(4) Safety promotion—

(*a*) training and education—of the AOC, ATO or AMO shall develop and maintain a safety training programme that—

(i) ensures that all personnel are trained and competent to perform the SMS duties; and

(ii) is appropriate to each individual's involvement in the SMS;

(*b*) safety communication—the AOC, ATO or AMO shall develop and maintain formal means for safety communication that:

(i) ensures all personnel are fully aware of the SMS;

(ii) conveys safety-critical information;

(iii) cxplains why particular safety actions are taken; and

(iv) explains why safety procedures are introduced or changed.

Made this 26th day of June, 2013.

Minister of Transport and and Public Works

(FILE NO. 5/2/3)

GOVERNMENT NOTICE NO. 00

AVIATION ACT

(CAP. 70:01)

AVIATION (PERSONNEL LICENSING) REGULATIONS, 2013

ARRANGEMENT OF REGULATIONS

REGULATION

REGULATION

REGULATION

REGULATION

IN EXERCISE of the powers conferred by section 19 of the Aviation Act, I, MOHAMMED SIDIK MIA, Minister of Transport and Public Works, make the following Regulations—

Citation and application

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

These Regulations prescribe—

(*a*) the requirements for issuing, renewal and re-issue of aviation personnel licences, ratings, authorizations and certificates;

(*b*) the conditions under which those licences, ratings, authorizations and certificates are necessary; and

(*c*) the privileges and limitations granted to the holders of those licences, ratings, authorizations and certificates.

Interpretation

2. For the purpose of these Regulations, unless the context otherwise requires—

"accredited medical conclusion" means the conclusion reached by one or more medical experts acceptable to the Licensing Authority for the purposes of the case concerned, in consultation with flight operations or other experts as necessary;

"aeroplane" means a power-driven heavier-than-air aircraft, deriving its lift in flight chiefly aerodynamic reactions on surfaces which remain fixed under given conditions of flight;

"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 a term designating any electronic device, including its electrical part, for use in an aircraft, including radio, automatic flight control and instrument systems;

"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 certificated for multi-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 two pilots;

"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;

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

"airship" means a power-driven lighter than air aircraft;

"calendar month" means a period of a month beginning and ending with the dates that are conventionally accepted as marking the beginning and end of a numbered month (as January 1 to January 31 in the Gregorian calendar);

"calendar year" means a period of a year beginning and ending with the dates that are conventionally accepted as marking the beginning and end of a numbered year (as January 1 to December 31 in the Gregorian calendar);

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

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

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

"competency unit" means a discrete function consisting of a number of competency elements.

"complex aeroplane" means an aeroplane that has retractable landing gear, flaps, and a controllable pitch propeller; or in the case of a seaplane, flaps and a controllable pitch propeller;

"conversion" means conversion is the action taken by the Authority in issuing its own licence on the basis of a licence issued by another Contracting State for use on aircraft registered in Malawi;

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

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

"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 and responding to errors with countermeasures that reduce or eliminate the consequences of errors, and mitigate the probability of errors or undesired aircraft state;

"examiner" means any person designated by the Authority to act as a representative of the Authority in examining , inspecting, and testing persons and aircraft for the purpose of issuing licences, ratings and certificates;

"flight plan" means specified information provided to air traffic services units, relative to an intended flight or portion of a flight of an aircraft;

"flight simulation training device formerly referenced as synthetic flight trainer" means any one of the following three types of apparatus in which flight conditions are simulated on the ground—

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

(*b*) flight procedures trainer provides a realistic flight deck environment, and 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*) basic instrument flight trainer: equipped with appropriate instruments and simulates the flight deck environment of an aircraft in flight in instrument flight conditions;

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

"instrument flight time" means time during which a pilot is piloting an aircraft solely by reference to instruments and without external reference points;

"instrument ground time" means time during which a pilot is practising, on the ground, simulated instrument flight in a flight simulation training device approved by the Licensing Authority;

"instrument time" means instrument flight time or instrument ground time;

"licensing Authority" means the Authority designated by the Contracting State as responsible for the licensing of personnel. The Licencing Authority has the following responsibilities—

(*a*) assessment of an applicant's qualifications to hold a licence or rating;

(*b*) issue and endorsement of licences and ratings;

(*c*) designation and authorization of approved persons;

(*d*) approval of training courses;

(*e*) approval of the use of flight simulation training devices and authorization for their use in gaining the experience or in demonstrating the skill required for the issue of a licence or rating; and

(*f*) validation of licences issued by other Contracting States;

"medical assessment" means the evidence issued by a Contracting State that the licence holder meets specific requirements of medical fitness;

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

"medical examiner" means a physician with training in aviation medicine and practical knowledge and experience of the aviation environment, who is designated by the Licensing Authority to conduct medical examinations of fitness of applicants for licences or ratings for which medical requirements are prescribed; called Aviation Medical Examiners (AME) in these Regulations when non-CAA physicians are designated to perform medical examinations;

"medical certificate" means the equivalent of a medical assessment;

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

"pilot (to)" means to manipulate the flight controls of an aircraft during flight time;

"PIC under supervision" means co-pilot performing, under the supervision of the PIC, the duties and functions of a PIC, provided that the method of supervision employed is acceptable to the Licensing Authority;

"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 the lift during these regimes and on non-rotating aerofoil(s) for lift during horizontal flight;

"problematic use of substances" means the use of one or more psychoactive substances by aviation personnel in a way that—

(*a*) constitutes a direct hazard to the user or endangers the lives, health or welfare of others; and/or

(*b*) causes or worsens an occupational, social, mental or physical problem or disorder;

"psychoactive substances" 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 audit of those policies procedures; management review and recommendation for quality improvements;

"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 authorization entered on or associated with a licence and forming part thereof, stating special conditions, privileges or limitations pertaining to such licence;

"re-issue of a licence, rating, authorization or certificate" means the administrative action taken after a licence, rating, authorization or certificate has lapsed that re-issues the privileges of the licence, rating, authorization or certificate for a further specified period consequent upon the fulfilment of specified requirements;

"rendering (a licence) valid" means the action taken by a Contracting State, 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;

"renewal of licence, rating, authorization or certificate" means the administrative action taken within the period of validity of a licence, rating, authorization or certificate that allows the holder to continue to exercise the privileges of a licence, rating, authorization or certificate for a further specified period consequent upon the fulfilment of specified requirements;

"route sector" means a flight comprising take off, departure, cruise of not less than 15 minutes, arrival, approach and landing phases;

"safety management system" means a systematic approach to managing safety, including the necessary organizational structures, accountabilities, policies and procedures;

"significant" means in the context of the medical provisions in these Regulations, to a degree or of a nature that is likely to jeopardise flight safety;

"state safety programme" means an integrated set of regulation and activities aimed at improving safety;

"synthetic flight trainer" means flight simulation training device;

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

"threat management" means the process of detecting and responding to the threats with counter-measures that reduce or eliminate the consequences of threats, and mitigate the probability of errors or undesired aircraft;

"validation" means the action taken by the Authority as an alternative to issuing its own licence, in accepting a licence issued by another Contracting State as the equivalent of its own licence for use on aircraft registered in Malawi.

Acronyms

3. The following acronmys are used in these Regulations—

(1) A—Aeroplane.

(2) AIP—Aeronautical Information Publication.

(3) AME—Aviation Medical Examiner.

(4) AME—Aircraft Maintenance Engineer.

(5) ATCO—Air Traffic.

(6) AS—Airship.

(7) ATPL—Airline Transport Pilot Licence.

(8) B—Balloon.

(9) CAT II—Category II.

(10) CAT III—Category III.

(11) CPL—Commercial Pilot Licence.

(12) CRM—Crew Resource Management.

(13) DFEE—Designated Flight Engineer Examiner.

(14) DFNE—Designated Flight Navigator Examiner.

(15) DFOOE—Designated Flight Operations Officer Examiner.

(16) DME—Designated Mechanic Examiner.

(17) DPE—Designated Pilot Examiner.

(18) DPRE—Designated Parachute Rigger Examiner.

(19) FE—Flight Engineer.

(20) FI—Flight Instructor.

(21) FOO—Flight Operations Officer.

(22) G—Glider.

(23) IA—Inspection Authorization.

(24) IFR—Instrument Flight Rules.

(25) ILS—Instrument Landing System.

(26) H—Helicopter.

(27) ICAO—International Civil Aviation Organisation.

(28) MPA—Multi-pilot Aeroplane.

(29) MPH—Multi-pilot Helicopter.

(30) MPL—Multi-crew Pilot Licence.

(31) NOTAM—Notice to airmen.

(32) PIC—pilot-in-command.

(33) PL—Powered-lift.

(34) PPL—Private Pilot Licence.

(35) RT—Radiotelephony.

(36) SPA— Single-pilot Aeroplane.

(37) SPH—Single-pilot Helicopter.

(38) VFR—Visual Flight Rules.

Division II—Issue, Renewal and Re-Issue of Licences, Ratings, Authorizations, Designation and Certificates

Licences

4.—(1) The Authority may issue the following licences under these Regulations to an applicant who satisfactorily accomplishes the requirements in these Regulations for the licence sought—

(*a*) pilot licences—

(i) private pilot licence—aeroplane, helicopter, airship, powered-lift, balloon or glider categories;

(ii) commercial pilot licence-aeroplane, helicopter, airship, powered-lift, balloon or glider categories;

(iii) Airline Transport Pilot Licence (ATPL)—aeroplane, helicopter or powered-lift categories;

(*b*) flight engineer licence;

(*c*) flight navigator licence;

(*d*) flight operations officer licence;

(*e*) flight instructor licence;

(*f*) ground instructor licence.

(*g*) aircraft maintenance engineer licence;

(*h*) aviation repairman specialist licence;

(*i*) parachute rigger licence;

(*j*) air traffic controller licence;

(*k*) aeronautical station operator licence;

(*l*) flight radiotelephone operator;

(2) Regarding the Flight radiotelephone operator licence—

(*a*) where the knowledge and skill of an applicant have been established as satisfactory in respect of the certification requirements for the radiotelephone operator's restricted certificate specified in the general radio regulations annexed to the International

Telecommunication Convention and the applicant has met the requirements that are pertinent to the operation of the radiotelephone on board an aircraft, a Contracting State may endorse a licence already held by the applicant or issue a separate licence as appropriate;

(*b*) the testing and authorization of radiotelephone licence may rest with another Government Agency other than the Authority;

(*c*) skill and knowledge requirements on radiotelephony procedures and phraseology have been developed as an integral part of all pilot aeroplane and helicopter licences.

Ratings

5.—(1) The Authority may issue the following ratings to place on a pilot licence or flight instructor licence when an applicant satisfactorily accomplishes the requirements in these Regulations for the rating sought—

(*a*) category ratings in the following aircraft—

(i) aeroplane;

(ii) helicopter;

(iii) glider;

(iv) free Balloon;

(v) airship;

(vi) powered lift;

(*b*) class ratings in the following aircraft—

(i) single-engine land—aeroplane;

(ii) single-engine sea—aeroplane;

(iii) multi-engine land—aeroplane;

(iv) multi-engine sea—aeroplane;

(v) a class rating may be issued for those helicopters certificated for single-pilot operations and which have comparable handling, performance and other characteristics;

(vi) hot air—balloon;

(vii) gas—balloon; and

(viii) any rating considered necessary by the Authority.

(2) A class rating or endorsement for High Performance Aeroplanes (HPA) requires additional knowledge, if the applicant has not completed the ATPL (A) knowledge requirements—

(*a*) type ratings in the following aircraft—

(i) each type of aircraft certificated for operation with a minimum crew of at least two pilots;

(ii) each type of helicopter certificated for single-pilot except where a class rating has been established under subregulation (1) (b) (v);

(iii) any aircraft considered necessary by the Authority;

(*b*) instrument ratings in the following aircraft—

(i) instrument—aeroplane;

(ii) instrument—helicopter;

(iii) instrument—powered lift;

(*c*) flight instructor ratings—the appropriate aircraft category, class, instrument and/or type rating according to the instruction to be taught;

(*d*) the Authority may issue the following ratings to place on a ground instructor's licence when an applicant satisfactorily accomplished the requirements of these Regulations for the rating sought—

(i) basic;

(ii) advanced;

(iii) instrument;

(3) The Authority may issue the following ratings to place on a flight engineer's licence when an applicant satisfactorily accomplishes the requirements in these Regulation for the rating sought—

(*a*) reciprocating engine powered.

(*b*) turbopropeller powered.

(*c*) turbojet powered.

(4) The Authority may issue the following ratings to place on an air traffic controller licence when an applicant satisfactorily accomplishes the requirements in these Regulations for the rating sought—

(*a*) aerodrome control rating;

(*b*) approach control rating;

(*c*) approach radar control rating;

(*d*) approach precision radar control rating;

(*e*) area control rating; and

(*f*) area radar control rating.

(5) The Authority may issue the following ratings to place on an aircraft maintenance engineer licence when an applicant satisfactorily accomplishes the requirements in these Regulations for the rating sought—

(*a*) airframe;

(*b*) powerplant; and

(*c*) avionics.

(6) The Authority may issue ratings as appropriate to place on an aviation repairman specialist licence.

(7) The Authority may issue the following ratings to place on a parachute rigger's licence when an applicant satisfactorily accomplished the requirements of these Regulations for the rating sought—

(*a*) seat;

(*b*) back;

(*c*) chest; and

(*d*) lap.

Authorization

6.—(1) The Authority may issue the following authorizations when an applicant satisfactorily accomplishes the requirements in these Regulations for the authorization sought—

(*a*) special purpose pilot authorization; and

(*b*) instructor authorization for training in a flight simulation training device.

(2) The Authority may issue the following authorizations to place on a pilot licence when an applicant satisfactorily accomplishes the requirements in these Regulations for the authorization sought—

(*a*) category II pilot authorization; and

(*b*) category III pilot authorization.

(3) The Authority may issue the following authorization to place on an AME licence when an applicant satisfactorily accomplished the requirements in these Regulations for the authorization sought—inspection authorization.

Endorsements

7. A pilot may receive the following endorsements from an authorized instructor when he/she satisfactorily accomplished the required training in this Regulation—

(*a*) complex aeroplane endorsement;

(*b*) high performance aeroplane endorsement; and

(*c*) high altitude aircraft endorsement.

Certificates

8.—(1) The Authority may issue the following medical certificates when an applicant satisfactorily accomplishes the requirements in these Regulations for the medical certificate sought—

(*a*) medical certificate Class 1 for CPL and ATPL licences; flight instructor licences and DPEs;

(*b*) medical certificate Class 2 for student pilot authorization, PPL, Flight Engineer, and Flight Navigator licences; and

(*c*) medical certificate Class 3 for Air traffic controller licence.

(2) The Authority may issue the following certificates to pilots and flight engineers holding a licence from another ICAO Contracting State—validation certificates.

(3) The Authority may issue certificates of designation to representatives of the Director of Civil Aviation as identified in regulation 9.

Designation of representatives of the Director of Civil Aviation

9. The Authority may issue the following designations to private persons to act on behalf of the Director of Civil Aviation, as specified in these Regulations—

(1) DPE.

(2) DFEE.

(3) DFNE.

(4) DFOOE.

(5) DME.

(6) DPRE.

(7) AME; or

(8) other designees as may be determined by the Authority.

Temporary licence or rating

10.—(1) The Authority may issue a temporary licence or rating for up to 90 days, at which time Authority will issue a proper licence to a person whom the Authority finds qualified under these Regulations.

(2) A temporary licence expires—

(*a*) on the expiry date shown on the licence

(*b*) upon receipt of the permanent licence; or

(*c*) upon receipt of a notice that the licence or rating sought is denied or revoked.

Validity of licences, ratings, authorizations and cerficates

11.—(1) The Authority will issue, renew or re-issue a licence, rating, authorization, designation and/or certificate when the applicant complies with the requirements of these Regulations and the procedures in IS 2:4 contained in the Schedule hereto.

(2) Privileges—The holder of a licence, certificate, authorization or designation shall not exercise privileges other than those granted by the licence, certificate, authorization or designation.

