B1.3	B1.4	B2
	Interpret geometrical drawings and apply geometric reasoning to check alignment, fitment, or clearances.	II	II	II	II	II

MODULE 2: PHYSICS

Topic/sub-topic	Skill Test Description	Level	B1.1	B1.2	B1.3	B1.4	B2
2.1 Matter	Identify states of matter and explain physical changes (melting, boiling, etc.); perform basic experiments demonstrating changes in state.	I	I	I	I	I	I
2.2.1 Statics	Demonstrate calculations involving forces in equilibrium, moments, and the use of levers and pulleys in practical applications.	II	II	II	II	II	II
2.2.2 Kinetics	Solve problems using Newton's laws, acceleration, and force diagrams; apply to aircraft loading situations.	II	II	II	II	II	II
2.2.3 Dynamics	Demonstrate understanding of motion (linear/angular), use instruments to measure speed, velocity, and acceleration in lab conditions.	II	II	II	II	II	II
2.2.4 Fluid Dynamics	Conduct basic experiments to demonstrate Bernoulli's Principle and pressure measurement in fluid systems (e.g., manometers, pitot tubes).	II	II	II	II	II	II
2.3 Thermodynamics	Use thermometers, interpret temperature/pressure data; perform practical experiments involving gas laws and heat transfer in typical aircraft environments.	II	II	II	II	II	II
2.4 Optics (Light)	Set up basic optical experiments: measure reflection, refraction, lens behavior, and demonstrate light path principles using ray boxes.	I	I	I	I	I	I
2.5 Wave Motion and Sound	Perform demonstrations of wave propagation, frequency, amplitude, and resonance using tuning forks, oscilloscopes, or simulation tools.	I	I	I	I	I	I

MODULE 3: ELECTRICAL FUNDAMENTALS

Sub-Module	Skill Test Description	B1.1	B1.2	B1.3	B1.4	B2
3.1 Electron Theory	Identify atomic structure and relate electron movement to electrical current. Demonstrate understanding via Ohm's Law calculation.	I	I	I	I	I
3.2 Static Electricity and Conduction	Demonstrate charging methods, test for static charge buildup, and assess grounding needs in aircraft structures.	II	II	II	II	I
3.3 Electrical Terminology	Define and correctly apply terms such as voltage, current, resistance, and power in schematics and fault diagnostics.	II	II	II	II	II
3.4 Generation of Electricity	Assemble and operate a simple generator model; explain generator components and produce voltage measurement under load.	II	II	II	II	II
3.5 DC Sources of Electricity	Demonstrate battery testing procedures, connect and charge batteries observing polarity and safety; interpret charge/discharge curves.	III	III	III	III	II
3.6 DC Circuits	Assemble series, parallel, and series-parallel DC circuits and verify functionality using multimeter and calculations.	III	III	III	III	III
3.7 Resistance/Resistor	Identify resistor types by color code and test resistance using a multimeter. Demonstrate effects of temperature on resistance.	II	II	II	II	II
3.8 Power	Calculate power dissipation in DC circuits; demonstrate effect of load variations on power consumption.	II	II	II	II	II
3.9 Capacitance/Capacitor	Identify capacitors, test with capacitance meter, and demonstrate capacitor charging/discharging in a basic RC circuit.	II	II	II	II	II
3.10 Magnetism	Demonstrate magnetic field around a conductor, and perform test to identify magnetic materials using simple tools.	II	II	II	II	I
3.11 Inductance/Inductor	Explain inductance in circuits; demonstrate effect in AC/DC circuits	II	II	II	II	II

Sub-Module	Skill Test Description	B1.1	B1.2	B1.3	B1.4	B2
	using oscilloscope and function generator.					
3.12 DC Motor/Generator Theory	Disassemble and assemble DC motor/generator. Measure speed, torque, and output under load. Identify winding types.	III	III	III	III	II
3.13 AC Theory	Demonstrate use of oscilloscope to analyze AC waveform, frequency, phase relationships, and perform basic AC calculations.	III	III	III	III	III
3.14 RLC Circuits	Construct RLC circuits. Demonstrate resonance, impedance, and use of LCR meter for circuit characterization.	III	III	III	III	III
3.15 Transformers	Demonstrate step-up/down function, test insulation resistance, and explain mutual inductance and losses in transformer.	III	III	III	III	III
3.16 Filters	Construct and test low-pass, high-pass filters using passive components. Measure frequency response using signal generator.	II	II	II	II	III
3.17 AC Generators	Test aircraft alternators under load. Identify components and simulate faults for troubleshooting scenarios.	III	III	III	III	III
3.18 AC Motors	Operate and test AC motors. Demonstrate start/run characteristics, identify phase failures and protection mechanisms.	III	III	III	III	II

MODULE 4: ELECTRONIC FUNDAMENTALS

Sub-Module	Skill Test Description	A/B1.1	B1.2	B1.3	B1.4	B2
4.1 Semiconductors	Identify and describe semiconductor properties and characteristics, including doping and current flow.	I	I	I	I	I
4.1.1 Diodes	Test and interpret operation of diodes (rectification, polarity, biasing) using multimeters.	II	II	II	II	II
4.1.2 Transistors	Identify types (NPN, PNP), check configuration, measure gains (hFE), and test transistor functionality.	II	II	II	II	II
4.1.3 Integrated Circuits	Identify and explain the purpose of digital/analog ICs (Op-Amps, Timers, Logic ICs); perform functional checks.	II	II	II	II	II

Sub-Module	Skill Test Description	A/B1.1	B1.2	B1.3	B1.4	B2
4.2 Printed Circuit Boards	Inspect PCB layout and track routing; perform fault tracing, soldering/desoldering, and component replacement.	III	III	III	III	III
4.3 Servomechanisms	Demonstrate understanding of servos in control systems; test feedback loops, error detection, and control signals.	III	III	III	III	III

MODULE 5 – DIGITAL TECHNIQUES / ELECTRONIC INSTRUMENT SYSTEMS

Topic/sub-topic	Skill Test Description	B1.1	B1.2	B1.3	B1.4	B2
5.1 Electronic Instrument Systems	Identify and interpret aircraft digital instrument systems; test for data validity using manufacturer test equipment.	II	II	II	II	III
5.2 Numbering Systems	Convert binary, decimal, hexadecimal; interpret binary-coded signals in avionics.	II	II	II	II	III
5.3 Data Conversion	Demonstrate digital-to-analog and analog-to-digital signal conversion using test circuits or simulation software.	II	II	II	II	III
5.4 Data Buses	Diagnose and test aircraft data bus systems (ARINC, MIL-STD, etc.) using bus analyzers.	II	II	II	II	III
5.5 Logic Circuits	Build and troubleshoot basic logic gates (AND, OR, NOT, NAND, NOR); verify using logic probes/simulators.	II	II	II	II	III
5.6 Basic Computer Structure	Identify major blocks in avionics computers (CPU, memory, input/output); explain memory types and hierarchy.	I	I	I	I	II
5.7 Microprocessors	Identify components of microprocessor systems; explain CPU functions and memory mapping.	I	I	I	I	II
5.8 Integrated Circuits	Identify and test simple ICs (Op-Amps, 555 timers) using datasheets and circuit testers.	II	II	II	II	III
5.9 Multiplexing	Demonstrate signal multiplexing/demultiplexing and its advantages in avionics wiring using test setup or simulators.	II	II	II	II	III
5.10 Fibre Optics	Handle, inspect, and test fibre optic cables for continuity and loss using visual fault locators or OTDRs.	I	I	I	I	II