(3) The privileges granted by a licence, or by related ratings, may not be exercised unless the holder maintains competency and meets the requirements for recent experience of this part.

(4) Maintenance of competency shall be indicated in the airman's personal licence or record (e.g. logbook).

(5) The maintenance of competency of flight crewmembers, engaged in commercial air transport operations, may be satisfactorily established by demonstration of skill during proficiency flight checks completed in accordance with these Regulations.

(6) Unless specified otherwise in subparts of these Regulations the validity period of a licence is 5 years.

(7) Renewal of a licence will take place within the 5 years validity period after initial issue of a rating provided the ratings related to the licence and the medical certificate are valid.

(8) The validity period of the ratings, authorizations, certificates of validation and medical certificates and the renewal/re-issue conditions are indicated in the relevant subparts of these Regulations.

(9) Medical fitness—Applicants for the following licences and authorizations shall hold a current and appropriate medical certificate issued under this part in order for their licence or authorization to be valid—

(*a*) student pilot licence/ authorization;

(*b*) pilot licence;

(*c*) flight engineer licence;

(*d*) flight navigator licence;

(*e*) flight instructor licence;

(*f*) designated pilot examiner (DPE);

(*g*) designated flight engineer examiner;

(*h*) designated flight navigator examiner; and

(*i*) air traffic controller licence.

Language proficiency

12.—(1) Pilots, flight engineers, flight navigators, air traffic controllers and aeronautical station operators shall demonstrate the ability to speak and understand the English language used for radio telephony communications means in Malawi.

(2) The airmen identified in subregulations above shall demonstrate the ability to speak and understand the English language used for radiotelephony communications in Malawi to least the Operational Level (Level 4) with the aim to speak at the Expert Level (Level 6) as specified in the language proficiency requirements in IS 2:12.

(3) The language proficiency of airmen identified in subregulation 1 shall be formally evaluated at intervals in accordance with an individual's demonstrated proficiency level as follows—

(*a*) those demonstrating language proficiency at the Operational Level (Level 4) shall be evaluated at intervals not more than 3 years;

(*b*) those demonstrating language proficiency at the Extended Level (Level 5) shall be evaluated at intervals not more than 6 years; and

(*c*) those demonstrating language proficiency at the Expert Level (Level 6) shall be exempt from further language evaluation.

(4) Implementing Standard IS 2:12 contains the detailed requirements for language proficiency.

Division III—Credit for Military Competency

Credit for military pilots

13.—(1) Pilot licences—Except for a rated military pilot or former military pilot who has been removed from flying status for lack of proficiency, or because of disciplinary action involving aircraft operations, a rated military pilot or former rated military pilot who meets the requirements of IS 2:13 may apply, on the basis of his or her military training, for—

(*a*) a CPL;

(*b*) a rating in the category and class of aircraft for which that military pilot is qualified;

(*c*) an instrument rating with the appropriate category rating for which that military pilot is qualified; and

(*d*) a type rating, if appropriate.

(2) The testing required by a military pilot seeking a licence or rating is as follows—

(*a*) if the applicant has been on active flight status within the past 12 months of application, pass a knowledge test on—

(i) air law;

(ii) aeronautical weather codes;

(iii) flight performance and planning;

(iv) human performance;

(*b*) if the applicant has not been on active flight status within the past 12 months of application, pass both a knowledge and skill test.

Credit for military parachute riggers

14. The Authority shall grant to an applicant for a senior parachute rigger licence that licence if he or she passes a knowledge test on the regulations of Part X of these Regulations and presents satisfactory documentary evidence that he or she—

(*a*) is a member or civilian employee of an armed force of Malawi, is a civilian employee of a regular armed force of a foreign country, or has, within the 12 months before he applies, been honourably discharged or released from any status covered by this paragraph;

(*b*) is serving, or has served within the 12 months before application, as a parachute rigger for such an armed force; and

(*c*) has the experience required by regulation 166 of these Regulations.

Division IV—Validation and Conversion of Foreign Licences, Ratings, Authorizations and Certificates

Validation of flight crew licences

15.—(1) General requirements for validation—

(*a*) a person who holds a current and valid pilot licence issued by another Contracting State in accordance with ICAO Annex 1 may apply for a validation of such licence for use on aircraft registered in Malawi;

(*b*) the applicant for the validation certificate shall present to the Authority the foreign licence and evidence of the experience required by presenting the record (e.g. logbook);

(*c*) the applicant for the validation certificate shall present to the Authority evidence that he/she holds either a current medical certificate issued under these Regulations or a current medical certificate issued by the Contracting State that issued the applicant's licence—the Authority may allow the applicant to use his/her 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 these Regulations, relevant to the licence held;

(*d*) the applicant for the validation certificate shall present to the Authority evidence of language proficiency in the English language as specified in regulation 12 or shall demonstrate to the Authority the language proficiency skills as specified in regulation 12—the validation shall be limited for use on Malawi registered aircraft for use within Malawi if the pilot is not proficient in the English language, as required by regulation 12;

(*e*) authority will verify the authenticity of the licence, ratings authorizations and the medical certificate with the state of licence issue prior to issuing the validation;

(*f*) the Authority will only validate ratings or authorizations on the foreign licence together with the validation of a licence; and

(*g*) the Authority may issue a validation certificate which will be valid for one year, provided the foreign licence, ratings or authorizations and the medical certificate remains valid.

(2) Validation certificate with PPL privileges—in addition to the requirements in subregulation (1) above, the applicant for the validation certificate with PPL privileges shall have a foreign licence with at least PPL privileges.

(3) Validation certificate with PPL/IR, CPL, CPL/IR, MPL, ATPL or FE privileges. In addition to the requirements in regulation 1 above, the applicant for a validation certificate for either a PPL/IR, CPL, CPL/IR, MPL, ATPL or FE privileges, shall have the relevant foreign licence and meet the following requirements—

(*a*) the applicant for the validation certificate shall demonstrate, to the satisfaction of the Authority and relevant to the licence to be validated, knowledge of Malawi's—

(i) air law;

(ii) meteorology;

(iii) operational procedures; and

(iv) radiotelephony;

(*b*) the applicant for the validation certificate shall complete a skill test for the relevant licence and ratings that he or she wants to be validated relevant to the privileges of the licence held; and

(*c*) comply with the experience requirements set out in the table below—

Licence	*Experience*	*Validation Privileges*
ATPL(A)	>1 500 hours as PIC in multi-pilot *certificated aeroplanes . .	Commercial air transport in multi-pilot aeroplanes as PIC
ATPL(PL)	>1500 hours as PIC in multi-pilot certificated powered-lift or 1500 hours in multi-pilot operations in a combination of powered-lift; aeroplane and helicopter aircraft as acceptable to the Authority . .	Commercial air transport in multi-pilot powered-lift as PIC
ATPL(H)	>1 000 hours as PIC on multi-pilot helicopters	Commercial air transport multi-pilot helicopters as PIC

Licence	*Experience*	*Validation Privileges*
ATPL(A) or CPL(A)/IR	>500 hours as PIC or co-pilot on multi-pilot aeroplanes	Commercial air transport in multi-pilot aeroplanes as co-pilot
ATPL(PL) or CPL(PL)/IR	>500 hours as PIC or co-pilot on multi-pilot powered-lift	Commercial air transport in multi-pilot powered-lift as co-pilot
ATPL(H) or CPL(H)/IR	>500 hours as PIC or co-pilot on multi-pilot helicopters	Commercial air transport in multi-pilot helicopters as co-pilot
CPL(A)/IR	>1 000 hours as PIC in commercial air transport since gaining an IR	Commercial air transport in single-pilot aeroplanes as PIC
CPL(H)/IR	>1 000 hours as PIC in commercial air transport since gaining an IR	Commercial air transport in single-pilot helicopters as PIC
CPL(A)	>700 hours in aeroplanes other than gliders, including 200 hours in the activity role for which validation is sought, and 50 hours in that role in the last 12 months	Activities in aeroplanes other than commercial air transport
CPL(H)	>700 hours in helicopters including 200 hours in the activity role for which validation is sought, and 50 hours in that role in the last 12 months	Activities in helicopters other than commercial air transport
CPL(PL)	>700 hours in powered-lift (or combination of powered-lift, aeroplane and helicopter as acceptable to the Authority) including 200 hours in the activity role for which validation is sought, and 50 hours in that role in the last 12 months	Activities in powered-lift other than commercial air transport
CPL(AS)	>250 hours as PIC in commercial air transport including 50 hours in AS within the last 12 months	Commercial air transport in airships as PIC under IR and VFR conditions

Licence	*Experience*	*Validation Privileges*
CPL(B)	>50 hours as PIC in commercial air transport of which 35 hours in B within the last 12 months	Commercial air transport in balloons as PIC
CPL(G)	>250 hours as PIC in commercial air transport, including of which 50 must be in G within the past 12 months	Commercial air transport in gliders as PIC
MPL(A)	>250 as co-pilot of turbine-powered air transport aeroplanes certificated for operations with a minimum crew of at least two pilots operated in commercial air transport within the past 12 months	Commercial air transport in turbine-powered air transport aeroplanes certificated for operations with a minimum crew of at least two pilots as co-pilot
PPL(A)/IR	>100 hours PIC instrument flight time	Private flights under IFR
PPL(H)/IR	>100 hours PIC instrument flight time	Private flights under IFR
PPL(PL)/IR	>100 hours PIC instrument flight time	Private flights under IFR
Flight engineer	>1 500 hours as flight engineer on aeroplanes in commercial air transport	Commercial air transport in aeroplanes as flight engineer
Flight engineer	>1 000 hours as flight engineer on aeroplanes in other than commercial air transport	Other than commercial air transport in aeroplanes as flight engineer

Conversion of flightcrew licences

16.—(1) Conversion of a foreign pilot licence for issuance of a PPL by Malawi. A person who holds a current and valid pilot licence with at least PPL privileges, issued by another Contracting State in accordance with ICAO Annex 1, may apply for a conversion and be issued with a PPL for use on aircraft registered in Malawi provided the following requirements are met—

(*a*) the holder shall—

(i) present to the Authority the foreign licence, evidence of experience required by presenting the record (e.g. logbook) and current medical certificate;

(ii) present to the Authority evidence of language proficiency in the language of Malawi and in English as specified in regulation 12 or shall demonstrate to the Authority the language proficiency skills as specified in regulation 12;

(iii) obtain a Class 2 medical certificate issued under these Regulations;

(iv) demonstrate, to the satisfaction of the Authority and relevant to the licence to be converted, knowledge of Malawi's—

(A) air law;

(B) meteorology;

(C) operational Procedures; and

(D) radiotelephony;

(v) complete a PPL skill test;

(*b*) the Authority will verify the authenticity of the licence, ratings, authorizations and the medical certificate with the state of licence issue prior to converting the licence.

(2) Conversion of PPL/IR, CPL, CPL/IR, MPL, ATPL and Flight Engineer licences, which have been validated in accordance with regulation 15—

(*a*) the holder of a current and valid foreign CPL, CPL/IR, MPL, ATPL or Flight Engineer licence issued by another Contracting State in accordance with ICAO Annex 1, and appropriate medical certificate, may apply for conversion to the appropriate licence and ratings issued by Malawi provided the following requirements are met—

(i) the applicant is the holder of a current validation certificate issued under regulation 15;

(ii) the applicant has completed 200 flight hours in a Malawi registered aircraft which are operated by an operator established in Malawi exercising the privileges granted by the validation certificate,

(iii) the applicant for the conversion shall present to the Authority the foreign licence and evidence of the 200 flight hours by presenting the record (e.g. logbook); and

(iv) the applicant shall hold or obtain a medical certificate issued under these Regulations, appropriate to the level of licence to be converted.

(v) ratings listed on a person's foreign pilot licence that have been validated in accordance with regulation 15, may be placed on that person's converted licence.

(*b*) the holder of a current and valid foreign PPL/IR issued by another Contracting State in accordance with ICAO Annex 1, and appropriate medical certificate, may apply for conversion to the appropriate licence and ratings issued by Malawi provided the following requirements are met—

(i) the applicant is the holder of a current validation certificate issued under regulation 15;

(ii) the applicant has completed 75 flight hours in a Malawi registered aircraft in Malawi exercising the privileges granted by the validation certificate,

(iii) the applicant for the conversion shall present to the Authority the foreign licence and evidence of the 75 flight hours by presenting the record (e.g. logbook); and

(iv) the applicant shall hold or obtain a medical certificate issued under these Regulations, appropriate to the level of licence to be converted.

(v) ratings listed on a person's foreign pilot licence that have been validated in accordance with regulation 15, may be placed on that person's converted licence.

Validation of flight crew licences by reliance upon the licensing system of another contracting state

17.—(1) Notwithstanding regulations 15 and 16, the Authority may issue a validation certificate with the applicable ratings to the holder of a current and valid foreign licence and current medical certificate,provided—

(*a*) the licence is issued by another ICAO Contracting State;

(*b*) the Authority is convinced that the licence has been issued on the basis of these Regulations;

(*c*) there is an agreement between the Authority and the other Contracting State about recognition of licences and, if applicable, keeping the licences and ratings current and valid; and

(*d*) the applicant for the validation certificate shall demonstrate, to the satisfaction of the Authority and relevant to the licence, knowledge of Malawi's—

(i) air law;

(ii) meteorology;

(iii) operational procedures; and

(iv) radiotelephony.

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

(*a*) foreign licence and evidence of the currency of the licence by presenting the record (e.g. logbook).

(*b*) medical certificate relevant to the licence to be validated, provided that the foreign medical certificate meets the requirements of these Regulations.

(*c*) evidence of language proficiency in English as specified in regulation 12 or shall demonstrate to the Authority the language skills as specified in regulation 12.

(3) The authority will verify the authenticity of the licence, ratings, authorizations and the medical certificate with the State of Licence issue prior to issuing the validation.

(4) The Authority may issue a validation certificate which will be valid for one year, provided the foreign licence, ratings, authorizations and medical certificate remains valid.

(5) The IS 2:17 contained in the second schedule hereto contains procedures for validation of flightcrew licences by reliance upon the licensing system of another ICAO Contracting State.

Conversion of flightcrew licensing by reliance upon the licensing system of another contracting state

18.—(1) Notwithstanding regulations 15 and 16, the Authority may issue a licence with the applicable ratings to the holder of a current and valid foreign licence, provided—

(*a*) the licence is issued by another ICAO Contracting State;

(*b*) the Authority is convinced that the licence has been issued on the basis of these Regulations; and

(*c*) there is an agreement between the Authority and the other Contracting State about recognition of licences.

(2) The applicant for the conversion shall present to the Authority the—

(*a*) foreign licence and evidence of the currency of the licence by presenting the record (e.g. logbook);

(*b*) medical certificate relevant to the licence if the medical certificate is to be converted or medical certificate issued under these Regulations relevant to the licence sought; and

(*c*) evidence of language proficiency in English as specified in regulation 12 or shall demonstrate to the Authority the language skills as specified in regulation 12.

(3) The applicant shall demonstrate, to the satisfaction of the Authority and relevant to the licence to be converted, the knowledge of Malawi's—

(*a*) air law;

(*b*) meteorology;

(*c*) operational procedures;

(*d*) radiotelephony.

(4) The authority will verify the authenticity of the licence, ratings, authorizations and the medical certificate with the State of Licence issue prior to issuing the licence.

(5) IS 2:18 contained in the Schedule hereto contains procedures for conversion of flightcrew licences by reliance upon the licensing system of another ICAO Contracting State.

Validation in case of leased, chartered or interchanged aircraft

19.—(1) The requirements stated in regulation 15 shall not apply where aircraft, registered in Malawi are leased to, chartered by or interchanged by an operator of another Contracting State, provided that during the term of the lease the State of the Operator has accepted the responsibility for the technical and/or operational supervision in accordance with Art. 83 bis of the ICAO Convention.

(2) The licences of the flightcrew of the other Contracting State may be validated, provided that the privileges of the flightcrew licence validation are restricted for use during the lease, charter or interchange period only on nominated aircraft in specified operations not involving a Malawi operator, directly or indirectly through a wet lease or other commercial arrangement.

(3) The Authority will verify the authenticity of the licence, ratings, authorizations, including the English language proficiency endorsement of at least Level 4, and the medical certificate, with the State of Licence issue prior to issuing the validation.

Temporary validation of non-Malawi pilot licences held by manufacturer pilots

20.—(1) In circumstances where validation of a non-Malawi pilot licence is needed to fulfill specific tasks of finite duration, the Authority may issue a temporary validation of such a licence for those tasks as described in this regulation.

(2) Notwithstanding the requirements contained in regulations 15,16,17 or 18, the Authority may temporarily validate a licence issued by another ICAO Contracting State in accordance with the provisions of ICAO Annex 1, including an instructor rating or examiner authorization issued by that State, provided that the holder of the licence shall—

(*a*) possess an appropriate licence, medical certificate, type ratings and qualifications, to include instructor or examiner qualifications, valid in the State of licence issue for the duties proposed;

(*b*) demonstrate, to the satisfaction of the Authority and relevant to the licence to be validated, knowledge of Malawi's—

(i) air law;

(ii) meteorology;

(iii) operational Procedures; and

(iv) radiotelephony.

(*c*) provide evidence of language proficiency in English as specified in regulation 12 or shall demonstrate to the Authority the language skills as specified in regulation 12.

(*d*) be employed by an aircraft manufacturer or Approved Training Organization located outside Malawi performing training on behalf of an aircraft manufacturer; and

(*e*) be limited to performing flight instruction and testing for initial issue of type ratings, the supervision of initial line flying by the pilots of an operator in Malawi, delivery or ferry flights, initial line flying, flight demonstrations or test flights.

(3) Whenever conducting or supervising line flying, the pilot shall also be required to meet the relevant requirements of the Aviation (Operations) Regulations, 2013.

(4) The Authority will verify the authenticity of the licence, ratings, authorizations and medical certificate with the State of Licence issue prior to issuing the temporary validation.

(5) The duration of the temporary validation shall be for one year.

Validation of aircraft maintenance engineers licences

21.—(1) General requirements for validation—

(*a*) a person who holds a current and valid AME licence issued by another Contracting State, in accordance with ICAO Annex 1, may apply for a validation of such licence for use on aircraft registered in Malawi.

(*b*) the applicant for the validation certificate shall present to the Authority the foreign licence and evidence of the experience required by presenting the personal record;

(*c*) the applicant for the validation certificate shall demonstrate to the Authority evidence of language proficiency in English;

(*d*) the Authority will verify the authenticity of the licence, ratings authorizations with the state of licence issue prior to issuing the validation;

(*e*) the Authority will only validate ratings or authorizations on the foreign licence together with the validation of a licence; and

(*f*) the Authority may issue a validation certificate which will be valid for one year, provided the foreign licence, ratings or authorizations remains valid.

(2) The applicant for the validation certificate shall demonstrate to the satisfaction of the Authority the knowledge relevant to the licence to be validated of—

(*a*) air law;

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

(*c*) approved maintenance organizations and procedures.

(3) The applicant for the validation certificate shall complete a skill test for the relevant licence and ratings that he or she wants to be validated relevant to the privileges of the licence held; and

(4) Have a minimum of four years AME experience.

Conversion of aircraft maintenance engineer licences

22.—(1) General requirements for conversion—a person who holds a current and valid AME licence issued by another Contracting State, in accordance with ICAO Annex 1, may apply for conversion of such licence for use on aircraft registered in Malawi provided the following requirements are met—

(*a*) the applicant for the conversion shall present to the Authority the foreign licence and evidence of the experience required by presenting the personal record;

(*b*) the applicant for the conversion shall demonstrate to the Authority evidence of language proficiency in English;

(*c*) demonstrate, to the satisfaction of the Authority and relevant to the licence to be validated, knowledge of Malawi's—

(i) air law;

(ii) applicable airworthiness requirements governing certification and continuing airworthiness;

(iii) approved maintenance organizations and procedures.

(*d*) the applicant for the validation certificate shall complete a skill test for the relevant licence and ratings that he or she wants to be validated relevant to the privileges of the licence held; and

(*e*) have a minimum of four years AME experience—

(i) the Authority will verify the authenticity of the licence, ratings and authorizations with the state of licence issue prior to issuing the converted licence;

(ii) the Authority will only convert ratings or authorizations on the foreign licence together with the conversion of a licence.

(2) Conversion of AME licences that have been validated in accordance with regulation 21. The holder of a current and valid AME licence issued by another Contracting State in accordance with ICAO Annex 1 who has a validation in accordance with regulation 21 and can show evidence of 12 months performing maintenance on aircraft registered in Malawi may convert his/her AME licence with no further formality.

Validation of AME licences by reliance upon the licensing system of another contracting State

23.—(1) Notwithstanding regulations 21 and 22, the Authority may issue a validation certificate with the applicable ratings to the holder of a current and valid foreign AMT, provided—

(*a*) the licence is issued by another ICAO Contracting State;

(*b*) the Authority had determined that the licence has been issued on the basis of these Regulations;

(*c*) there is an agreement between the Authority and the other Contracting State about recognition of licences and, if applicable, keeping the licences and ratings current and valid; and

(*d*) the applicant for the validation certificate demonstrates, to the satisfaction of the Authority and relevant to the licence to be validated, knowledge of Malawi's—

(i) air law;

(ii) applicable airworthiness requirements governing certification and continuing airworthiness; and

(iii) approved maintenance organizations and procedures.

(*e*) the applicant for the validation certificate shall present to the Authority the foreign licence and evidence of the currency of the licence by presenting the personal record.

(*f*) the applicant for the conversion shall demonstrate to the Authority evidence of language proficiency in English.

(2) The authority will verify the authenticity of the licence, ratings, with the State of Licence issue prior to issuing the validation.

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

(4) The IS 2:23 in the Schedule hereto contains procedures for validation of flightcrew licences by reliance upon the licensing system of another ICAO Contracting State.

Conversion of AME licences by reliance upon the licensing system of another Contracting State

24.—(1) Notwithstanding regulations 21 and 22, the Authority may issue a licence with the applicable ratings to the holder of a current and valid foreign licence, provided—

(*a*) the licence is issued by another ICAO Contracting State;

(*b*) the Authority is convinced that the licence has been issued on the basis of these Regulations; and

(*c*) there is an agreement between the Authority and the other Contracting State about recognition of licences.

(2) The applicant for the conversion shall present to the Authority the—

(*a*) foreign licence; and

(*b*) evidence of the currency of the licence by presenting the personnel record (e.g. logbook).

(3) The applicant for the conversion shall demonstrate to the Authority evidence of language proficiency in English.

(4) The applicant shall demonstrate, to the satisfaction of the Authority and relevant to the licence to be validated, knowledge of Malawi's—

(*a*) air law;

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

(*c*) approved maintenance organizations and procedures.

(5) The authority will verify the authenticity of the licence, ratings, authorizations and the medical certificate with the State of Licence issue prior to issuing the validation.

(6) IS 2:24 contained in the Schedule hereto contains procedures for conversion of AME licences by reliance upon the licensing system of another ICAO Contracting State.

Division V—Training and Testing Requirements

Documentation of training and aeronautical experience

25.—(1) Each person shall document and record the following in a manner acceptable to the Authority—

(*a*) training and/or experience used to meet the requirements for a licence, rating, endorsement and/or authorization of these Regulations;

(*b*) the experience required to show the maintaining of recency of aeronautical experience according to the requirements of this Regulations.

Training conducted in an approved training organization

26.—(1) Approved training for aviation personnel licences shall be conducted within an approved training organization.

(2) The Authority may approve a training programme for a licence, rating, authorization or endorsement that allows an alternative means of compliance with the experience requirements prescribed in this Chapter when training is conducted within an Approved Training Organization under special curricula approved by the Authority under the Aviation (Approved Training Organizations) Regulations, 2013.

(3) Prior to authorizing an alternative means of compliance that permits an Approved Training Organization to conduct training, which does not meet the normal prescribed experience requirements, the Authority shall ensure that the approved training programme provides a level of competency at least equal to that provided by the minimum experience requirements for personnel not receiving such approved special curricula.

(4) The Aviation (Approved Training) Regulations, 2013, prescribe the requirements for certifying and administering Approved Training Organizations for conducting approved training.

(5) Competency-based approved training for aircraft maintenance personnel shall be conducted within an approved training organization.

Use of flight simulation training devices

27.—(1) Except as specified in subregulation 2 of this regulation, no airman may receive credit for use of any flight simulation training device for satisfying any training, testing, or checking requirement of this part unless that flight simulator or flight training device is approved by the Authority for—

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

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

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

(2) The flight simulation training device shall have the same technology for the basic flight instruments (attitude indicator, airspeed, altimeter, and heading reference) as those of the aircraft used by the operator.

(3) Operators that have electronic/glass displays shall use simulators that have electronic/glass displays.

(4) Operators that have standard instruments shall use simulators that have standard instruments.

(5) Operators shall not conduct differences training on variant training on aircraft that have electronic glass displays with aircraft that have standard instruments.

(6) The Authority may approve a device other than a flight simulation training device for specific purposes.

(7) The use of a flight simulation training device for performing training, testing and checking for which a flight crewmember is to receive credit, shall be approved by the Authority, which shall ensure that the flight simulation training device is appropriate to the task.

Knowledge and skill tests and checks: time, place, designated persons and format

28.—(1) Knowledge and Skill Tests and Checks prescribed by or under these Regulations are given at times, places, and by persons authorized and designated by the Authority.

(2) The knowledge test will be performed in written or computer format, except for the knowledge test for an instructor licence or an additional instructor rating within the same aircraft category, which may be performed orally.

(3) In addition to the written knowledge test, candidates may be questioned orally during the skill test, as appropriate.

Knowledge and skill tests and checks: prerequisites, passing grades and retesting after failure

29.—(1) An applicant for a knowledge test or a skill test shall have received any required endorsement as specified in these Regulations for the applicable licence, rating or authorization to show that the applicant has met the training and/or experience requirements to take the knowledge or skill test.

(2) An applicant for a knowledge or skill test shall receive written authorization from the Authority to take, or re take, the test.

(3) An applicant shall show proper identification in the form of a Government issued identification document at the time of application that contains the applicant's—

(*a*) photograph;

(*b*) signature;

(*c*) date of birth, which shows the applicant meets or will meet the age requirements of these Regulations for the licence sought before the expiration date of the airman knowledge test report; and

(4) Actual residential address, if different from the applicant's mailing address.

(5) An applicant shall, before attempting the skill test for a licence or rating—

(*a*) have passed the required knowledge test within the 24 calendar-month period preceding the month the applicant successfully completes the skill test; or

(*b*) if an applicant for an ATPL has passed the ATP knowledge test within a period of 7 years before successfully completing the ATP skill test, provided that the applicant is, and has been continuously, employed as a flight crewmember by a certificate holder under the Aviation (Air Operator Certification and Administration) Regulations, 2013, at the time of the ATP skill test;

(6) When an applicant is required to provide an aircraft for a skill test, it must be—

(*a*) airworthy and certificated;

(*b*) have operating limitations that do not prohibit the tasks required for the skill test;

(*c*) be of national, foreign or military registry of the same category, class, and type if applicable, for the licence and/or rating for which the applicant is applying;

(*d*) have fully functioning dual controls, except as provided for in these Regulations; and

(*e*) be capable of performing all areas of operation appropriate to the rating sought and have no operating limitations, which prohibit its use in any of the areas of operation, required for the skill test.

(7) If the applicant is required to take a segmented skill test using a flight simulation training device and an aircraft, the flight simulation training device must be approved by the authority—

(*a*) retesting after failure of a test;

(*b*) an applicant for a knowledge or skill test who fails that test may reapply to retake the test only after the applicant has received;

(*c*) the necessary training from an authorized instructor who has determined that the applicant is proficient to pass the test;

(*d*) an endorsement from an authorized instructor who gave the applicant the additional training; and

(*e*) 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 skill test due to deficiencies in instructional proficiency on stall awareness, spin entry, spins, or spin recovery shall—

(i) comply with the requirements of subreguletion 6 (*a*) of these Regulation before being retested;

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

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

Reliance on training and testing in another contracting State

30.—(1) The Authority may rely on the training and/or testing system administered by another Contracting State as the basis for its own approved training curriculum,including the administration of written and/or skill test requirements for airman licences provided that the Authority has an agreement with the other Contracting State whose training and/or testing system is used.

(2) The applicant shall apply for and receive written approval from the Authority prior to receiving training and/or testing in a system administered by another Contracting State.

Instructor requirements: general

31.—(1) All applicants for instructor licences and ratings or authorizations shall, in addition to specific requirements contained in have received and logged training from an authorized instructor on the fundamentals of instructing and have passed a knowledge test on the following areas of instructing—

(*a*) techniques of applied instruction;

(*b*) assessment of student performance in those subjects in which ground instruction is given;

(*c*) the learning process;

(*d*) elements of effective teaching;

(*e*) student evaluation and testing, training philosophies;

(*f*) training programme development;

(*g*) lesson planning;

(*h*) classroom instructional techniques;

(*i*) use of training aids, including flight simulation training devices as appropriate;

(*j*) analysis and correction of student errors;

(*k*) human performance relevant to flight instruction;

(*l*) hazards involved in simulating system failures and malfunctions in the aircraft; and

(*m*) principles of threat and error management.

(2) The following applicants do not need to comply with subregulation 1 of this regulation—

(*a*) the holder of an instructor licence or authorization issued under these Regulations who has already passed the knowledge test in the areas of instructing;

(*b*) the holder of a current teacher's certificate issued by a national or local authority that authorizes the person to teach at a secondary educational level or higher; or

(*c*) a person who provides evidence of an equivalent level of experience acceptable to the Authority.

Designated examiners

32.—(1) The Authority may designate private individuals to act as representatives of the Director of Civil Aviation in examining, inspecting, and testing persons and aircraft for the purpose of issuing airmen and aircraft licences, ratings and certificates.

(2) The specific requirements for each type of designated examiner are contained in the appropriate licensing section of these Regulations related to the licensing requirements of the persons to be examined.

(3) The Authority will issue each designated examiner a certificate of designated authority and a designee identification card specifying the kinds of designation for which the individual is qualified and the duration of the designation.

Specifications and format of the licence

33.—(1) The licence shall be made of a suitable material as listed in ICAO Annex 1: 5.1.2.

(2) The licence format shall be in a form and manner prescribed by the Authority.

(3) The items required on the licence are indicated in IS 2:33 contained in the Schedule hereto.

(4) The licence shall contain the expiration date of the licence and ratings.

(5) The licence shall be issued in the English language.

Division VI—Suspension or Revocation of a Licence, Rating, Authorization or Certificate

Suspension of a licence, rating authorization or validation certificate

34. Action to suspend or revoke a licence will be taken by the Authority in accordance with the enforcement regulations contained in Part III of Aviation (General Policies, Procedures and Definitions) Regulations, 2013.

Suspension of a licence, rating authorization or validation certificate

35.—(1) If, in accordance with the Aviation Act the Authority determines that the interests of safety require that a licence, rating, authorization or certificate must be suspended, the Authority may act as follows—

(*a*) if the Authority discovers facts indicating either a lack of competency or lack of qualification, the Authority may, require an applicant for or the holder of any licence, rating, authorization, or validation certificate to retake all or part of the knowledge or practical tests required for any licence, rating, authorization, or validation certificate at issue, renewal or re-issue. The Authority may suspend the validity of any such licence, rating, authorization and/or validation certificate pending the results of such re-testing;

(*b*) a person whose licence, rating, authorization, or certificate has been amended, modified, suspended, or revoked shall be provided with notice and an opportunity to be heard in accordance with subregulation 1 (3) of the Aviation (General Policies, Peocedures and Definitions) Regulations, 2013;

(*c*) after notifying the person involved, in writing, stating the reasons for such action, the Authority may also suspend the validity of any licence, rating, authorization and/or validation certificate in the following cases—

(i) during the investigation of an aircraft disaster or incident;

(ii) in cases of proven misconduct, recklessness or excessive carelessness;

(iii) if the holder has acted in contradiction to his or her privileges; and/or

(iv) pending the investigation of a suspected violation of these regulations or the aviation law under which these regulations are affected.