Topic/sub-topic	Skill Test Description	B1.1	B1.2	B1.3	B1.4	B2
5.11 Electronic Displays	Identify types of aircraft electronic displays (CRT, LCD, LED); evaluate display faults through test scenarios.	II	II	II	II	III
5.12 Electrostatic Sensitive Devices (ESD)	Apply ESD precautions; demonstrate safe handling and testing of ESD devices in accordance with ESD safety standards.	II	II	II	II	III
5.13 Software Management Control	Understand and document software version control procedures; validate software certification status.	I	I	I	I	II
5.14 Electromagnetic Environment	Explain shielding, bonding and filtering methods for EMI/RFI protection; test with basic EMI meters.	II	II	II	II	III
5.15 Typical Electronic/Digital Aircraft Systems	Perform operational checks, fault diagnosis and interpretation of digital system fault codes on systems like EICAS, EFIS, FADEC.	II	II	II	II	III

MODULE 6: MATERIALS & HARDWARE

6 — MATERIALS & HARDWARE: SKILL TEST STANDARDS TABLE

Topic / Sub-topic	Skill Test Description	B1.1	B1.2	B1.3	B1.4	B2
6.1 Ferrous Materials	Identify ferrous aircraft metals, perform hardness and magnetism tests, and evaluate material usage based on strength and corrosion resistance	II	II	II	II	II
6.2 Non-Ferrous Materials	Inspect and identify aluminium, titanium, copper alloys; assess suitability for airframe and engine use	II	II	II	II	II
6.3 Composite/Non-metallic Materials	Perform damage inspection and assessment of CFRP/GFRP components; interpret repair procedures	III	III	III	III	III
6.3.1 Non-metallic (excl. wood/fabric)	Apply damage evaluation and repair patching on honeycomb panels, thermoplastics, and core structures	III	III	III	III	III
6.3.2 Wooden Structures	Identify wood grain, knots, and glue line faults; perform joinery techniques		II		II	
6.3.3 Fabric Covering	Evaluate dope shrinkage, inspect tension, and apply repair patch on aircraft fabric		II		II	

Topic / Sub-topic	Skill Test Description	B1.1	B1.2	B1.3	B1.4	B2
6.4 Corrosion	Identify corrosion types; perform corrosion removal and treatment procedures	III	III	III	III	III
6.5.1 Screw Threads	Measure thread types and pitch; perform thread gauging and inspection	II	II	II	II	II
6.5.2 Bolts, Studs, Screws	Select appropriate hardware; perform torque procedures and verify grip length	II	II	II	II	II
6.5.3 Locking Devices	Demonstrate installation and inspection of safety wire, cotter pins, tab washers	II	II	II	II	II
6.5.4 Aircraft Rivets	Identify rivet types; demonstrate setting and inspection of solid and blind rivets	II	II	II	II	II
6.6 Pipes and Unions	Fabricate and install rigid and flexible lines; demonstrate flaring, bending, pressure testing	III	III	III	III	III
6.7 Springs	Inspect and measure spring free length, tension/compression properties; replace with correct equivalent	I	I	I	I	I
6.8 Bearings	Demonstrate inspection and installation of plain, ball, and roller bearings	II	II	II	II	II
6.9 Transmissions	Identify wear, backlash and correct installation of gears, chains, and pulleys	II	II	II	II	II
6.10 Control Cables	Inspect tension, fraying, and routing; perform swaging and tensioning of cables	III	III	III	III	III
6.11 Electrical Cables and Connectors	Demonstrate cable stripping, crimping, soldering, and connector pin replacement	III	III	III	III	III

MODULE 7: MAINTENANCE PRACTICES

Sub-Module	Skill Test Description	B1.1	B1.2	B1.3	B1.4	B2
7.1 Safety Precautions	Demonstrate correct use of PPE, safe tool usage, hazard recognition	II	II	II	II	II
7.2 Workshop Practices	Use of workshop equipment (drills, presses, hand tools), measuring equipment	II	II	II	II	II
7.3 Tools	Identify, select and use aircraft maintenance tools correctly	II	II	II	II	II
7.4 Avionic Test Equipment	Setup and use of multimeters, oscilloscopes, signal generators	II	II	II	II	III

Sub-Module	Skill Test Description	B1.1	B1.2	B1.3	B1.4	B2
7.5 Drawings/Standards	Interpret engineering drawings, wiring diagrams, and ISO standards	II	II	II	II	II
7.6 Fits and Clearances	Measure and adjust fits (e.g., bushings, bearings, shafts)	II	II	II	II	-
7.7 EWIS	Perform EWIS inspections, routing, bonding, termination	III	III	III	III	III
7.8 Riveting	Perform drilling and installation of solid and blind rivets	II	II	II	II	-
7.9 Pipes and Hoses	Fabricate, install, pressure test fluid lines (metallic/flexible)	II	II	II	II	-
7.10 Springs	Identify spring types, inspect for defects, install tension/compression springs	I	I	I	I	-
7.11 Bearings	Remove, inspect, lubricate, and install bearings	II	II	II	II	-
7.12 Transmissions	Inspect gears, shafts, torque settings in gearboxes or rotors	II	II	II	II	-
7.13 Control Cables	Tension, inspect and install aircraft control cables	III	III	III	III	-
7.14.2 Composite & Non-Metallic	Perform repairs on composites (e.g., patch, vacuum bagging)	III	III	III	III	-
7.15 Welding/Brazing/Soldering	Demonstrate aircraft-standard soldering (B2), welding/brazing (B1)	II	II	II	II	II
7.16 Weight & Balance	Calculate and apply aircraft weight and balance data	II	II	II	II	II
7.17 Aircraft Handling & Storage	Secure aircraft, towing, jacking, and mooring procedures	II	II	II	II	-
7.18 Disassembly, Inspection, Repair, Assembly	Follow AMM for disassembly/assembly; inspect components	III	III	III	III	III
7.19 Abnormal Events	Apply procedures after abnormal events (e.g., lightning strike, bird strike)	III	III	III	III	III
7.20 Maintenance Procedures	Complete documentation, follow scheduled maintenance checks	III	III	III	III	III

MODULE 8: BASIC AERODYNAMICS

Topic/subtopic	Skill Test Description	B1.1	B1.2	B1.3	B1.4	B2
8.1 Physics of the Atmosphere	Demonstrate understanding of pressure, temperature, density and altitude changes.	II	II	II	II	II
	Interpret atmosphere layers and their effect on aircraft performance.	II	II	II	II	II
	Explain standard and non-standard atmosphere and implications on instruments.	II	II	II	II	II
8.2 Aerodynamics	Identify and explain the airflow around aerofoils, including laminar and turbulent flow.	II	II	II	II	II
	Demonstrate understanding of lift, drag (parasite and induced), thrust and weight forces.	II	II	II	II	II
	Analyze angle of attack, stall, boundary layer and flow separation.	II	II	II	II	II
	Differentiate between subsonic and supersonic airflow behavior.	II	II	II	II	II
8.3 Theory of Flight	Describe and identify aircraft control axes (pitch, yaw, roll).	I	I	I	I	I
	Describe and explain the use of primary and secondary flight controls.	I	I	I	I	I
	Demonstrate knowledge of control surfaces and their aerodynamic effects.	II	II	II	II	II
	Interpret flight control trimming and balance systems.	I	I	I	I	I
8.4 Flight Stability and Dynamics	Describe longitudinal, lateral, and directional stability principles.	II	II	II	II	II
	Demonstrate knowledge of static and dynamic stability with reference to center of gravity.	II	II	II	II	II
	Evaluate stability effects caused by aircraft configuration changes (e.g., fuel load, payload).	III	III	III	III	III
	Understand damping, phugoid oscillation, and Dutch roll.	III	III	III	III	III

MODULE 9: HUMAN FACTORS:

Topic/sub topic	Description	B1.1	B1.2	B1.3	B1.4	B2
9.1 General	Need for knowledge of human factors	**I**	**I**	**I**	**I**	**I**
9.2 Human Performance and Limitations	Vision, hearing, information processing etc.	**II**	**II**	**II**	**II**	**II**

Topic/sub topic	Description	B1.1	B1.2	B1.3	B1.4	B2
9.3 Social Psychology	Group behavior, leadership, teamwork	**II**	**II**	**II**	**II**	**II**
9.4 Factors Affecting Performance	Stress, fatigue, time pressure, alcohol etc.	**III**	**III**	**III**	**III**	**III**
9.5 Physical Environment	Noise, lighting, climate, workspace design	**II**	**II**	**II**	**II**	**II**
9.6 Tasks	Complexity, automation, workload, vigilance	**III**	**III**	**III**	**III**	**III**
9.7 Communication	Verbal, non-verbal, written communication	**III**	**III**	**III**	**III**	**III**
9.8 Human Error	Types, consequences, mitigation strategies	**III**	**III**	**III**	**III**	**III**
9.9 Hazards in the Workplace	Slips, trips, exposure, hazard reporting etc.	**II**	**II**	**II**	**II**	**II**

MODULE 11: AEROPLANE AERODYNAMICS, STRUCTURES & SYSTEMS

Module 11 Topic	Skill Test Description	Test level	
		B1.1	B1.2
11.1 Theory of Flight	Explain and demonstrate understanding of subsonic and supersonic flight theory including control surface effects.	II	II
11.1.2 High Speed Flight	Describe effects of compressibility and Mach number. Demonstrate ability to identify components like vortex generators or shock wave management.	II	
11.2 Airframe Structures — General Concepts	Identify materials, stresses and loads. Demonstrate inspection techniques and material compatibility in repair scenarios.	III	III
11.3 Airframe Structures — Aeroplanes	Perform structure inspections; identify damage and repair needs per ATA 50 series.	III	III
11.3.1 Fuselage (ATA 52/53/56)	Perform fuselage visual inspection, damage mapping, and perform non-structural component removal/installation.	III	III
11.3.2 Wings (ATA 57)	Carry out visual inspection, access panels removal, and minor wing surface repairs (skin and fairings).	III	III
11.3.3 Stabilisers (ATA 55)	Check structural integrity of stabilisers and inspect hinge/actuator areas.	III	III
11.3.4	Inspect, remove and install control surfaces and perform free movement and rigging checks.	III	III

Module 11 Topic	Skill Test Description	Test level	
		B1.1	B1.2
Flight Control Surfaces (ATA 55/57)			
11.3.5 Nacelles/Pylons (ATA 54)	Inspect for heat/fire damage, alignment, and attachment of nacelle fairings and pylons.	III	III
11.4 Air Conditioning and Cabin Pressurisation (ATA 21)	Demonstrate fault finding on cabin pressurisation and air conditioning components; safety precautions and test procedures.	III	III
11.4.1 Air Supply	Demonstrate bleed air system testing and safety checks.	III	III
11.4.2 Air Conditioning	Troubleshoot environmental control systems (e.g. pack cooling issues).	III	III
11.4.3 Pressurisation	Operate and test automatic and manual pressurisation systems on simulator or aircraft.	III	III
11.4.4 and Warning Devices	Test and inspect cabin altitude warnings and overpressure devices.	III	III
11.5 Instruments/Avionic Systems	Perform installation checks, wiring continuity, and calibration using test equipment.	III	III
11.5.1 Instrument Systems (ATA 31)	Test and troubleshoot pitot-static, altimeter, and standby systems.	III	III
11.5.2 Avionic Systems	Identify and troubleshoot typical avionic interfaces like ADC, AHRS, and interface buses (limited for B1 scope).	II	II
11.6 Electrical Power (ATA 24)	Demonstrate fault diagnosis, voltage/current measurement, relay and bus tie checks.	III	III
11.7 Equipment and Furnishings (ATA 25)	Carry out installation, security and condition inspections of seats, panels, doors, and interiors.	II	II
11.8 Fire Protection (ATA 26)	Check fire detection loops, test bottle pressure and squib continuity; simulate fire loops.	III	III
11.9 Flight Controls (ATA 27)	Perform rigging, travel checks, symmetry, and backlash checks on primary/secondary flight control systems.	III	III
11.10	Check for fuel leaks, quantity indications, pump performance and contamination tests.	III	III