(*d*) once the suspension is effective, the person involved shall immediately cease exercising the privileges of the affected licence, certificate, rating, or authorization. The person involved shall surrender to the Authority all licences or validation certificates in his or her possession that are subject to the suspension within 8 days of receiving the notification of the order. If the person fails to surrender the documents under suspension, the Authority may revoke all such certificate(s) held by that person;

(*e*) when a suspension is limited to one or more ratings mentioned on the licence or validation certificate, the Authority shall provide the person involved with a new licence or validation certificate omitting all ratings which are subject to the suspension;

(*f*) the Authority may cancel a suspension in the following cases—

(i) if person under suspension has taken and passed the knowledge or practical tests required for any licence, rating, or authorization at issue indicated in (*a*);

(ii) if the person involved has gained the required additional experience; or

(iii) by revocation of the licence, rating, authorization and/or validation certificate;

(*g*) once the suspension has been cancelled, other than by revocation, the Authority shall issue the person involved a new licence or validation certificate.

Suspension of a medical certificate

36.—(1) In case of doubt concerning the medical fitness of the holder of a medical certificate the Authority may determine that the person involved shall again repeat a complete or partial medical examination, and may suspend the validity of that medical certificate until the repeat examination is completed with favourable results.

(2) The validity of a medical certificate may also be suspended in case of a temporary rejection on medical grounds.

(3) The person holding the medical certificate will be notified in writing of a suspension stating the reasons for that suspension.

(4) The person holding the suspended medical certificate shall surrender the medical certificate in his or her possession to the Authority within 8 days after the date of receiving the notification.

(5) In cases in which the medical fitness of the person involved allows it, the Authority may provide the person with a suspended medical certificate of a particular class with a new medical certificate of a lower class.

(6) A suspension may be lifted if the medical examination intended in subregulation (1) has been passed satisfactorily. If a suspension is lifted, the person involved shall receive a new medical certificate unless the medical certificate was revoked.

Revocation of licences, ratings authorization or certificates

37.—(1) A licence, rating, authorization or certificate shall be revoked if the holder has lost the skills for exercising the privileges mentioned in the document or fails to meet the appropriate medical standards as shown by the results of a medical examination or a test.

(2) A licence, rating, authorization and/or certificate may be revoked if the holder has made a statement contrary to the truth in obtaining or maintaining that licence, rating authorization or certificate, or has provided incorrect data at a medical examination and/or test required for the issue, maintenance or renewal of the licence, rating, authorization and certificate.

(3) A licence, rating, authorization or certificate shall be revoked in case of proven misconduct, recklessness or excessive carelessness. The holder of the licence will be notified in writing of the revocation with the reasons therefore.

(4) A person who has had a licence or certificate revoked shall be obliged to hand over to the Authority all the licences or certificates in his or her possession applicable to the revocation within 8 days after the date of receiving notification from the Authority.

(5) The person who has been denied the privilege to manipulate the controls of an aircraft by judgment of a court, shall be equally obliged to hand over to the Authority all licences and certificates in his or her possession within 8 days after he or she has taken cognizance of the judgment or after it can be reasonably assumed that he or she has taken cognizance thereof.

Part Two—Pilot Licences, Categories, Ratings, Authorizations, Endorsements, Instructors for Pilot Licensing, and Designated Pilot Examiners

Division I—General

Application

38 —(1) This Part prescribes the requirements for the issue, renewal and re-issue, if applicable, of pilot licences, ratings and authorizations.

General rule concerning licences, ratings and authorizations

39.—(1) An applicant shall, before being issued with any pilot licence, rating, authorization or designation, meet such requirements in respect of age, knowledge, experience, flight instruction, skill, medical fitness and language proficiency as are specified for that licence, rating or authorization.

(2) A person shall not act either as PIC or as co-pilot of an aircraft in any of the categories unless that person is the holder of a pilot licence issued in accordance with the provisions of these Regulations.

(3) An applicant shall for renewal or re-issue of a licence, rating, authorization or designation, meet the requirements as are specified for that licence, rating, authorization or designation.

Authority to act as a flight crewmember

40.—(1) A person shall not act as a pilot flight crewmember of an aircraft registered in Malawi unless a valid licence or a validation certificate is held showing compliance with the specifications of these Regulations and appropriate to the duties to be performed by that person.

(2) No person may act as the PIC or co-pilot of an aircraft unless that person holds the appropriate category, class and type rating for the aircraft to be flown.

(3) During a skill test, the applicant acts as PIC but the safety pilot will intervene in safety situations.

Crediting of flight time

41.—(1) A student pilot or the holder of a pilot licence shall be entitled to be credited in full with all solo, dual instruction and PIC 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 for operation by a single pilot but required by Malawi to be operated with a co-pilot shall be entitled to be credited with not more than 50 per cent of the co-pilot flight time towards the total flight time required for a higher grade of pilot licence. The Authority may authorize that flight time be credited in full towards the total flight time required if the aircraft is equipped to be operated by a co-pilot and the aircraft is operated in a multi-crew operation.

(3) 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 entitled to be credited in full with this flight time towards the total flight time required for a higher grade of pilot licence.

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

Limitation of privileges of pilots who attained their 60th birthday and birthday curtailment of privileges of pilots who have attained their 65th birthday

42.—(1) No person who holds a pilot licence issued under this Part shall serve as a PIC in single pilot operations on a civil aircraft of Malawi registry engaged in commercial air transport operations if the person has reached his or her 60th birthday.

(2) For commercial air transport operations on a civil aircraft of Malawi registry requiring more than one pilot, one pilot may be up to 65 years of age provided the other pilot is less than 60 years of age.

Recent experience and currency requirement s

43.—(1) A pilot shall not operate an aircraft carrying passengers as PIC or co-pilot unless he or she has carried out at least three take-offs and three landings as pilot flying in an aircraft of the same type/class or variant of a type or a flight simulator of the aircraft type/class to be used, in the preceding 90 days.

(2) The holder of a licence that does not include an instrument rating shall not act as PIC of an aircraft carrying passengers at night unless he or she has carried out at least three take-offs and three landings at night during the previous 90 days.

(3) A pilot shall not operate an aircraft under IFR or in weather conditions less than the minima prescribed for VFR flight unless within the preceding six months—

(*a*) the pilot had an instrument proficiency check on the manoeuvres in IS 2:57 contained in the Schedule hereto or (IR Skill Test) or

(*b*) has logged six hours instrument flight time including at least three hours in flight in the category of aircraft and has carried out six instrument approaches in either actual or simulated conditions.

(4) Each person shall document and record the experience required to show recent flight experience.

(5) Each pilot shall also meet the currency requirements in Part IV of the Aviation (Operations) Regulations, 2013 before operating an aircraft in Malawi.

Recording of flight time

44.—(1) Each person shall document and record the following time in a manner acceptable to the Authority as outlined in IS 2:43 contained in the Schedule hereto.

(2) Training and experience used to meet the requirements for a licence, rating and authorization of this Regulation; and

(3) The experience required to show recent flight experience according to the requirements of this Regulation.

Division II—Category, Class and Type Ratings, Category II/III Authorizations and Endorsements

General

45.—(1) The holder of a pilot licence shall not be permitted to act as PIC or as co-pilot of an aircraft unless the holder has received the applicable ratings, authorizations and/or endorsements as follows—

(*a*) the appropriate aircraft category rating specified in this Regulation;

(*b*) The appropriate class rating when required in accordance with in these Regulations;

(*c*) a type rating when required in accordance with these Regulations;

(*d*) an authorization when required in accordance with these Regulations; or

(*e*) an endorsement when required in accordance with this Regulation.

(2) The applicant shall meet the appropriate requirements of this Regulation for the aircraft rating, authorization or endorsement sought.

(3) When an applicant demonstrates skill and knowledge for the initial issue or re-issue of a pilot licence, the category and ratings appropriate to the class or type of aircraft used in the demonstration will be entered on the licence.

(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 subregulation (1). This authorization shall be limited in validity to the time needed to complete the specific flight.

Category ratings

46.—(1) The category of aircraft shall be endorsed on the licence as a rating.

(2) Initial category rating—an applicant for a pilot's licence, after successfully meeting all requirements for the issuance of the licence as contained in ththese Regulations, shall receive the appropriate licence with the aircraft category, and if applicable, class or type rating endorsed on the licence.

(3) Additional category ratings—

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

(*b*) the holder of a pilot licence seeking an additional category rating shall—

(i) meet the requirements of these Regulations appropriate to the privileges for which the category rating is sought;

(ii) have an endorsement is his/her logbook or training record from an authorized instructor that the applicant has been found competent in the required aeronautical knowledge and flight instruction areas;

(iii) pass the required knowledge test; and

(iv) pass the required skill test for the aircraft category, and if applicable, class rating being sought.

(4) Privileges. Subject to compliance with the requirements specified in these Regulations, the privileges of the holder of a class rating are to act as a pilot on the class of aircraft specified in the rating.

(5) The validity, renewal or reissue of the category rating will coincide with the requirements for validity, renewal or reissue of the licence, and if applicable class or type rating contained in these Regulations.

Class ratings

47.—(1) The class of aircraft, if applicable, shall be endorsed on the licence as a rating.

(2) Initial class rating—an applicant for a pilot's licence, after successfully meeting all requirements for the issuance of the licence as contained in these Regulations, shall receive the appropriate licence with the aircraft category, class, and if applicable, type rating endorsed on the licence.

(3) Additional class ratings—

(*a*) any additional class rating endorsed on a pilot licence shall indicate the level of licensing privileges at which the class rating is granted.

(*b*) the holder of a pilot licence seeking an additional class rating shall—

(i) meet the requirements of these Regulations appropriate to the privileges for which the class rating is sought;

(ii) have an endorsement is his/her logbook or training record from an authorized instructor that the applicant has been found competent in the required aeronautical knowledge and flight instruction areas;

(iii) pass the required knowledge test unless the applicant holds a class rating within the same category of aircraft, at the same level of pilot licence at either the private or commercial levels; and

(iv) pass the required skill test for the aircraft class rating being sought.

(4) Privileges. Subject to compliance with the requirements specified in these Regulatuions, the privileges of the holder of a class rating are to act as a pilot on the class of aircraft specified in the rating.

(5) Validity—Subject to compliance with the requirements specified in these Regulations, the validity period of—

(*a*) a multi-engine class rating is 1 calendar year;

(*b*) a single-engine class rating; balloon gas or balloon hot air rating is 2 calendar years.

(6) Renewal Timeframe—

(*a*) for the renewal of a single-engine class rating, a balloon gas rating or a balloon hot air rating, the pilot shall—

(i) aithin the preceding 24 calendar months, complete a proficiency check on areas of operation listed in the skill test that is applicable to the level of licence, category and class rating; and

(ii) have completed 12 hours flight time within the 12 months preceding the expiry date;

(*b*) for the renewal of a multi-engine class rating the pilot shall—

(i) within the preceding 12 calendar months, complete a proficiency check on the subjects listed in the skill test that is applicable to the level of licence, category and class rating; and

(ii) have completed 10 route sectors within the 3 months preceding the expiry date.

(*c*) where applicable the proficiency check shall include instrument procedures, including instrument approach and landing procedures under normal, abnormal and emergency conditions, including simulated engine failure.

(*d*) if a pilot takes the proficiency check required in this section in the calendar month before or the calendar month after the month in which it is due, the pilot is considered to have taken it in the month in which it was due for the purpose of computing when the next proficiency check is due.

(7) Re-issue— If the class rating has expired the applicant shall—

(*a*) have received refresher training from an authorized instructor with an endorsement that the person is prepared for the required skill test; and

(*b*) pass the required skill test for the applicable aircraft category and/or class;

(*c*) where applicable the skill test shall include instrument procedures, including instrument approach and landing procedures under normal, abnormal and emergency conditions, including simulated engine failure.

Type ratings

48.—(1) The type rating shall be endorsed on the licence as a rating, including any limitations.

(2 A pilot seeking an aircraft type rating to be added on a pilot licence shall—

(*a*) hold or concurrently obtain an instrument rating that is appropriate to the aircraft category, class or type rating sought;

(*b*) have an endorsement in his or her logbook or training record from an authorized instructor that the applicant has been found competent in the required aeronautical knowledge and flight instruction areas;

(*c*) pass the required skill test at the ATPL level, applying crew resource management concepts, applicable to the aircraft category, class and type rating being sought—applicants seeking a private or commercial licence in an aircraft that requires a type rating shall also complete the applicable portions of either the PPL or CPL skill test in conjunction with the ATPL skill test;

(*d*) perform the skill test under instrument flight rules unless the aircraft used for the skill test is not capable of the instrument manoeuvres and procedures required for the skill test in which case the applicant may—

(i) obtain a type rating limited to "VFR only,"; and

(ii) remove the "VFR only" limitation for each aircraft type in which the applicant demonstrates compliance with the ATPL skill test under instrument conditions.

(3) Privileges. Subject to compliance with the requirements specified in this Regulation, the privileges of the holder of a type rating are to act as a pilot on the type of aircraft specified in the rating. 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 flight, such limitation shall be endorsed on the rating.

(4) Validity. Subject to compliance with the requirements in this Regulation, the validity period of a type rating is 1 calendar year.

(5) Renewal. For the renewal of a type rating the pilot shall—

(*a*) within the preceding 12 calendar months, complete a proficiency check: in the areas of operation listed in the skill test for the appropriate category, type and if applicable class of aircraft;

(*b*) have completed 10 route sectors within the 3 months preceding the expiry date;

(*c*) if a pilot takes the proficiency check required in this section in the calendar month before or the calendar month after the month in which it is due, the pilot is considered to have taken it in the month in which it was due for the purpose of computing when the next proficiency check is due.

(6) Re-issue. If the type rating has been expired the applicant shall—

(*a*) have received refresher training from an authorized instructor with an endorsement that the person is prepared for the required skill test; and

(*b*) pass the required skill test for the appropriate category, type and if applicable class of aircraft.

Category II and III authorization

49.—(1) The Authority will issue a Category II or Category III pilot authorization by letter, to accompany the pilot's licence, when the pilot meets the requirements contained in this regulation and IS 2:49 contained in the Schedule to these Regulations.

(2) General—

(*a*) a person, not flying for an AOC holder under the Aviation (Air Operator Certification and Administration) Regulations, 2013, may not act as pilot of an aircraft during Category II or III operations unless that person holds a Category II or III pilot authorization for that category, class or type of aircraft.

(*b*) the applicant for a Category II or III pilot authorization shall—

(i) hold a pilot licence with an instrument rating or an ATPL; and

(ii) hold a category and class or type rating for the aircraft for which the authorization is sought.

(3) Knowledge— The applicant for a Category II or III pilot authorization shall have completed the theoretical knowledge instruction on the subjects as listed in IS 2:49 in the Schedule hereto.

(4) Experience— The applicant for a Category II or III pilot authorization shall have at least—

(*a*) 50 hours of night flight time as PIC;

(*b*) 75 hours of instrument time under actual or simulated instrument conditions; and

(*c*) 250 hours of cross-country flight time as PIC.

(5) Flight instruction—The applicant for a Category II or III pilot authorization shall have completed the flight instruction on the areas of operation listed in IS 2:49 in the Schedule hereto.

(6) Skill—The applicant for a Category II or III pilot authorization shall pass a skill test including the areas of operation listed in IS: 2:49 in the Schedule hereto.

(7) Validity—Subject to compliance with the requirements specified in this Part, the validity period of a Category II and III authorization is 6 months.

(8) Renewal—For the renewal of a Category II or III pilot authorization the pilot shall have completed a proficiency check including the areas of operation listed in IS 2:49 in the Schedule hereto.

(9) Re-issue—If the Category II or the Category III have been expired the applicant shall—

(*a*) have received refresher training from an authorized instructor with an endorsement that the person is prepared for the required skill test; and

(*b*) Pass the required skill test on the subjects listed in the IS 2:49.