Module 11 Topic	Skill Test Description	Test level	
		B1.1	B1.2
Fuel Systems (ATA 28)			
11.11 Hydraulic Power (ATA 29)	Perform operational tests, check fluid levels and system pressures. Replace filters and identify leaks.	III	III
11.12 Ice and Rain Protection (ATA 30)	Inspect and test pitot/static heat, de-ice boots, windshield heat and wiper systems.	III	III
11.13 Landing Gear (ATA 32)	Demonstrate retraction tests, rig shock struts, check torque links, and service hydraulic systems.	III	III
11.14 Lights (ATA 33)	Troubleshoot interior and exterior lighting systems. Replace faulty lamps, ballasts, or circuit breakers.	II	II
11.15 Oxygen (ATA 35)	Perform oxygen refill operations, inspect oxygen lines and fittings for leaks, and check crew/passenger masks.	III	III
11.16 Pneumatic/Vacuum (ATA 36)	Test and troubleshoot vacuum pumps and pneumatic valves; leak and performance checks.	III	III
11.17 Water/Waste (ATA 38)	Flush and disinfect potable water systems, test waste tank drain valves and sensors.	III	III
11.18 On Board Maintenance Systems (ATA 45)	Use maintenance panels/screens to retrieve fault codes and system information.	II	
11.19 Integrated Modular Avionics (ATA 42)	Understand architecture and fault isolation capabilities. Identify main components and communication protocols.	II	
11.20 Cabin Systems (ATA 44)	Test passenger announcement, lighting, and IFE systems. Perform BITE tests on seats or crew call systems.	II	
11.21 Information Systems (ATA 46)	Demonstrate awareness of aircraft information networks and fault tracing using built-in test features or manual referencing.	II	

MODULE 12: HELICOPTER AERODYNAMICS, STRUCTURES & SYSTEMS

Topic/subtopic	Skill Test Description	Test level	
		B1.3	B1.4
12.1 Theory of Flight Rotary Wing Aerodynamics	Demonstrate knowledge of rotorcraft flight theory by interpreting flight manuals and identifying lift, torque, and autorotation phenomena.	II	II
12.2 Flight Control Systems	Perform rigging checks, inspect linkages, and adjust swashplate controls. Demonstrate control travel measurements.	III	III
12.3 Blade Tracking and Vibration Analysis	Conduct blade tracking using visual and electronic methods; perform vibration analysis and record findings.	III	III
12.4 Transmission	Inspect and service main and tail rotor transmissions; perform backlash and wear checks.	III	III
12.5 Airframe Structures	Inspect airframe for fatigue, corrosion, damage; perform minor structural repairs under supervision.	III	III
12.6.1 Air Supply	Identify components and test air distribution systems, verify valve operation and filter condition.	II	II
12.6.2 Air Conditioning	Troubleshoot and test vapor-cycle or air-cycle air conditioning systems for operation and leaks.	II	II
12.7.1 Instrument Systems (ATA 31)	Perform functional checks on flight instruments including altimeters, airspeed indicators, and tachometers.	III	III
12.7.2 Avionic Systems	Inspect and verify navigation and communication system installations (VHF, GPS, transponders).	II	II
12.8 Electrical Power (ATA 24)	Perform battery servicing, generator/alternator checks, and troubleshooting of electrical power circuits.	III	III
12.9 Equipment and Furnishings (ATA 25)	Inspect seats, harnesses, emergency equipment, and cabin components for serviceability and installation.	II	II
12.10 Fire Protection (ATA 26)	Conduct fire bottle inspection and squib resistance tests, verify system pressurization and indications.	II	II
12.11 Fuel Systems (ATA 28)	Perform checks on fuel tanks, pumps, and valves; test fuel quantity indicators and verify system integrity.	III	III
12.12 Hydraulic Power (ATA 29)	Service hydraulic systems including reservoirs and filters; perform leak checks and pressure tests.	III	III

Topic/subtopic	Skill Test Description	Test level	
		B1.3	B1.4
12.13 Ice and Rain Protection (ATA 30)	Inspect windshield wipers, pitot heating, and rotor blade anti-ice systems. Verify operation and effectiveness.	II	II
12.14 Landing Gear (ATA 32)	Perform functional tests of retractable or skid-type gear, including damper checks and torque-link inspection.	III	III
12.15 Lights (ATA 33)	Inspect, test and replace external and internal lights, strobe and nav lights, and annunciators.	II	II
12.16 Pneumatic/Vacuum (ATA 36)	Test pneumatic actuators and vacuum instruments; inspect filters, check valves, and pump output.	II	II
12.17 Integrated Modular Avionics (ATA 42)	Demonstrate basic familiarity with IMA modules, conduct BITE checks and system reset procedures.	I	I
12.18 On Board Maintenance Systems (ATA 45)	Retrieve and interpret fault codes, download data from onboard diagnostics.	II	II
12.19 Information Systems (ATA 46)	Use onboard systems to access maintenance documentation, wiring diagrams and service bulletins.	II	II

MODULE 13: AIRCRAFT AERODYNAMICS, STRUCTURES & SYSTEMS (B2)

Topic/sub-topic	Skill Description/Expected Proficiency	Test level B2
13.1 Theory of Flight	Explain aerodynamic principles affecting avionics and instruments. Analyze flight behavior inputs related to control systems.	**II**
13.2 Structures — General Concepts	Recognize basic structural concepts, load paths and structural terminology.	**I**
13.3 Autoflight (ATA 22)	Operate, troubleshoot, and calibrate autoflight systems including auto-throttle, autopilot, and flight director systems.	**III**
13.4 Communication/ Navigation (ATA 23/34)	Set up, test, and diagnose faults in VHF, HF, VOR, DME, GPS, and SATCOM systems. Ensure compliance with certification and redundancy standards.	**III**
13.5 Electrical Power (ATA 24)	Analyze electrical generation and distribution. Diagnose failures, perform continuity checks, and understand redundancy requirements.	**III**

Topic/sub-topic	Skill Description/Expected Proficiency	Test level B2
13.6 Equipment and Furnishings (ATA 25)	Inspect and test electrically controlled furnishings. Identify impact on avionics performance (e.g., power supply interference).	**II**
13.7 Flight Controls (ATA 27)	Understand electro-mechanical interface of primary/secondary flight controls. Identify integration with FBW and avionics.	**II**
13.8 Instruments (ATA 31)	Troubleshoot and calibrate electronic and analog indicators, pitot-static systems, and flight data recorders.	**III**
13.9 Lights (ATA 33)	Perform operational checks and fault isolation on cockpit and external lighting. Interpret control system feedback.	**II**
13.10 On-Board Maintenance Systems (ATA 45)	Operate BITE systems, interpret fault codes, retrieve logs, and update software. Analyze trends for preventative maintenance.	**III**
13.11 Air Conditioning and Cabin Pressurisation (ATA 21)	Monitor and troubleshoot avionics cooling requirements. Assess impacts of ECS on electronic systems.	**II**
13.11.1 Air Supply	Evaluate air supply routing related to avionics bay environmental conditions.	**II**
13.11.2 Air Conditioning	Identify temperature control impacts on system reliability. Perform checks on avionics zone conditioning.	**II**
13.11.3 Pressurisation	Interpret pressurization system feedback on avionics components and cooling requirements.	**II**
13.11.4 Safety and Warning Devices	Test system alerts and annunciations; verify configuration logic.	**II**
13.12 Fire Protection (ATA 26)	Test smoke/fire detection systems in avionics compartments; interpret logic thresholds.	**II**
13.13 Fuel Systems (ATA 28)	Identify sensor and monitoring equipment related to fuel management and its interface with avionics.	**I**
13.14 Hydraulic Power (ATA 29)	Understand hydraulic monitoring interfaces (EICAS/ECAM inputs) related to avionics readouts.	**I**
13.15 Ice and Rain Protection (ATA 30)	Verify and test probe heating, windshield heating, and their associated indicators.	**II**