Complex aeroplane endorsement

50.—(1) No person shall act as pilot in command of a complex aeroplane, including a seaplane, unless the person has—

(*a*) received and logged ground and flight training from an authorized instructor in a complex aeroplane or flight simulation training device that is representative of a complex aeroplane and has been found proficient in the operation and systems of the aeroplane; and

(*b*) received a one-time endorsement in the pilot's logbook from an authorized instructor who certifies that person is proficient to operate a complex aeroplane.

High performance aeroplane endorsement

51.—(1) No person shall act as pilot in command of a high performance aeroplane unless the person has—

(*a*) received and logged ground and flight training from an authorized instructor in a high performance aeroplane or flight simulation training device that is representative of a high performance aeroplane and has been found proficient in the operation and systems of the aeroplane; and

(*b*) received a one-time endorsement in the pilot's logbook from an authorized instructor who certifies that person is proficient to operate a high performance aeroplane.

High altitude aircraft endorsement

52.—(1) No person shall act as pilot in command of a pressurised aircraft capable of operating at high altitudes (an aircraft that has a service ceiling or maximum operating altitude, whichever is lower, above 25,000 feet MSL) unless the person has—

(*a*) received and logged ground training from an authorized instructor and received an endorsement in the logbook from the instructor certifying the person has satisfactorily accomplished ground training in at least in the following subjects—

(i) high-altitude aerodynamics and meteorology

(ii) respiration

(iii) effects, symptoms, and causes of hypoxia and any other high-altitude sickness;

(iv) duration of consciousness without supplemental oxygen

(v) effects of prolonged usage of supplemental oxygen

(vi) causes and effects of gas expansion and gas bubble formation

(vii) physical phenomena and incidents of decompression; and any other physiological aspects of high-altitude flight.

(*b*) received and logged flight training from an authorized instructor and received an endorsement in the logbook from the instructor certifying the person has satisfactorily accomplished flight training in an aircraft or in a flight simulation training device that is representative of a pressurized aircraft, in at least the following subjects—

(i) normal cruise flight operations while operating above 25,000 feet MSL;

(ii) proper emergency procedures for simulated rapid decompression without actually depressurising the aircraft; and

(iii) emergency descent procedures.

Division III—Student Pilots

General requirements

53.—(1) Age— The applicant for a student pilot authorization shall be not less than 16 years of age.

(2) Knowledge—The applicant for a student pilot authorization shall receive and log ground training from an authorized instructor on the following subjects—

(*a*) applicable regulations of these Regulations for the category of aircraft to be flown and under the Aviation (Operations) Regulations, 2013;

(*b*) airspace rules and procedures for the aerodrome where the student will perform solo flight; and

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

(3) Pre-solo flight instruction. Prior to conducting a solo flight, a student pilot shall have—

(*a*) received and logged flight training for the manoeuvres and procedures applicable to the aircraft category including flight training in those manoeuvres and procedures at night, if the solo flight is to be conducted at night.

(*b*) demonstrated satisfactory proficiency and safety, as judged by an authorized instructor, on the manoeuvres and procedures for the appropriate category, and class if applicable, of aircraft.

(4) Solo flight requirements: A student pilot shall not fly solo—

(*a*) unless holding at least a Class 2 Medical Certificate; and

(*b*) unless under the supervision of, or with the authority of, a licensed flight instructor, and

(*c*) in international flight unless there is a special or general arrangement between Malawi and the intended State of flight.

54. An applicant for a student pilot authorization in the aeroplane category shall receive training in the manoeuvres and procedures contained in IS 2:54 contained in the Schedule hereto. Student pilot manoeuvers and procedures for pre-solo flight training—aeroplane category

55. An applicant for a student pilot authorization in the helicopter category shall receive training in the manoeuvres and procedures contained in IS 2:55 contained in the Schedule hereto. Student pilot manoeuvers and procedures for pre-solo flight training—helicopter category

56. An applicant for a student pilot authorization in the powered-lift category shall receive training in the manoeuvres and procedures contained in IS 2:56 contained in the Schedule hereto. Student pilot manoeuvers and procedures for pre-solo flight training—powered-lift category

57. An applicant for a student pilot authorization in the airship category shall receive training in the manoeuvres and procedures contained in IS 2:57 contained in the Schedule hereto. Student pilot manoeuvers and procedures for pre-solo flight training—airship category

58. An applicant for a student pilot authorization in the balloon category shall receive training in the manoeuvres and procedures contained in IS 2:58 contained in the Schedule hereto. Student pilot manoeuvers and procedures for pre-solo flight training—ballon category

59. An applicant for a student pilot authorization in the glider category shall receive training in the manoeuvres and procedures contained in IS 2:59 contained in the Schedule hereto. Student pilot manoeuvers and procedures for pre-solo flight training—glider category

Division IV—Private Pilot Licence

60.—(1) Age— General requirements

(*a*) the applicant for a PPL in all categories other than balloon and glider shall be not less than 17 years of age;

(*b*) the applicant for a PPL in the balloon or glider category shall be not less than 16 years of age.

(2) Medical fitness: The applicant for a PPL shall hold a current Class 2 Medical Certificate as issued under these Regulations.

(3) Knowledge areas: The applicant for a PPL shall receive and log ground training from an authorized instructor on the following subjects appropriate to the privileges granted to the holder of a private pilot licence and appropriate to the category of aircraft to be included on the licence—

(*a*) air law—rules and regulations relevant to the holder of a PPL; rules of the air; appropriate air traffic services practices and procedures.

(*b*) aircraft general knowledge—

(i) principles of operation and functioning of powerplants, systems and instruments;

(ii) operating limitations of aeroplanes and the relevant category of aircraft and powerplants; 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 and balloon, physical properties of gases;

(*c*) flight performance and planning—

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

(ii) use and practical application of take-off or launching, landing and other performance data; and

(iii) pre-flight and en-route flight planning appropriate to private operations under VFR; preparation and filing of air traffic services flight plans; appropriate air traffic services procedures; position reporting procedures; altimeter setting procedures; operations in areas of high-density traffic;

(*d*) human performance—

(i) human performance relevant to the appropriate category of aircraft;

(ii) principles of threat and error management;

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

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

(*g*) operational procedures—

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

(ii) altimeter setting procedures;

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

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

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

(*h*) principles of flight—principles of flight relating to the appropriate category of aircraft;

(*i*) radiotelephony—communications procedures and phraseology as applied to VFR operations; action to be taken in case of communication failure.

(4) Knowledge testing—The applicant for a PPL shall—

(*a*) have received an endorsement for the knowledge test from an authorized instructor who—

(i) conducted the training on the knowledge subjects; and

(ii) certifies that the person is prepared for the required knowledge test.

(*b*) Pass the required written knowledge test on the knowledge areas listed in subregulation 3.

(5) Experience and flight instruction. An applicant for a PPL shall have completed the experience and flight instruction requirements appropriate to the aircraft category as specified in these Regulations.

(6) Skill. The applicant for a PPL shall—

(*a*) have received an endorsement from an authorized instructor who certifies that the person is prepared for the required skill test.

(*b*) have demonstrated by passing a skill test the ability to perform as PIC of an aircraft, within the appropriate category areas of operation described in the appropriate IS listed in these Regulations, with a degree of competency appropriate to the privileges granted to the holder of a PPL.

(*c*) have demonstrated the ability to—

(i) recognize and manage threats;

(ii) operate the aircraft within its limitations;

(iii) complete all manoeuvres with smoothness and accuracy;

(iv) exercise good judgment and airmanship;

(v) apply aeronautical knowledge; and

(vi) maintain control of the aircraft at all times in a manner such that the successful outcome of a procedure or manoeuvre is assured.

(7) Privileges. Subject to compliance with the requirements specified in these Regulations, the privileges of the holder of a PPL shall be to act, but not for remuneration, as PIC or co-pilot of an aeroplane aircraft within the appropriate aircraft category engaged in non-revenue flights.

(8) Validity. Subject to compliance with the requirements specified in these Regulations, the validity period of the licence is 5 years. For renewal or reissue, see regulation 11 under these Regulations.

Experience, flight instruction and skill test for the PPL— aeroplane category

61.—(1) Experience—

(*a*) The applicant for a PPL (A) shall have completed not less than 40 hours of flight time, or 35 hours if completed during a course of approved training, as pilot of aeroplanes, appropriate to the class rating sought. the Authority shall determine whether experience as a pilot under instruction in a flight simulation training device is acceptable as part of the total flight time of 40 or 35 hours, as the case may be: credit for such experience shall be limited to a total of 5 hours if completed under instruction in flight simulation training device approved by the Authority;

(*b*) the applicant shall have completed in aeroplanes 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 (150 NM) in the course of which full-stop landings at two difference aerodromes shall be made;

(*c*) the holder of pilot licences in other categories may be credited with 10 hours of the total flight time as PIC towards a PPL (A).

(2) Flight Instruction—

(*a*) the applicant for a PPL (A) shall receive and log not less than 20 hours of dual instruction from an authorized instructor on the subjects listed in IS 2:61 contained in the Second Schedule hereto. These 20 hours may include 5 hours completed in a flight simulation training device. The 20 hours of dual instruction shall include at least 5 hours of solo cross-country flight time with at least one cross-country flight totaling not less than 270 km (150 NM) in the course of which full-stop landings at two different aerodromes shall be made;

(*b*) 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—

(i) pre-flight operations, including mass and balance determination, aeroplane inspection and servicing;

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

(iii) control of the aeroplane by external visual reference;

(iv) flight at critically slow airspeeds; recognition of, and recovery from, incipient and full stalls;

(v) flight at critically high airspeeds; recognition of, and recovery from, spiral dives;

(vi) normal and cross-wind take-offs and landings;

(vii) maximum performance (short field and obstacle clearance take-offs, short-field landings;

(viii) flight by reference solely to instruments, including the completion of a level 180 degrees turn;

(ix) cross-country flying using visual reference, dead reckoning and, where available, radio navigation aids;

(x) emergency operations, including simulated aeroplane equipment malfunctions; and

(xi) operations to, from and transmitting controlled aerodromes, compliance with air traffic services procedures, radiotelephony procedures and phraseology;

(xii) as further specified in IS 2:61 contained in the Schedule hereto.

(*c*) if the privileges of the PPL (A) are to be exercised at night, the applicant shall have received 4 hours dual instruction in aeroplanes in night flying, including take-offs, landings and 1 hour of navigation.

(3) The requirements for the skill test for the PPL (A) are included in IS 2:61 contained in the Schedule hereto.

Experience, flight instruction and skill test for the PPL—helicopter category

62.—(1) Experience—

(*a*) the applicant for a PPL (H) shall have completed not less than 40 hours of flight time, or 35 hours if completed during a course of approved training, as a pilot of helicopters: the Authority shall determine whether experience as a pilot under instruction in a flight simulation training device is acceptable as part of the total flight time of 40 or 35 hours, as the case may be: credit for such experience shall be limited to a total of 5 hours if completed under instruction in a flight simulation training device approved by the Authority;

(*b*) the applicant shall have completed in helicopter 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 (100 NM) in the course of which landings at two different points shall be made;

(*c*) the holder of pilot licences in other powered aircraft categories may be credited with 10 hours of the total flight time as PIC towards a PPL (H).

(2) Flight Instruction—

(*a*) the applicant for a PPL (H) shall receive and log not less than 20 hours of dual instruction from an authorized instructor on the subjects listed in IS 2:62 contained in the Schedule hereto: these 20 hours may include 5 hours completed in a flight simulation training device. The 20 hours of dual instruction shall include at least 5 hours of solo cross-country flight time with at least one cross-country flight totaling not less than 180 km (100 NM) in the course of which landings at two different points shall be made;

(*b*) 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—

(i) recognize and manage threats and errors;

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

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

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

(v) recovery at the incipient stage from settling with power; recovery techniques from low-rotor rpm within the normal range of engine rpm;

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

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

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

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

(x) operations to, from and transmitting controlled aerodromes, compliance with air traffic services procedures, radiotelephony procedures and phraseology;

(xi) if the privileges of the PPL (H) are to be exercised at night, the applicant shall have received 4 hours dual instruction in helicopters in night flying, including take-offs, landings and 1 hour of navigation.

(3) The requirements for the skill test for the PPL (H) are included in IS 2:62 contained in the Schedule hereto.

Experience, flight instruction and skill test for the PPL—powered-lift category

63.—(1) Experience—

(*a*) the applicant for a PPL-Powered—Lift shall have completed not less than 40 hours of flight time as pilot of powered lift. The Authority should determine whether such experience as a pilot under instruction in a flight simulation training device is acceptable as part of the total flight time of 40 hours;

(*b*) when the applicant has flight time as a pilot of aircraft in other categories, the Authority should determine whether such experience is acceptable and if so, the extent to which the flight time in subregulation (1) (*a*) may be reduced;

(*c*) the applicant shall have completed in a powered-lift aircraft not less than 10 hours of solo flight time under the supervision of an authorized flight instructor, including five hours of solo cross-country flight time with at least one cross-country flight totaling not less than 270

km (150 NM) in the course of which full-stop landings at two different aerodromes shall be made.

(2) Flight Instruction—The applicant shall have received not less than 20 hours dual instruction from an authorized instructor in at least the following areas—

(*a*) recognize threat and error management;

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

(*c*) aerodrome and traffic operations, collision avoidance precautions and procedures;

(*d*) control of the powered lift by external visual reference;

(*e*) ground manoeuvring and run-ups; hover and rolling take-offs and climb out; hover and rolling approach and landings—normal, out of wind and slopping ground;

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

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

(*h*) emergency operations, including simulated powered-lift equipment malfunctions; power of reconversion to autorotation and autorotative approach, where applicable; transmission and interconnect driveshaft failure, where applicable; and

(*i*) operations to, from and transiting controlled aerodromes, compliance with air traffic services procedures, radiotelephony procedures and phraseology.

(3) The requirements for the skill test for the PPL—powered-lift category are included in IS 2:63 contained in the Schedule hereto.

Experience, flight instruction and skill test for the PPL—airship category

64.—(1) Experience—The applicant for a PPL—Airship shall have completed not less than 25 hours of flight time as pilot of airships including at least—

(*a*) three hours of cross-country flight training in an airship with a cross-country flight totaling not less than 45 kilometres (25 NM);

(*b*) five take-offs and five landings to a full stop at an aerodrome with each landing involving a flight in the traffic pattern of an aerodrome;

(*c*) three hours of instrument time; and

(*d*) five hours as pilot assuming the duties of the PIC under the supervision of the PIC.

(2) Flight Instruction—The applicant shall have received dual instruction from an authorized instructor in at least the following areas—

(*a*) pre-flight operations, including mass and balance determination, airships inspections and servicing;

(*b*) ground reference manoeuvres;

(*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 airships by external visual reference;

(*f*) take-offs and landings and go-around;

(*g*) maximum performance (obstacle clearance) take-offs;

(*h*) flight by reference solely to instruments, including the completion of a level 180 degree turn;

(*i*) navigation, cross-country flying using visual reference, dead reckoning and radio navigation aids;

(*j*) emergency operations (recognition of leaks), including simulated airship equipment malfunctions; and

(*k*) radiotelephony procedures and phraseology.

(3) The requirements for the skill test for the PPL-Airship are included in IS 2:64 contained in the Schedule hereto.

Experience, flight instruction and skill test for the PPL—balloon category

65.—(1) Experience—The applicant for a PPL–balloon shall have completed not less than 16 hours of flight time as pilot of balloons including at least 8 launches and accents, at least one of which must be solo.

(2) Flight Instruction—The applicant shall have received dual instruction in free balloons from an authorized instructor in at least the following areas—

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

(*b*) aerodrome operations, transiting controlled aerodromes, compliance with air traffic services procedures, radiotelephony procedures and phraseology;

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

(*d*) collision avoidance precautions;

(*e*) control of a free balloon by external visual references;

(*f*) recognition of and recovery from rapid descents;

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

(*h*) approaches and landings, including ground handling; and

(*i*) emergency procedures.

(3) The requirements for the skill test for the PPL-Balloon category are included in IS 2:65 contained in the Schedule hereto.

Experience, flight instruction and skill test for the PPL—glider category

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

(2) Flight instruction—The applicant shall have received dual instruction in gliders from an authorized instructor 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 cross-wind launches, approaches and landings;

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

(i) emergency procedures.