Topic/sub-topic	Skill Description/Expected Proficiency	Test level B2
13.16 Landing Gear (ATA 32)	Interpret gear position and warning sensor integration. Evaluate WOW sensors and their impact on avionics systems.	**II**
13.17 Oxygen (ATA 35)	Understand sensor readouts and monitoring system functions (cabin and crew oxygen systems).	**I**
13.18 Pneumatic/Vacuum (ATA 36)	Recognize the influence of pneumatic systems on instrument systems (e.g., standby attitude indicators).	**I**
13.19 Water/Waste (ATA 38)	Basic understanding of monitoring and alerting systems.	**I**
13.20 Integrated Modular Avionics (ATA 42)	Configure, troubleshoot, and manage data flow within IMA. Evaluate LRU/LRM functions.	**III**
13.21 Cabin Systems (ATA 44)	Operate and test entertainment, cabin display, PA and announcement systems. Assess EMI shielding.	**II**
13.22 Information Systems (ATA 46)	Validate performance and operation of central maintenance computers, EFB, and ground support interfaces.	**III**

MODULE 14: PROPULSION

Topic /subtopic	Skill Test Description	Test level B2
14.1 Turbine Engines	Understand the basic layout and operation of gas turbine engines. Identify engine types and typical B2-relevant monitoring systems.	**I**
	Perform wiring inspection, identify EICAS/ECAM signals related to propulsion systems.	**II**
	Troubleshoot BITE (Built-In Test Equipment) for FADEC or EEC (Electronic Engine Control) systems.	**III**
14.2 Engine Indicating Systems	Identify parameters monitored (N1, N2, EGT, FF, Oil Pressure, etc.). Understand analogue and digital indicating systems.	**I**
	Install, test, and calibrate engine indicating sensors (e.g., TGT probes, pressure transducers).	**II**
	Perform diagnostics using avionic test equipment on engine indicating systems (e.g., faults in engine display units or signal processing).	**III**
14.3 Starting and Ignition Systems	Understand ignition systems in turbine engines, such as high-energy capacitive discharge systems.	**I**
	Perform continuity checks and insulation resistance tests on ignition wiring.	**II**

Topic /subtopic	Skill Test Description	Test level B2
	Analyze faults in electronic control of starter systems (e.g., electric starter controller faults, interlocks).	**III**

MODULE 15 – GAS TURBINE ENGINES

Topic/sub-topic	Skill test Description	Test Level	
		B1.1	**B1.3**
15.1 Fundamentals	Identify and explain major engine regulations on a mock-up or diagram	**II**	**II**
15.2 Engine Performance	Analyze engine performance charts (e.g., EPR vs. N1) and identify performance trends or discrepancies.	**II**	**II**
15.3 Inlet	Perform visual inspection of engine intake for FOD, damage, and security	**II**	**II**
15.4 Compressors	Conduct a borescope inspection of the compressor regulation, interpret findings.	**III**	**III**
15.5 Combustion Regulation	Inspect combustion chamber for cracks, erosion, or wear; identify types of combustors.	**III**	**III**
15.6 Turbine Regulation	Identify turbine blade damage, perform turbine clearance checks using feeler gauges or borescope.	**I**	**I**
15.7 Exhaust	Examine the exhaust duct for cracks, deformation, or soot accumulation	**II**	**II**
15.8 Bearings and Seals	Identify bearing types used in gas turbines, inspect bearing compartment seals.	**I**	**I**
15.9 Lubricants and Fuel	Select correct turbine oil and fuel types from a maintenance manual for specific engine models.	**II**	**II**
15.10 Lubrication Systems	Perform oil system pressure test or verify oil filter bypass indicator function	**III**	**III**
15.11 Fuel Systems	Troubleshoot a fuel flow malfunction; replace a fuel nozzle or fuel pump.	**III**	**III**
15.12 Air Systems	Inspect and test bleed air system components (valves, ducts) for leakage.	**III**	**III**
15.13 Starting and Ignition Systems	Perform operational check of an engine starting and ignition system.	**III**	**III**

Topic/sub-topic	Skill test Description	Test Level	
		B1.1	B1.3
15.14 Engine Indication Systems	Test and calibrate an EGT sensor or torque transducer.	**II**	**II**
15.15 Power Augmentation Systems	Demonstrate understanding of water/methanol injection or afterburner (where applicable).	**II**	**II**
15.16 Turbo-prop Engines	Perform operational check of a propeller control system integrated with a turboprop engine	**III**	**III**
15.17 Turbo-shaft Engines	Conduct a ground run-up and interpret N1/N2 split, vibration levels	**III**	**III**
15.18 Auxiliary Power Units (APUs:-)	Inspect and perform operational run of an APU; identify faults from indications	**III**	**III**
15.19 Powerplant Installation	Perform engine mounting torque check and verify alignment of engine supports	**III**	**III**
15.20 Protection Systems	Fire Inspect fire/overheat detection loops, perform squib continuity test.	**II**	**II**
15.21 Engine Monitoring and Ground Operation	Conduct a full engine ground run including checks of idle speed, acceleration, and deceleration.	**III**	**III**
15.22 Engine Storage and Preservation	Perform preservation procedures for short-term engine storage including oil misting or desiccant pack installation.	**II**	**II**

MODULE 16 – PISTON ENGINES

Topic/subtopic	Skill Test Description	Test Level	
		B1.2	B1.4
16.1 Fundamentals	Demonstrate ability to identify and describe the four-stroke cycle; perform timing checks using timing marks and understand basic engine terminology.	**II**	**II**

Topic/subtopic	Skill Test Description	Test Level	
		B1.2	B1.4
16.2 Engine Performance	Interpret performance charts; assess engine parameters (e.g., BHP, torque, thermal efficiency) from test data or during ground runs.	**II**	**II**
16.3 Engine Construction	Disassemble and inspect major engine components: crankshaft, cylinders, valves, camshaft. Measure wear limits using technical data. Reassemble to standard.	**III**	**III**
16.4 Engine Fuel Systems	Identify and inspect fuel system components; troubleshoot fuel pressure/flow faults.	**III**	**III**
16.4.1 Carburettors	Strip and inspect carburettor; check float level and mixture settings. Reassemble and leak-check.	**III**	**III**
16.4.2 Fuel injection systems	Inspect and test injectors for spray pattern and leakage. Set up basic injection system using manufacturer data.	**III**	**III**
16.4.3 Electronic engine control	Use diagnostic equipment to read fault codes; inspect electronic control unit (ECU) connectors and wiring.	**II**	**II**
16.5 Starting and Ignition Systems	Test magnetos for spark quality; set timing using timing lights or protractors; check spark plug condition and gap.	**III**	**III**
16.6 Induction, Exhaust and Cooling Systems	Check and service induction filters, exhaust mufflers, and baffles; inspect cooling fins and cowl flaps for proper operation.	**II**	**II**
16.7 Supercharging/Turbocharging	Inspect turbocharger installation; check wastegate operation and system pressures; assess condition of associated ducting.	**II**	**II**
16.8 Lubricants and Fuels	Identify correct fuels/lubricants; interpret Material Safety Data Sheets (MSDS); sample and analyze for contamination.	**I**	
16.9 Lubrication Systems	Inspect and clean oil filters/screens; measure oil pressure and temperature; troubleshoot low pressure faults.	**III**	**III**
16.10 Engine Indication Systems	Test function of engine instruments (Tachometer, CHT, EGT); assess calibration and installation.	**II**	**II**
16.11 Powerplant Installation	Inspect engine mountings, firewalls, cowlings, and alignment; verify compliance with torque settings and airworthiness data.	**III**	**III**
16.12 Engine Monitoring and	Conduct safe engine run-up; monitor oil pressure, temperature, RPM and magneto drop. Identify abnormal trends.	**III**	**III**

Topic/subtopic	Skill Test Description	Test Level	
		B1.2	B1.4
Ground Operation			
16.13 Engine Storage and Preservation	Apply engine preservation procedures (e.g., fogging oil, desiccant plugs); inspect preserved engines before reactivation.	**II**	**II**

MODULE 17: PROPELLERS

Sub-Module Topic	Skill Test Description	Test Level	
		B1.1	B1.2
17.1 Fundamentals	Demonstrate understanding of propeller types, terminology, and function. Identify propeller components on actual assemblies.	I	I
17.2 Propeller Construction	Inspect and identify different propeller construction types (wooden, metal, composite). Evaluate for visible defects and corrosion.	II	II
17.3 Propeller Pitch Control	Perform functional testing of pitch control systems (mechanical, hydraulic, electrical). Troubleshoot basic pitch faults.	III	III
17.4 Propeller Synchronising	Test synchronising and synchrophasing systems for operation and adjustment. Identify system faults and carry out rectification actions.	III	III
17.5 Propeller Ice Protection	Inspect and test ice protection systems (electrical, fluid-based). Verify correct function and perform troubleshooting.	II	II
17.6 Propeller Maintenance	Remove and install propeller assemblies following AMM. Conduct inspections (pre-flight, scheduled, overhaul). Torque fasteners and verify blade angles.	III	III
17.7 Propeller Storage and Preservation	Perform preservation procedures using correct materials and techniques. Label, tag, and document according to regulatory requirements.	II	II

FOURTH SCHEDULE-PART C

Regulation 7

SOUTH SUDAN- AIRCRAFT MAINTENANCE ENGINEERS CONVERSION CATEGORIES A, C, A & C, X and R TO B1/B2 LICENSING CATEGORY

Below is the guidance for conversion of aircraft maintenance engineers licences issued under the *Categories A, C, A & C, X and R* methodology to the B1/B2 methodology:

AMEL issue

AMEL Categories A, C, A & C, X and R	***B1/B2 licence category equivalent***
CAT "A" Aeroplanes and Cat "C" Gas Turbines	B1.1
Cat "A" Aeroplanes and CAT "C" Piston Engines	B1.2
CAT 'A' & 'C' – Turbine Engine Rotorcraft	B1.3
CAT 'A'&'C' - Piston Engines Rotorcraft	B1.4
CAT 'X' – Electrical CAT 'X' - Instruments CAT 'X'–Automatic Pilots Aeroplanes or Rotorcraft CAT 'X' - Compass Compensation & Adjustment. CAT 'R'– Radio	B2

AMEL licence Issuance with Limitations

A,C, A & C, X or R Category	***B1/B2 Category***	***Limitation on B1/B2 licence to match the privilege (s)***	***Limitation code to be endorsed (L#)***
CAT "X" Electrical	B2	Electrical	L1
CAT "X" Instruments	B2	Instruments	L2
CAT "X" Autopilot	B2	Autopilot	L3
CAT "X" Radio	B2	Radio	L4
CAT" Compass Compensation & Adjustment.	B1/B2	Compass Compensation & Adjustment.	L5
CAT "A" Aeroplanes	B1.1	Aeroplane	L6
	B1.2		
CAT "C" Gas Turbine	B1.1	Gas Turbines	L7
CAT "C" Piston Engines	B1.2	Piston Engines	L8

CONVERSION TABLE

MODULES UNDER CATEGORIES, A, C, A & C, AND X			**MODULES UNDER CATEGORY B1/B2**			**Remarks**
Licence category	**No.**	**Module name**	**Licence category**	**No.**	**Module name**	
"A" Aeroplanes	1	Regulations	**A1/B1.1**	10	Aviation Legislation	*For a holder of Category "A" license to convert to A1/B1.1 license, modules 15& 17 examinations are required. Module 17- Propeller Module 15-Gas Turbine Engines*
	2	Basic Engineering Practices		1	Mathematics	
				2	Physics	
				3	Electrical Fundamentals	
				4	Electronic Fundamentals	
				5	Digital Technics/ Electronic Instrument Systems	
				6	Materials & Hardware	
				7	Maintenance Practices	
	3	Airframe General		8	Basic Aerodynamics	
	4	Aeroplanes		11	Turbine Aeroplane Aerodynamics, Structures and Systems	
	13	Human Factors		9	Human Factors	
				17	Propellers	
				15	Gas Turbine Engines	
"C" Gas Turbine Engines	1	Regulations	**A1/B1.1**	10	Aviation Legislation	*For a holder of Category "C" license to convert to A1/B1.1 license, module 11 examinations are required. 11A- Turbine Aeroplane Aerodynamics, Structures and Systems*
	2	Basic Engineering Practices		1	Mathematics	
				2	Physics	
				3	Electrical Fundamentals	
				4	Electronic Fundamentals	
				5	Digital Technics/ Electronic Instrument Systems	
				6	Materials & Hardware	
				7	Maintenance Practices	
	7	Propellers		17	Propeller	
	9	Human Factors		9	Human Factors	
	8	Turbine Engines		15	Gas Turbine Engines	
				11	Turbine Aeroplane Aerodynamics, Structures and Systems	
"A" Aeroplanes	1	Regulations	**A2/B1.2**	10	Aviation Legislation	*For a holder of Category "A"*
	2			1	Mathematics	