(3) Crediting of time in other aircraft categories. The holder of a pilot licence in the aeroplane category may be credited with 3 hours towards the 6 hours of flight time required for the glider licence.

(4) The requirements for the skill test for the PPL—glider category are included in the IS 2:66 contained in the Schedule hereto.

Division V—Commercial Pilot Licence

General requirements

67.—(1) Age—The applicant for a CPL shall be not less than 18 years of age.

(2) Medical fitness—The applicant for a CPL shall hold a current Class 1 Medical Certificate issued under these Regulations.

(3) Knowledge areas—The applicant for a CPL shall receive and log ground training from an authorized instructor on the following subjects appropriate to the privileges granted to the holder of a commercial pilot licence and appropriate to the category of aircraft to be included on the licence—

(*a*) air law—

(i) rules and regulations relevant to the holder of a CPL;

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

(iii) aircraft general knowledge;

(iv) principles of operation and functioning of power-plants, systems and instruments;

(v) operating limitations of the appropriate category of aircraft and powerplants; relevant operational information from the flight manual or other appropriate document;

(vi) use and serviceability checks of equipment and systems of appropriate aircraft;

(vii) maintenance procedures for airframes, systems and power-plants of appropriate aircraft;

(viii) for helicopters and powered-lift, transmission (power-trains) where applicable; and

(ix) for airships and balloons, physical properties and practical application of gases;

(*b*) 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 or launching, landing and other performance data;

(iii) pre-flight and en-route flight planning appropriate to commercial operations under VFR; preparation and filing of air traffic services flight plans; appropriate air traffic services procedures; and

(iv) in the case of helicopter and powered-lift, effects of external loading;

(*c*) human performance—

(i) human performance relevant to the appropriate aircraft type; and

(ii) principles of threat and error management;

(*d*) meteorology—

(i) interpretation and application of aeronautical meteorological reports, charts and forecasts; use of, and procedures for obtaining, meteorological information, pre-flight and in-flight; altimetry;

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

(iii) causes, recognition and effects of icing; frontal zone penetration procedures; hazardous weather avoidance;

(*e*) 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;

(iii) operation of air borne equipment; and

(iv) in the case of airships—

(A) use, limitation and serviceability of avionics and instruments necessary for the control and navigation;

(B) use, accuracy and reliability of navigation systems used in departure, en-route, approach and landing phases of flight, identification of radio navigation aids; and

(C) principles and characteristics of self-contained and external referenced navigation systems, operations of airborne equipment;

(*f*) operation procedures—

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

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

(iii) altimeter setting procedures;

(iv) appropriate precautionary and emergency procedures;

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

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

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

(*g*) principles of flight—principles of flight relating to the appropriate category of aircraft;

(*h*) radiotelephony—

(i) communication procedures and phraseology as applied to VFR operations; action to be taken in case of communication failure; and

(ii) as further specified in IS 2:67 contained in the Schedule hereto.

(4) Knowledge testing. The applicant for the CPL shall—

(*a*) have received an endorsement for the knowledge test from an authorized instructor who—

(i) conducted the training on the knowledge subjects; and

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

(*b*) pass the required knowledge test on the knowledge subjects listed in IS 2:67 contained in the Schedule hereto.

(5) Experience and flight instruction—An applicant for a CPL shall have completed the experience and flight instruction requirements appropriate to the aircraft category as specified in these Regulations.

(6) Skill—The applicant for a CPL shall—

(*a*) have received an endorsement from an authorized instructor who certifies that the person is prepared for the required skill test;

(*b*) have demonstrated by passing a skill test the ability to perform as PIC of an aeroplane, the areas of operation described in IS 2:67 contained in the Schedule hereto with a degree of competency appropriate to the privileges granted to the holder of a CPL, and to—

(i) operate the aeroplane within its limitations;

(ii) complete all manoeuvres with smoothness and accuracy;

(iii) exercise good judgment and airmanship;

(iv) apply aeronautical knowledge; and

(v) maintain control of the aeroplane at all times in a manner such that the successful outcome of a procedure or manoeuvre is never seriously in doubt.

(7) Privileges— Subject to compliance with the requirements specified in ththese Regulations, the privileges of the holder of a CPL shall be—

(*a*) to exercise all the privileges of the holder of a PPL in an aircraft within the appropriate aircraft category;

(*b*) to act as PIC in an aircraft within the appropriate aircraft category engaged in operations other than commercial air transportation;

(*c*) to act as PIC in commercial air transportation in an aircraft within the appropriate aircraft category certificated for single-pilot operation;

(*d*) to act as co-pilot in aircraft within the appropriate aircraft category required to be operated with a co-pilot; and

(*e*) for the airship category, to pilot an airship under IFR.

(8) Validity— Subject to compliance with the requirements specified in this Part, the validity period of the licence is 5 years. For renewal or reissue, see regulation 11 under these Regulations.

Experience, flight instruction and skill test for the CPL— aeroplane category

68.—(1) Experience—

(*a*) the applicant for a CPL (A) shall have completed not less than 200 hours of flight time, or 150 hours if completed during a CAA approved training course provided for in an Aviation (Approved Training Organization) Regulations,2013 as a pilot of aeroplanes, of which 10 hours may have been completed in a flight simulation training device;

(*b*) the applicant shall have completed in aeroplanes not less than—

(i) 100 hours as PIC or, in the case of a course of approved training, 70 hours as PIC;

(ii) 20 hours of cross-country flight time as PIC including a cross-country flight totaling not less than 540 km (300 NM) in the course of which full-stop landings at two different aerodromes shall be made;

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

(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 landings as PIC.

(*c*) the holder of a pilot licence in another category may be credited towards the 200 hours of flight time as follows—

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

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

(iii) 100 hours as PIC holding a CPL (H) on helicopters;

(*d*) the applicant for a CPL (A) shall hold a PPL (A) issued under this Chapter.

(2) Flight instruction—

(*a*) the applicant for a CPL (A) shall receive and log not less than 25 hours of dual instruction from an authorized instructor. These 25 hours may include 5 hours completed in a flight simulation training device.

(*b*) 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—

(i) recognize and manage threats and errors;

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

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

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

(v) flight at critically slow airspeeds; recognition of, and recovery from, incipient and full stalls;

(vi) flight with asymmetrical power for multi-engine class or type ratings;

(vii) flight at critically high airspeeds; recognition of, and recovery from, spiral dives;

(viii) normal and cross-wind take-offs and landings;

(ix) maximum performance (short field and obstacle clearance take-offs, short-field landings;

(x) basic flight manoeuvres and recovery from unusual attitudes by reference solely to basic flight instruments;

(xi) cross-country flying using visual reference, dead reckoning and radio navigation aids; diversion procedures

(xii) Abnormal and emergency procedures and manoeuvres including simulated aeroplane equipment malfunctions;

(xiii) operations to, from and transmitting controlled aerodromes, compliance with air traffic services procedures; and

(xiv) communication procedures and phraseology.

(*c*) if the privileges of the CPL (A) are to be exercised at night, the applicant shall have received 4 hours dual instruction in aeroplanes in night flying, including take-offs, landings and 1 hour of navigation.

(3) Skill test. The requirement for the skill test for the commercial pilot licence-aeroplane category are included in IS 2:68 contained in the Second Schedule hereto.

Experience, flight instruction and skill test for the CPL— helicopter category

69.—(1) Experience—

(*a*) the applicant for a CPL (H) licence shall have completed not less than 150 hours of flight time, or 100 hours if completed during an integrated course of approved training provided for in an Approved Training Organization Regulations, as a pilot of helicopters, of which 10 hours may have been completed in a flight simulation training device.

(*b*) the applicant shall have completed in helicopters 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;

(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 landings as PIC;

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

(i) 20 hours as PIC holding a PPL (A) in aeroplanes; or

(ii) 50 hours as PIC holding a CPL (A) in aeroplanes;

(*d*) the applicant for a CPL (H) shall hold a PPL (H) under these Regulations.

(2) Flight instruction—

(*a*) the applicant for a CPL (H) shall have received and logged not less than 30 hours of dual instruction in helicopters from an authorized flight instructor on the subjects listed in IS 2:71 contained in the Schedule hereto.

(*b*) 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—

(i) recognize and manage threats and errors;

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

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

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

(v) recovery at the incipient stage from settling with power; recovery techniques from low-rotor rpm within the normal range of engine rpm;

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

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

(viii) hovering out of ground effect; operations with external load, if applicable; flight at high altitude;

(ix) basic flight manoeuvres and recovery from unusual attitudes by reference solely to basic flight instruments;

(x) cross-country flying using visual reference, dead-reckoning and radio navigation aids; diversion procedures

(xi) abnormal and emergency procedures, including simulated helicopter equipment malfunctions, autorotative approach and landing; and

(xii) operations to, from and transmitting controlled aerodromes, compliance with air traffic services procedures, radiotelephony procedures and phraseology

(xiii) as further specified in IS 2:71 contained in the Second Schedule hereto.

(*c*) if the privileges of the licence are to be exercised at night, the applicant shall have received dual instruction in helicopters in night flying, including take-offs, landings and navigation.

(3) Skill test— The requirement for the skill test for the commercial pilot licence—helicopter category are included in IS 2:69 contained in the Schedule hereto.

Experience, flight instruction and skill test for the CPL— Powered-lift category

70.—(1) Experience—

(*a*) the applicant for a CPL powered-lift category shall have completed not less than 200 hours of flight time, or 150 hours if completed during a course of approved training provided for in an Aviation Training Organization under Regulations, as a pilot of aircraft: the Licensing Authority may determine whether experience as a pilot under instruction in a flight simulation training device is acceptable as part of the total flight time of 200 hours or 150 hours, as the case may be.

(*b*) the applicant shall have completed in a powered-lift aircraft not less than—

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

(ii) 10 hours in cross-country flying as pilot-in command including a cross-country flight totaling not less than 540 km (300 NM) in the course of which full stop landing 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 are to be exercised at night, 5 hours of night flight including 5 take-offs and landings as PIC;

(*c*) when the applicant has flight time as pilot of aircraft in other categories, the Authority may determine whether such experience is acceptable and if so, the extent to which the flight time requirements in subregulation (1) may be reduced.

(2) Flight instruction—The applicant shall have received dual instruction in powered-lift from an authorized instructor in at least the following areas to the level of performance required for the commercial pilot—

(*a*) recognize and manage threats and errors to minimize their negative effects;

(*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; hover and rolling take-offs and climb out; hover and rolling approach and landings - normal, out of wind and slopping ground; steep approaches;

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

(*g*) hovering out of ground effect; operations with external load, if applicable; flight at high altitude;

(*h*) basic flight manoeuvres and recovery from unusual attitudes by reference solely to basic flight instruments;

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

(*j*) emergency operations, including simulated powered-lift equipment malfunctions, where applicable; power of reconversion to autorotation; autorotative approach; transmission and interconnect driveshaft failure; and

(*k*) operations to, from and transiting controlled aerodromes, compliance with air traffic services procedures, radiotelephony procedures and phraseology.

(3) Skill test— The requirement for the skill test for the commercial pilot licence-powered-lift category are included in IS 2:70 contained in the Schedule hereto.

Experience, flight instruction and skill test for the CPL—airship category

71.—(1) Experience—

(*a*) the applicant shall have completed not less than 200 hours of flight time as a pilot;

(*b*) the applicant shall have completed not less than—

(i) 50 hours as a pilot in airships;

(ii) 30 hours as PIC or PIC under supervision in airships, to include not less than—

(A) 10 hours of cross-country flight time; and

(B) 10 hours of night flight;

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

(iv) 20 hours of flight training in airships on the areas of operation listed in subregulations (2).

(2) Flight instruction—The applicant shall have received dual instruction in airships from an authorized instructor 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, airships 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 airships by external visual reference;

(*f*) recognition of leak;

(*g*) normal take-offs and landings;

(*h*) maximum performance (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 applicable, 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*) communications procedures and phraseology.

(3) Skill test—The requirement for the skill test for the commercial pilot licence-airship category are included in IS 2:71 contained in the Schedule hereto.

Experience, flight instruction and skill test for the CPL— balloon category

72.—(1) Experience—The applicant shall have completed at least—

(*a*) 35 hours flight time as a pilot, including at least—

(i) 20 hours as a pilot of free balloons;

(ii) 10 flights in a free balloon; and

(iii) 2 flights in a free balloon as the pilot in command;

(*b*) 10 hours of flight training that includes at least 10 training flights in a free balloon on the areas of operation listed in subregulation (2) below, including at least—

(i) for a gas balloon rating—

(A) 2 training flights of 2 hours each in a gas balloon on the areas of operations appropriate to a gas balloon within 60 days prior to application for the rating;

(B) 2 flights performing the functions of PIC in a gas balloon on the appropriate areas of operation; and

(C) 1 flight involving a controlled ascent to 5,000 feet above the launch site;

(ii) for a hot air balloon rating—

(A) 3 training flights of 1 hour each in a balloon with an airborne heater on the areas of operation appropriate to a balloon with an airborne heater within 60 days prior to application for the rating;

(B) 2 solo flights in a balloon with an airborne heater on the appropriate areas of operations; and

(C) 1 flight involving a controlled ascent to 3,000 feet above the launch site.

(2) Flight instruction— The applicant shall have received dual instruction in balloons from an authorized instructor in at least the following areas to the level of performance required for the commercial pilot—

(*a*) recognize and manage threats and errors;

(*b*) technical subjects;

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

(*d*) pre-flight lesson on a manoeuvre to be performed in flight;

(*e*) aerodrome operations, transiting controlled aerodromes, compliance with air traffic services procedures, radiotelephony procedures and phraseology;

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

(*g*) collision avoidance precautions;

(*h*) control of a free balloon by external visual references;

(*i*) recognition of and recovery from rapid descents;

(*j*) navigation and cross-country flying using visual reference and dead reckoning;

(*k*) approaches and landings, including ground handling;

(*l*) emergency procedures; and

(*m*) post-flight procedures.

(3) Skill test. The requirement for the skill test for the commercial pilot licence-balloon category are included in IS 2:72 contained in the Schedule hereto.

Experience, flight instruction and skill test for the CPL—glider category

73.—(1) Experience—The applicant shall have completed at least—

(*a*) 25 hours flight time as a pilot in a glider and that flight time must include at least 100 flights in a glider as pilot in command, including at least—

(i) 3 hours of flight training or 10 training flight in gliders on the areas of operation listed in subregulation (2), and

(ii) 2 hours of solo flight that includes not less than 10 solo flights in gliders on the areas of operations listed in subregulation (2); or

(*b*) 200 hours of flight time as a pilot in either aeroplane, helicopter or powered-lift aircraft, and 20 flights in gliders as pilot in command, including at least—

(i) 3 hours of flight training or 10 training flights in gliders on the areas of operation listed in subregulation (2), and

(ii) 5 solo flights in a glider on the areas of operation listed in subregulation (2).

(2) Flight instruction—The applicant shall have received dual instruction in a glider from an authorized instructor in at least the following areas of operation to the level of performance required for a commercial pilot—

(*a*) recognize and manage threats and errors;

(*b*) pre-flight preparation;

(*c*) pre-flight procedures

(*d*) aerodrome and gliderport operations;

(*e*) launches and landings;

(*f*) performance speeds;

(*g*) soaring techniques;

(*h*) performance manoeuvres;

(*i*) navigation

(*j*) slow flight and stalls

(*k*) emergency procedures; and

(*l*) post-flight procedures.

(3) Skill test—The requirement for the skill test for the commercial pilot licence-glider category are included in IS 2:73 contained in the Schedule hereto.

Division VI—Multi-Crew Pilot Licence-Aeroplane

General requirements

74.—(1) Age—The applicant for the MPL shall be not less than 18 years of age.

(2) Medical fitness—The applicant for the MPL shall hold a current Class 1 Medical Certificate issued under this Part.

(3) Knowledge—The applicant for the MPL shall meet the requirements specified in subregulation 76 (3) for the ATPL appropriate to the aeroplane category.

(4) Knowledge testing—The applicant for an MPL shall—

(*a*) have received an endorsement for the knowledge test from an authorized instructor who—

(i) conducted the training on the knowledge subjects; and

(ii) certifies that the person is prepared for the required knowledge test.