		Basic Engineering Practices		2	Physics	*license to convert to A2/B1.2 license, modules 16 &1 7 examinations are required.* *16 -Piston Engine* *17 -Propeller*
				3	Electrical Fundamentals	
				4	Electronic Fundamentals	
				5	Digital Technics/ Electronic Instrument Systems	
				6	Materials & Hardware	
				7	Maintenance Practices	
	3	Airframe General		8	Basic Aerodynamics	
	4	Aeroplanes		11	Piston Aeroplane Aerodynamics, Structures and Systems	
	13	Human Factors		9	Human Factors	
				16	Piston Engine	
				17	Propeller	
"C" Piston Engines	1	Regulations	**A2/B1.2**	10	Aviation Legislation	*For a holder of Category "C" Piston Engines license to convert to A2/B1.2 license, modules 8 & 11 examinations are required.* *11-* Aeroplane Aerodynamics Structure and Systems *Module 8-* Basic Aerodynamics *Engines*
	2	Basic Engineering Practices		1	Mathematics	
				2	Physics	
				3	Electrical Fundamentals	
				4	Electronic Fundamentals	
				5	Digital Technics/ Electronic Instrument Systems	
				6	Materials & Hardware	
				7	Maintenance Practices	
	13	Human Factors		9	Human Factors	
	7	Propellers		17	Propeller	
	6	Piston Engines		16	Piston Engines	
				11	Aeroplane Aerodynamics Structure and Systems	
				8	Basic Aerodynamics	
'A' & 'C' Gas Turbine Engines Rotorcraft	1	Regulations	**A3/B1.3**	10	Aviation Legislation	*For a holder of Category "A" & "C Turbine Rotorcraft license to convert to A3/B1.3 license, NO examination is required since modules covered are compatible.*
	2	Basic Engineering Practices		1	Mathematics	
				2	Physics	
				3	Electrical Fundamentals	
				4	Electronic Fundamentals	
				5	Digital Technics/ Electronic Instrument Systems	
				6	Materials & Hardware	
				7	Maintenance Practices	
	3	Airframe General		8	Basic Aerodynamics	

	8	Gas Turbine		15	Gas Turbine Engines	
	9	Rotorcraft		12	Helicopter Aerodynamics, Structures and Systems	
	13	Human Factors		9	Human Factors	
"A" & "C" Piston Engines Rotorcraft	1	Regulations	**A4/B1.4**	10	Aviation Legislation	*For a holder of Category "A" & "C Turbine Rotorcraft license to convert to A4/B1.4 license, NO examination is required since modules covered are compatible.*
	2	Basic Engineering Practices		1	Mathematics	
				2	Physics	
				3	Electrical Fundamentals	
				4	Electronic Fundamentals	
				5	Digital Technics/ Electronic Instrument Systems	
				6	Materials & Hardware	
				7	Maintenance Practices	
	6	Piston Engines		16	Piston Engines	
	9	Rotorcraft		12	Helicopter Aerodynamics, Structures and Systems	
	13	Human Factors		9	Human Factors	
				8	Basic Aerodynamics	
"A" Aeroplanes	1	Regulations	**B2**	10	Aviation Legislation	*For a holder of Category "A" Aeroplanes license to convert to B2 license, examination is required in the following modules:. Module 13: Aircraft Aerodynamics, Structures and Systems Module 14: Propulsion — avionic systems*
	2	Basic Engineering Practices		1	Mathematics	
				2	Physics	
				3	Electrical Fundamentals	
				4	Electronic Fundamentals	
				5	Digital Technics/ Electronic Instrument Systems	
				6	Materials & Hardware	
				7	Maintenance Practices	
	3	Airframe General		8	Basic Aerodynamics	
	4	Aeroplanes		13	Aircraft Aerodynamics, Structures and Systems	
	13	Human Factors		9	Human Factors	
				14	Propulsion	
"A" & "C" Piston Engines Rotorcraft	1	Regulations	**B2**	10	Aviation Legislation	*For a holder of Category "C" Piston Rotorcraft license to convert*
	2	Basic Engineering Practices		1	Mathematics	
				2	Physics	
				3	Electrical Fundamentals	

				4	Electronic Fundamentals	*to B2 license, examinations are required in the following modues. Module 13: Aircraft Aerodynamics, Structures and Systems Module 14: Propulsion — avionic systems*
				5	Digital Technics/ Electronic Instrument Systems	
				6	Materials & Hardware	
				7	Maintenance Practices	
	13	Human Factors		9	Human Factors	
	9	Rotorcraft		13	Aircraft Aerodynamics, Structures and Systems	
	6	Piston Engines				
				8	Basic Aerodynamics	
				14	Propulsion	
"A" & "C" Gas Turbine Engines Rotorcraft	1	Regulations	**B2**	10	Aviation Legislation	*For a holder of Category "A" & "C" GTE Rotorcraft license to convert to B2 license, examination is required in the following modules:. Module 13: Aircraft Aerodynamics, Structures and Systems Module 14: Propulsion — avionic systems*
	2	Basic Engineering Practices		1	Mathematics	
				2	Physics	
				3	Electrical Fundamentals	
				4	Electronic Fundamentals	
				5	Digital Technics/ Electronic Instrument Systems	
				6	Materials & Hardware	
				7	Maintenance Practices	
	3	Airframe General		8	Basic Aerodynamics	
	8	Turbine Engines		14	Propulsion	
	9	Rotorcraft		13	Aircraft Aerodynamics, Structures and systems	
	13	Human Factors		9	Human Factors	
"C" Gas Turbine Engines	1	Regulations	**B2**	10	Aviation Legislation	*For a holder of Category "C" Gas Turbine Engines license to convert to B2 license, examination is required in the following modules: Module 13: Aircraft Aerodynamics, Structures and Systems*
	2	Basic Engineering Practices		1	Mathematics	
				2	Physics	
				3	Electrical Fundamentals	
				4	Electronic Fundamentals	
				5	Digital Technics/ Electronic Instrument Systems	
				6	Materials & Hardware	
				7	Maintenance Practices	
	8	Turbine Engines		14	Propulsion	
	13	Human Factors		9	Human Factors	
	7	Propellers				

				13	Aircraft Aerodynamics, Structures and Systems	*Module 14: Propulsion — avionic systems*
				8	Basic Aerodynamics	
"X" Electrical	1	Regulations	**B2**	10	Aviation Legislation	*For a holder of Category "X" Electrical license to convert to B2 license, examination is required in the following modules: Module 13: Aircraft Aerodynamics, Structures and Systems (Excluding 13.5- Electrical power (ATA24)) Module 14: Propulsion — avionic systems*
	2	Basic Engineering Practices		1	Mathematics	
				2	Physics	
				3	Electrical Fundamentals	
				4	Electronic Fundamentals	
				6	Materials & Hardware	
				7	Maintenance Practices	
	13	Human Factors		9	Human Factors	
	21	Basic: Electrical Equipment and Systems		5	Digital Technics/ Electronic Instrument Systems	
				8	Basic Aerodynamics	
				13	Aircraft Aerodynamics, Structures and Systems	
				14	Propulsion	
'X' INSTRUMENTS	1	Regulations	**B2**	10	Aviation Legislation	*For a holder of Category "X" Instrument's license to convert to B2 license, examination is required in the following modules: Module 13: Aircraft Aerodynamics, Structures and Systems (Excluding 13.8 Instrument systems (ATA31)) Module 14: Propulsion — avionic systems*
	2	Basic Engineering Practices		1	Mathematics	
				2	Physics	
				3	Electrical Fundamentals	
				4	Electronic Fundamentals	
				6	Materials & Hardware	
				7	Maintenance Practices	
	21	Basic: Electrical Equipment and Systems		5	Digital Technics/ Electronic Instrument Systems	
	13	Human Factors		9	Human Factors	
	23	Basic Gyroscopes and Servomechanisms				
	22	Basic Instruments				
				8	Basic Aerodynamics	
				13	Aircraft Aerodynamics, Structures and Systems	

				14	Propulsion	
"X" AUTOMATIC PILOT AEROPLANES	1	Regulations	**B2**	10	Aviation Legislation	*For a holder of Category "X" Automatic Aeroplanes license to convert to B2 license, examination is required in the following modules: Module 13: Aircraft Aerodynamics, Structures and Systems (Excluding 13.3 Auto flight (ATA22)) Module 14: Propulsion — avionic systems*
	2	Basic Engineering Practices		1	Mathematics	
				2	Physics	
				3	Electrical Fundamentals	
				4	Electronic Fundamentals	
				5	Digital Technics/ Electronic Instrument Systems	
				6	Materials & Hardware	
				7	Maintenance Practices	
	13	Human Factors		9	Human Factors	
	25	Automatic Pilots – Common				
	23	Basic Gyroscopes and Servomechanisms				
	24	Automatic Pilots - Aeroplanes				
				14	Propulsion	
				8	Basic Aerodynamics	
				13	Aircraft Aerodynamics, Structures And Systems	
"X" Autopilot Rotorcraft	1	Regulations	**B2**	10	Aviation Legislation	*For a holder of Category "X" Automatic Pilot Rotorcraft license to convert to B2 license, examination is required in the following modules: Module 13: Aircraft Aerodynamics, Structures and Systems*
	2	Basic Engineering Practices		1	Mathematics	
				2	Physics	
				3	Electrical Fundamentals	
				4	Electronic Fundamentals	
				5	Digital Technics/ Electronic Instrument Systems	
				6	Materials & Hardware	
				7	Maintenance Practices	
	13	Human Factors		9	Human Factors	

						(Excluding 13.3 Auto flight (ATA22)) Module 14: Propulsion — avionic systems
	25	Automatic Pilots – Common				
	23	Basic Gyroscopes and Servomechanisms				
	26	Automatic Pilots - Rotorcraft				
				14	Propulsion	
				13	Aircraft Aerodynamics, Structures and Systems	
				8	Basic Aerodynamics	
"X" Compass Compensation	30	Compass Compensation	**B2**	10	Aviation Legislation	*For a holder of Category "X" Compass Compensation license to convert to B2 license, the conversion will be based on other licensed held conditions. Refer to THE CIVIL AVIATION (PERSONEL LICENSING) REGULATION 2018 Regulation 125(2)*
				1	Mathematics	
				2	Physics	
				3	Electrical Fundamentals	
				4	Electronic Fundamentals	
				5	Digital Technics/ Electronic Instrument Systems	
				6	Materials & Hardware	
				7	Maintenance Practices	
				9	Human Factors	
				13	Aircraft Aerodynamics, Structures and Systems	
				14	Propulsion	
				8	Basic Aerodynamics	
"R" Radio Communication, Navigation & Pulse systems	1	Regulations	**B2**	10	Aviation Legislation	*For a holder of Category "R" Radio license to convert to B2 license, examination is required in the following modules: Module 13: Aircraft Aerodynamics, Structures and Systems*
	2	Basic Engineering Practices		1	Mathematics	
				2	Physics	
				3	Electrical Fundamentals	
				4	Electronic Fundamentals	

				5	Digital Technics/ Electronic Instrument Systems	*(Excluding 13.4 Communication and navigation (ATA23/34)) Module 14: Propulsion — avionic systems*
				6	Materials & Hardware	
				7	Maintenance Practices	
	13	Human Factors		9	Human Factors	
	31	Radio Communication and Navigation				
				13	Aircraft Aerodynamics, Structures and Systems	
				14	Propulsion	
				8	Basic Aerodynamics	

FIFTH SCHEDULE

PENALTIES
Regulation 265

REG. NO.	TITLE	PART
21	Validity of Licences	A
23	Decrease in medical fitness	A
59	Curtailment of privileges of pilots	A
50	General requirements for pilot licences, ratings and authorisations	A
61	Solo flight requirements	A
62	SPL Privileges and Limitations	B
67	PPL: Privileges and limitations.	A
80	CPL: Privileges and limitations.	A
94	ATPL: Privileges and limitations.	A
121	Type ratings	A
123	Night rating:- general eligibility requirements.	A
97	Instrument rating- general eligibility requirements.	A
106	Trainee Records	A
109	Flight instructor: limitations and qualifications.	A
148	Flight engineer: licences and ratings required.	A
170	ATC: Required licences and ratings or qualifications.	A
175	ATC: Privileges and limitations.	A
177	ATC: Maximum working hours.	A
178	Responsibilities over fatigue	A
179	Prohibition of unlicensed air traffic controllers.	A
186	ARS: Privileges and limitations.	A
187	ARS: Display of authorisation.	A
188	ARS: Surrender of authorisation.	A

189	CCMC: Required certificate, ratings and qualifications.	A
190	CCMC: Eligibility requirements.	A
198	Aviation medical examiner submission of signed medical evaluation report.	A
199	Issue of medical certificate.	A
201	Medical confidentiality.	A
206	Medical requirements.	A
217	Ear and related structures.	A
219	Cardiovascular: general.	A
220	Blood pressure and circulation.	A
222	Neurological requirements.	A
223	Respiratory capability.	A
225	Vestibular apparatus	A
226	Bones, muscles and tendons.	A
227	Endocrine system	A
228	Diabetic applicant.	A
229	Gastrointestinal and digestive tract.	A
230	Kidneys and urinary tract.	A
251	Use of psychoactive substances.	B
252	Drug and alcohol testing and reporting.	B
253	Inspection of licences, certificates and authorisations.	A
258	Use and retention of documents and records.	A
259	Report of violation	A

Issued under my hand in Juba on this 12th day of the month of Feb in Year 2026.

12/02/2026

Hon Rizik Zakaria Hassan
Minister of Transport
Republic of South Sudan - Juba