(*b*) pass the required written knowledge test on the knowledge areas specified in subregulation 76 (3).

(5) Experience and flight instruction—The applicant shall have completed the experience and flight instruction requirements appropriate to the aircraft category as specified in these Regulations.

(6) Skill—The applicant for an MPL shall demonstrate the skills required for fulfilling all the required competency units in IS: 2:74 contained in the Schedule hereto as pilot flying and pilot not flying, to the level required to perform as a co-pilot of turbine-powered aeroplanes certificated for operation with a minimum crew of at least two pilots under VFR and IFR, and have been continuously assessed in the training progress of acquiring the following skills—

(*a*) recognize and manage threats and errors;

(*b*) smoothly and accurately, manually control the aeroplane within its limitations at all times, such that the successful outcome of a procedure or manoeuvre is assured;

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

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

(*e*) communicate effectively with other flight crew members and demonstrate the ability to effectively perform procedures for crew incapacitation, crew coordination, including allocation of pilot tasks, crew cooperation, adherence to standard operating procedures (SOPs) and use of checklists.

(7) Privileges—The privileges of the holder of a multi-crew pilot licence shall be as follows—

(*a*) subject to compliance with the requirements specified in these Regulatins, the privileges of the holder of a multi-crew pilot licence shall be—

(i) to exercise all the privileges of the holder of a private pilot licence in the aeroplane category provided the private pilot experience requirements of regulation 61 have been met;

(ii) to exercise the privileges of the instrument rating in a multi-crew operation; and

(iii) to act as co-pilot of an aeroplane required to be operated with a co-pilot.

(*b*) before exercising the privileges of the instrument rating in a single-pilot operation in aeroplanes, the licence holder shall have demonstrated an ability to act as pilot-in- command in a single-pilot operation exercised by reference solely to instruments and shall have met the instrument rating skill requirement specified in regulation 81 appropriate to the aeroplane category.

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

(i) completed in aeroplanes 70 hours, either as pilot-in-command, or made up of not less than 10 hours as pilot-in-command and the necessary additional flight time as pilot-in-command under supervision;

(ii) completed 20 hours of cross-country flight time as pilot-in-command, or made up of not less than 10 hours as pilot-in-command and 10 hours as pilot-in-command under supervision, including a cross-country flight totaling not less than 540 km (300 NM) in the course of which full-stop landings at two different aerodromes shall be made; and

(iii) met the requirements for the commercial pilot licence specified in subregulation 67 (3), 67 (6), 68 (1) (*b*) (with the exception of subregulation (*c*) (i) of this Regulation and regulation 68 (2) (*c*) appropriate to the aeroplane category.

(8) Validity. Subject to compliance with the requirements specified in these Regulations, the validity period of the licence is 5 years—For renewal or reissue, see regulation 11 under these Regulations.

Experience, flight instruction, and skill test for the multi-crew pilot licence—aeroplane category

75.—(1) Experience—The applicant shall have completed in an approved training course not less than 240 hours as pilot flying and pilot not flying of actual and simulated flight—

(*a*) the flight experience in actual flight shall include at least the experience for a PPL(A) in regulation 61, upset recovery training, night flying and flight by reference solely to instruments;

(*b*) in addition to meeting the provisions of subregulation (1) (*a*), the applicant shall have gained, in a turbine-powered aeroplane certificated for operations with a minimum crew of at least two pilots, or in a flight simulation training device approved for that purpose by the Authority, the experience necessary to achieve the advance level of competency defined in IS: 2:75 contained in the Schedule hereto.

(2) Flight instruction—The applicant shall have received dual flight instruction in all the competency units specified in IS: 2:75 to the level required for the issue of the multi-crew pilot licence, to include the competency units required to pilot under instrument flight rules.

(3) Skill test—The requirement for the skill test for the multi-crew pilot licence-aeroplane category are included in IS 2:75 contained in the Second Schedule hereto.

Division VII—Airline Transport Pilot Licence

General requirements

76.—(1) Age— The applicant for an ATPL shall be not less than 21 years of age.

(2) Medical fitness—The applicant for an ATPL shall hold a current Class 1 Medical Certificate issued under these Regulations.

(3) Knowledge—The applicant for an ATPL shall receive and log ground training from an authorized instructor on the following subjects appropriate to the privileges of the ATPL and to the category of aircraft intended to be included on the licence—

(*a*) air law—rules and regulations relevant to the holder of an ATPL; rules of the air; appropriate air traffic services practices and procedures;

(*b*) aircraft general knowledge—

(i) general characteristics and limitations of electrical, hydraulic, pressurisation and other aircraft systems; flight control systems, including autopilot and stability augmentation;

(ii) principles of operation, handling procedures and operating limitations of aircraft powerplants; effects of atmospheric conditions on engine performance; relevant operational information from the flight manual or other appropriate document;

(iii) operating procedures and limitations of appropriate aircraft; effects of atmospheric conditions on aircraft performance in accordance to the relevant operational information from the flight manual;

(iv) use and serviceability checks of equipment and systems of the relevant category of aircraft;

(v) flight instruments; compasses, turning and acceleration errors; gyroscopic instruments, operational limits and precession effects; practices and procedures in the event of malfunctions of various flight instruments and electronic display units;

(vi) maintenance procedures for airframes, systems and powerplants of appropriate aircraft;

(vii) for helicopter, and if applicable, powered-lift transmission (power-trains);

(*c*) flight performance, planning and loading—

(i) effects of loading and mass distribution on aircraft handling, flight characteristics and performance; mass and balance calculations;

(ii) use and practical application of take-off, landing and other performance data, including procedures for cruise control;

(iii) pre-flight and en-route operational flight planning; preparation and filing of air traffic services flight plans; appropriate air traffic services procedures; altimeter setting procedures;

(iv) in the case of helicopter or powered-lift, effects of external loading on handling;

(*d*) human performance—human performance including principles of threat and error management;

(*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;

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

(iii) causes, recognition and effects of icing; frontal zone penetration procedures; hazardous weather avoidance;

(iv) in the case of aeroplane and powered-lift, practical high altitude meteorology, including interpretation and use of weather reports, charts and forecasts; jetstreams;

(*f*) navigation—

(i) air navigation, including the use of aeronautical charts, radio navigation aids and area navigation systems; specific navigation requirements for long-range flights;

(ii) use, limitation and serviceability of avionics and instruments necessary for the control and navigation of aircraft;

(iii) use, accuracy and reliability of navigation systems used in departure, en-route, approach and landing phases of flight; identification of radio navigation aids;

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

(*g*) operational procedures—

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

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

(iii) precautionary and emergency procedures; safety practices;

(iv) operational procedures for carriage of freight and dangerous goods;

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

(vi) in the case of helicopter, and if applicable, powered-lift, settling with power; ground resonance; retreating blade stall; dynamic roll-over and other operational hazards; safety procedures, associated with flight under VFR;

(*h*) principles of flight—principles of flight relating to the appropriate aircraft category;

(*i*) radiotelephony—communication procedures and phraseology; action to be taken in case of communication failure;

(4) Knowledge testing—The applicant for the ATPL shall—

(*a*) have received an endorsement for the knowledge test from an authorized instructor who—

(i) conducted the training on the knowledge subjects; and

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

(*b*) pass the required written knowledge test on the knowledge subjects listed in subregulation (3) (*b*) of these Regulations.

(5) Experience and flight instruction. An applicant for an ATPL shall have completed the experience and flight instruction requirements appropriate to the aircraft category as specified in these Regulations.

(6) Skill:—The applicant for an ATPL shall—

(*a*) have received an endorsement from an authorized instructor who certifies that the person is prepared for the required skill test; and

(*b*) have demonstrated by passing a skill test the ability to perform, as PIC of an aircraft of the appropriate category required to be operated with a co-pilot, the following procedures and manoeuvres—

(i) pre-flight procedures, including the preparation of the operational flight plan and filing of the air traffic services flight plan;

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

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

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

(v) in the case of the aeroplane and powered-lift, procedures and manoeuvres for instrument flight as described in this Division, including simulated engine failure;

(vi) in the case of aeroplane, the applicant shall have demonstrated the ability to perform the procedures and manoeuvres described in this paragraph as PIC in a multi-engine aircraft;

(*c*) have demonstrated by passing a skill test, the ability to perform the areas of operation described in IS 2:77, IS 2:78, or IS 2:79 contained in the Schedule hereto, with a degree of competency appropriate to the privileges granted to the holder of an ATPL, and to—

(i) operate the aeroplane within its limitations recognize and manage threats and errors;

(ii) complete all manoeuvres with smoothness and accuracy smoothly and accurately manually control the aircraft within its limitations at all times, such that the successful outcome of a procedure or manoeuvre is assured;

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

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

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

(vi) communicate effectively with the other flight crewmembers and demonstrate the ability to effectively perform procedures for crew incapacitation, crew coordination, including allocation of pilot tasks, crew cooperation, adherence to standard operating procedures and use of checklists.

(7) Privileges: Subject to compliance with the requirements specified in this Regulation, the privileges of the holder of an ATPL shall be—

(*a*) to exercise all the privileges of the holder of a PPL and CPL of an aircraft within the appropriate aircraft category and class, if applicable;

(*b*) In the case of the aeroplane and powered-lift categories, to exercise the privileges of the holder of an IR; and

(*c*) to act as PIC and co-pilot in commercial air transportation in an aircraft of the appropriate category, and class if applicable.

(8) Validity: Subject to compliance with the requirements specified in this Regulations, the validity period of the licence is 5 years. For renewal or reissue, see regulation 11 under these Regulations.

Experience, flight instruction and skill test for the ATPL—aeroplane category

77.—(1) Experience—

(*a*) the applicant for an ATPL (A) shall have completed not less than 1500 hours of flight time as a pilot of aeroplanes of which a maximum of 100 hours may have been completed in a flight simulation training device. The applicant shall have completed in aeroplanes not less than—

(i) 250 hours, either as PIC, or made up by not less than 100 hours as PIC and the necessary additional flight time as co-pilot performing, under the supervision of the PIC, the duties and functions of a PIC; provided that the method of supervision employed is acceptable to the Authority;

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

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

(iv) 100 hours of night flight as PIC or as co-pilot;

(*b*) holders of a CPL (H) will be credited with 50% of their helicopter flight time as PIC towards the flight time required in (1);

(*c*) the applicant shall have completed a CRM course on the subjects listed in IS 2:75; and

(*d*) the applicant for an ATPL (A) shall be the holder of a CPL (A) with instrument and multi- engine rating issued under these Regulations.

(2) Flight instruction: The applicant for an ATPL (A) shall have received the dual flight instruction required for the issue of the CPL and the IR.

(3) Skill test: The requirement for the skill test for the ATPL—aeroplane category are included in IS 2:77 contained in the Schedule hereto.

Experience, flight instruction and skill test for the ATPL—powered-lift category

78.—(1) Experience—

(*a*) the applicant for an ATPL (H) shall have completed not less than 1000 hours of flight time as a pilot of helicopters of which a maximum of 100 hours may have been completed in a flight simulator. The applicant shall have completed in helicopters not less than—

(i) 250 hours, either as PIC, or made up by not less than 100 hours as PIC and the necessary additional flight time as co-pilot performing, under the supervision of the PIC, the duties and functions of a PIC; provided that the method of supervision employed is acceptable to the Authority;

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

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

(iv) 50 hours of night flight as PIC or as co-pilot;

(*b*) holders of a CPL (A) will be credited with 50 percent of their aeroplane flight time as PIC towards the flight time required in (1);

(*c*) the applicant shall have completed a CRM course on the subjects listed in IS 2:78; and

(*d*) the applicant for an ATPL (H) shall be the holder of a CPL (H) issued under this Regulation.

(2) Flight instruction:—The applicant for an ATPL (H) shall have received the dual flight instruction required for the issue of the CPL.

(3) Skill test:—The requirement for the skill test for the ATPL—helicopter category are included in IS 2:78 contained in the Schedule hereto.

79.—(1)—Experience—

Experience, flight instruction and skill test for the ATPL—powered-lift category

(*a*) the applicant for an ATPL—powered-lift category shall have completed not less than 1500 hours of flight time as a pilot of powered-lift. The Authority may determine whether experience completed under instruction in a flight simulator is acceptable as part of the total time of 1500 hours. The applicant shall have completed in powered-lift not less than—

(i) 250 hours, either as PIC, or made up by not less than 100 hours as PIC and the necessary additional flight time as co-pilot performing, under the supervision of the PIC, the duties and functions of PIC, in a method acceptable to the Authority;

(ii) 100 hours of cross-country flight time, of which not less than 50 hours shall be as PIC or as co-pilot performing under supervision of the PIC in a method acceptable to the Authority;

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

(iv) 25 hours of night time as PIC or co-pilot;

(*b*) the Authority may determine if pilot flight time in other aircraft categories may be credited toward meeting the 1500-hour flight time in subregulation (1) (*a*); and

(*c*) the applicant for an ATPL powered-lift shall be the holder of a CPL powered-lift issued under these Regulations.

(2) Flight instruction:—The applicant for an ATPL powered-lift category shall have received the dual flight instruction required for the issue of the CPL powered lift category and for the issue of the instrument rating.

(3) Skill test:—The requirements for the skill test for the ATPL—powered-lift category are included in IS 2:79 contained in the Schedule hereto.

Division VIII—Instrument Rating

General requirements

80.—(1) Age—The applicant for an IR shall be not less than 17 year of age.

(2) Medical fitness: The applicant for an IR shall hold either a Class 1 or 2 medical certificate issued under this Regulation as appropriate to the level of licence held. The applicant for an IR holding a PPL shall have established his/her hearing acuity on the basis of compliance with the hearing requirements for the issue of a Class 1 Medical Certificate.

(3) Knowledge: The applicant for an IR shall receive and log ground training from an authorized instructor on the following subjects—

(*a*) air law—rules and regulations relevant to flight under IFR; related air traffic services practices and procedures; (*b*) aircraft general knowledge for the aircraft category being sought—

(i) use, limitation and serviceability of avionics, electronic devices and instruments necessary for the control and navigation of aeroplanes under IFR and in instrument meteorological conditions; use and limitations of autopilot;

(ii) compasses, turning and acceleration errors; gyroscopic instruments, operational limits and precession effects; practices and procedures in the event of malfunctions of various flight instruments;

(*c*) flight performance and planning for the aircraft category being sought—

(i) pre-flight preparations and checks appropriate to flight under IFR;

(ii) operational flight planning; preparation and filing of air traffic services flight plans under IFR; altimeter setting procedures;

(*d*) human performance for the aircraft category being sought—

(i) human performance relevant to instrument flight in aircraft;

(ii) principles of threat and error management;

(*e*) meteorology for the aircraft category being sought—

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

(ii) causes, recognition and effects of icing; frontal zone penetration procedures; hazardous weather avoidance;

(iii) in the case of helicopter and powered-lift, effects of rotor icing;

(*f*) navigation for the aircraft category being sought—

(i) practical air navigation using radio navigation aids;

(ii) use, accuracy and reliability of navigation systems used in departure, en-route, approach and landing phases of flight; identification of radio navigation aids;

(*g*) operational procedures for the aircraft category being sought—

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

(ii) interpretation and use of aeronautical documentation such as AIP, NOTAM, aeronautical codes and abbreviations, and instrument procedure charts for departure, en-route, descent and approach;

(iii) precautionary and emergency procedures; safety practices associated with flight under IFR; obstacle clearance criteria;

(*h*) radiotelephony—communication procedures and phraseology as applied to aircraft operations under IFR; action to be taken in case of communication failure.

(4) Knowledge testing:—An applicant for an IR shall—

(*a*) have received an endorsement for the knowledge test from an authorized instructor who—

(i) conducted the training on the knowledge subjects;

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

(*b*) pass the required knowledge test on the knowledge subjects listed in subregulation 80 (3) above.

(5) Experience and flight instruction: An applicant for an IR shall have completed the experience and flight instruction requirements appropriate to the aircraft category as specified in this Regulation.

(6) Privileges: Subject to compliance with the requirements specified in this Regulation, the privileges of the holder of an IR shall be to pilot an aircraft of the appropriate category under IFR. Before exercising the privileges on multi-engine aircraft, the holder of the rating shall have complied with the requirements of subregulation (8) (*c*) of this Regulation.

(7) Validity: Subject to compliance with the requirements specified in this Regulation, the validity period of an IR is 1 year.

(8) Renewal—

(*a*) for the renewal of a single-engine instrument rating the applicant shall within the preceding 12 calendar months, complete a proficiency check on the subjects listed in IS 2:81 in the Schedule hereto;

(*b*) for the renewal of a multi-engine instrument rating the applicant shall within the preceding 12 calendar months, complete a proficiency check on the subjects listed in IS 2:81 in the Schedule hereto.

(*c*) if a pilot takes the proficiency check required in this section in the calendar month before or the calendar month after the month in which it is due, the pilot is considered to have taken it in the month in which it was due for the purpose of computing when the next proficiency check is due.

(9) Re-issue: If the instrument rating has been expired, the applicant shall—

(*a*) have received refresher training from an authorized instructor with an endorsement that the person is prepared for the required skill test; and

(*b*) pass the required skill test on the subjects listed in IS 2:81 as contained in the Schedule hereto.

Experience, flight instruction, skill test and proficiency check for the IR

81.—(1) Experience—

(*a*) the applicant for an IR shall hold a pilot licence with an aircraft category, and class rating if applicable, for the instrument rating sought.

(*b*) the applicant shall have completed not less than—

(i) 50 hours of cross-country flight time as PIC of aircraft in categories acceptable to the Authority, of which not less than 10 hours shall be in the aircraft category being sought; and

(ii) 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. The ground time shall be under the supervision of an authorized instructor.

(2) Flight instruction—

(*a*) the applicant for an IR shall have not less than 10 hours of the instrument flight time required in subregulation (1) (*b*) (ii) while receiving and logging dual instruction in aircraft from an authorized flight instructor.

(*b*) 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—

(i) 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;

(ii) pre-flight inspection, use of checklists, taxiing and pre-take-off checks;

(iii) procedures and manoeuvres for IFR operation under normal, abnormal and emergency conditions covering at least—

(A) transition to instrument flight on take-off;

(B) standard instrument departures and arrivals;

(C) en-route IFR procedures and navigation;

(D) holding procedures;

(E) instrument approaches to specified minima;

(F) nissed approach procedures; and

(G) landings from instrument approaches;

(iv) in flight manoeuvres and particular flight characteristics;

(*c*) if the privileges of the instrument rating are to be exercised on multi-engine aircraft, the applicant shall have received dual instrument flight instruction in such an aircraft from an authorized flight instructor. The instructor shall ensure that the applicant has operational experience in the operation of the aircraft solely by reference to instruments with one engine inoperative or simulated inoperative.

(3) Skill:—The applicant for an IR shall—

(*a*) have received an endorsement from an authorized instructor who certifies that the person is prepared for the required skill test.

(*b*) have demonstrated by passing a skill test the ability to perform the areas of operation described in IS 2:81 contained in the Schedule hereto with a degree of competency appropriate to the privileges granted to the holder of an IR, and to—

(i) recognize and manage threats and errors;

(ii) operate the aircraft within its limitations;

(iii) complete all manoeuvres with smoothness and accuracy;

(iv) exercise good judgment and airmanship;

(v) apply aeronautical knowledge;

(vi) maintain control of the aircraft at all times in a manner such that the successful outcome of a procedure or manoeuvre is assured;

(vii) understand and apply crew coordination and incapacitation procedures; and

(viii) communicate effectively with the other flight crewmembers;

(*c*) Have demonstrated by passing a skill test the ability to operate multi-engine aircraft solely by reference to instruments with one engine inoperative, or simulated inoperative, described in IS 2:81 contained in the Schedule hereto, if the privileges of the instrument rating are to be exercised on such aircraft.

(4) The skill test and proficiency check for the instrument rating is included in IS 2:81 contained in the Schedule hereto.

Division IX—Instructions for Pilot Licensing

General requirements

82.—(1) Application—

(*a*) this Regulation prescribes the requirements for the issuance of instructor licences, ratings or authorizations, the conditions under which those ratings and authorizations are necessary, and the privileges and limitations on those ratings and authorizations. The following instructor licences, ratings and authorizations are issued under this Regulation:

(*b*) flight Instructor licence—

(i) ground Instructor licence, with basic or advanced ratings; and

(ii) instructor Authorization for Flight Simulation Training.

Fllight instructor licence requirements, skill test and proficiency check

83.—(1) Age: The applicant for a flight instructor licence shall be of the appropriate age for the underlying licence to be held.

(2) Medical fitness: The applicant for a flight instructor licence shall have a Class 1 medical certificate.

(3) Knowledge—

(*a*) receive and log training from an authorized instructor and pass a flight instructor knowledge test on—

(i) the aeronautical knowledge areas for a student, private, commercial and airline transport pilot licences applicable to the aircraft category for which flight instructor privileges are sought; and

(ii) the aeronautical knowledge areas for the instrument rating applicable to the category for which instrument flight instructor privileges are sought.

(*b*) meet the requirements for fundamentals of knowledge instruction as listed in regulation 31.

(4) Experience: The applicant shall hold a licence with the aircraft category, and if applicable class and/or type rating, that is appropriate to the flight instructor rating sought as follows—

(*a*) for an instructor licence in the aeroplane category - hold either a CPL or ATPL aeroplane category with instrument rating and appropriate class and/ or type ratings;

(*b*) for an instructor licence in the powered-lift category - hold either a CPL or ATPL powered-lift category with instrument rating and as applicable, class or type rating;

(*c*) for an instructor licence in the helicopter category - hold either a CPL or ATPL helicopter category and any applicable class or type rating;

(*d*) for an instructor licence in the balloon category - hold a CPL balloon category with applicable class rating;

(*e*) for an instructor licence in the airship category - hold a CPL airship category and any applicable ratings;

(*f)* for an instructor licence in the glider category - hold a CPL glider category and any applicable ratings; and

(*g*) for an instructor instrument rating licence - hold an IR in the appropriate category of aircraft.

(5) Flight instruction: Receive flight instruction from an authorized instructor in the areas of—

(*a*) flight instructional techniques including demonstration, student practices, recognition and correction of common student errors; and

(*b*) have practised instructional techniques in those flight manoeuvres and procedures in which it is intended to provide flight instruction.

(6) Skill—

(*a*) receive a logbook endorsement from an authorized instructor to indicate that the applicant is proficient on the areas of operation listed in subregulation (*b*), appropriate to the flight instructor rating sought;

(*b*) pass the required skill test that is appropriate to the flight instructor licence sought on the areas of operation in IS 2:83 in an—

(i) aircraft that is representative of the category of aircraft, and if applicable class and/or type, for the aircraft rating sought; or

(ii) approved flight simulation training device that is representative of the category, and if applicable class and/or type of aircraft for the licence and rating sought, and used in accordance with an approved course at an ATO certified under the Aviation (Approved Training Organization) Regulation, 2013.

(7) Privileges, limitations and qualifications—

(*a*) a flight instructor is authorized within the limitations of that person's flight instructor licence, and pilot licence and ratings, to give training and endorsements that are required for, and relate to:

(i) a student pilot authorization;

(ii) a pilot licence;

(iii) a flight instructor licence;

(iv) a ground instructor licence;

(v) an aircraft category rating;

(vi) an aircraft class rating;

(vii) an instrument rating;

(viii) a proficiency check or recency of experience requirement;

(ix) a knowledge test; and

(x) a skill test.

(8) Validity: Subject to compliance with the requirements specified in this Regulation, the validity period of instructor licence is 2 years.

(9) Renewal: A flight instructor licence that has not expired may be renewed for an additional 24 calendar months if the holder—

(*a*) passes a skill test for—

(i) renewal of the flight instructor licence; or

(ii) an additional flight instructor rating; or

(*b*) presents to an Authority inspector—

(i) a record of training students that shows during the preceding 24 calendar months the flight instructor has endorsed at least five students for a skill test for a licence or rating, and at least 80 percent of those students passed that test on the first attempt;

(ii) a record that shows that within the preceding 24 calendar months, services as a company check pilot, chief flight instructor, company check airman, or flight instructor in a the Aviation (Operations) Regulations, 2013, or in a position involving the regular evaluation of pilots; or

(iii) a graduation certificate showing that the pilot has successfully completed an approved flight instructor refresher course consisting of ground training or flight training, or both, within the 90 days preceding the expiration month of his or her flight instructor licence.

(*c*) if a flight instructor accomplishes the renewal requirements within the 90 days preceding the expiration month of his or her flight instructor licence—

(i) the Authority shall consider that the flight instructor accomplished the renewal requirement in the month due; and

(ii) the Authority shall renew the current flight instructor rating for an additional 24 calendar months from its expiration date.

(*d*) a flight instructor may accomplish the skill test required by this subsection in an approved course conducted by an ATO certified under the Aviation (Approved Training Organization) Regulations, 2013.

(10) Re-issue. If the instructor licence has expired, the applicant shall—

(*a*) have received refresher training from an authorized instructor with an endorsement that the person is prepared for the required skill test; and

(*b*) pass the prescribed skill test.

(11) Additional flight instructor licences: An applicant for an additional flight instructor licence shall meet the requirements listed in this regulation that apply to the flight instructor rating sought.

(12) Flight instructor records: A flight instructor shall—

(*a*) sign the logbook of each person to whom that instructor has given flight training or ground training;

(*b*) maintain a record in a logbook or separate document that contains the following—

(i) the name of each person whose logbook or student pilot licence that instructor has endorsed for solo flight privileges, and the date of the endorsement; and

(ii) the name of each person that instructor has endorsed for a knowledge test or skill test, and a record of the kind of test, the date, and the results;

(*c*) retain the records required by this subjection for at least 3 years.

(13) Flight instructor limitations and qualifications. The holder of a flight instructor licence shall observe the following limitations and qualifications—

(*a*) hours of training: in any 24-consecutive-hour period, a flight instructor may not conduct more than 8 hours of flight training:

(*b*) required licence and ratings: a flight instructor may not conduct flight training in any aircraft for which the flight instructor does not hold a pilot licence and flight instructor licence with the applicable category and if applicable class or type rating;

(*c*) for instrument flight training or for training for a type rating not limited to VFR, an appropriate instrument rating on his or her flight instructor rating and pilot licence;

(*d*) limitations on endorsements: a flight instructor may not endorse the following—

(i) student pilot's licence or logbook for solo flight privileges, unless that flight instructor has—

(A) given that student the flight training required for solo flight privileges required by this Division;

(B) 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;

(C) given that 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

(D) endorsed the student pilot’s logbook for the specific make and model aircraft to be flown;

(ii) student pilot’s licence and logbook for a solo cross country flight, unless that flight instructor has determined that—

(A) 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

(B) the student has the appropriate solo cross country endorsement for the make and model of aircraft to be flown;

(iii) student pilot's licence and logbook for solo flight in a Class B airspace area or at an airport within Class B airspace unless that flight instructor has—

(A) given that student ground and flight training in that Class B airspace or at that airport; and

(B) determined that the student is proficient to operate the aircraft safely;

(iv) logbook of a pilot for a flight review, unless that instructor has conducted a review of that pilot in accordance with the requirements in regulation 3 (1) (*c*) of the Aviation (Operations) Regulations, 2013; or

(v) logbook of a pilot for an instrument proficiency check, unless that instructor has tested that pilot in accordance with the requirements of regulation 33 (2) of the Aviation (Operations) Regulations, 2013.

(*e*) training in a multiengine aeroplane or a helicopter: a flight instructor may not give training required for the issuance of a licence or rating in a multi-engine aeroplane or a helicopter, unless that flight instructor has at least 5 flight hours of PIC time in the specific make and model of multi-engine aeroplane or helicopter, as appropriate.

(*f*) qualifications of the flight instructor for training first-time flight instructor applicants—

(i) no flight instructor may provide instruction to another pilot who has never held a flight instructor licence unless that flight instructor holds a current ground or flight instructor licence with the appropriate rating, has held that licence for at least 24 months, and has given at least 40 hours of ground training; or

(ii) holds a current ground or flight instructor licence with the appropriate rating, and has given at least 100 hours of ground training in a course which has been approved by the Authority;

(iii) meets the eligibility requirements prescribed in regulation 31 under these Regulations;

(iv) for training in preparation for an aeroplane or helicopter rating, has given at least 200 hours of flight training as a flight instructor;

(v) for training in preparation for a glider rating, has given at least 80 hours of flight training as a flight instructor;

(*g*) prohibition against self endorsements: A flight instructor may not make any self-endorsement for a licence, rating, flight review, authorization, operating privilege, skill test, or knowledge test that is required by the Aviation (Personnel Licensing) Regulations, 2013;

(*h*) category II and Category III instructions: A flight instructor may not give training in Category II or Category III operations unless the flight instructor has been trained and tested in Category II or Category III operations as applicable.

(14) The skill test and proficiency check for flight instructor ratings in the categories of aeroplane, helicopter, powered-lift, airship, balloon, and glider, as well as instrument ratings (aeroplane, helicopter, and powered-lift) and additional type ratings are included in IS 2:83 contained in the Schedule hereto.

Instructor authorization for flight simulation training

84.—(1) Current and former holders of professional pilot licences, having instructional experience can apply for an authorization to provide flight instruction in a flight simulation training device, provided the applicant has at least 1 year experience as instructor in flight simulation training devices—

(*a*) skill: the applicant shall have demonstrated in a skill test, in the category and in the class or type of aircraft for which instructor authorization privileges are sought, the ability to instruct in those areas in which ground instruction is to be given;

(*b*) privileges: subject to compliance with the requirements specified in this Regulation, the privileges of the holder of an authorization are to carry out instruction in a flight simulation training device for the issue of a class or type rating in the appropriate category of aircraft;

(*c*) validity: subject to compliance with the requirements specified in this Regulation, the validity period of an instructor authorization for flight simulation training is 1 year;

(*d*) renewal: renewal of the authorization requires the successful completion of a proficiency check;

(*e*) re-issue: if the authorization has expired, the applicant must complete refresher training and successfully pass a skill test in the category and class or type of aircraft for which instructor authorization privileges are sought.

Ground instructor authorization

85.—(1) Age: the applicant for a ground instructor licence shall be at least 18 years of age.

(2) Knowledge—

(*a*) receive and log training from an authorized instructor and pass a knowledge test on the aeronautical knowledge areas appropriate to the aircraft category, for the licence and ratings below as applicable—

(i) for a basic rating, the knowledge for a student and private pilot licence as listed in these Regulations;

(ii) for an advanced rating, the student, private, commercial and airline transport pilot knowledge areas as listed in these Regulations;

(iii) for an instrument rating, the knowledge for the instrument rating as listed in these.

(*b*) meet the requirements for fundamentals of knowledge instructing as listed in regulation 31 under these Regulations.

(3) Privileges: The holder of a ground instructor licence may exercise the privileges appropriate to the licence and rating held—

(*a*) a person who holds a ground instructor licence with a basic rating is authorized to provide—

(i) ground training in the aeronautical knowledge areas required for the issuance of a student pilot authorization or private pilot licence or associated ratings;

(ii) ground training required for a private pilot flight review; and

(iii) a recommendation for a knowledge test required for the issuance of a private pilot licence.

(*b*) a person who holds a ground instructor licence with an advanced rating is authorized to provide—

(i) ground training in the aeronautical knowledge areas required for the issuance of any licence or rating;

(ii) ground training required for any flight review; and

(iii) a recommendation for a knowledge test required for the issuance of any licence.

(*c*) a person who holds an instrument ground instructor rating is authorized to provide—

(i) ground training in the aeronautical knowledge areas required for the issuance of an instrument rating;

(ii) ground training required for an instrument proficiency check; and

(iii) a recommendation for a knowledge test required for the issuance of an instrument rating;

(*d*) a person who holds a ground instructor licence is authorized, within the limitations of the licence and 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 subregulation (*a*) to (*c*) of this Regulation.

(4) Currency requirements: The validity period for a ground instructor licence is 5 years—

(*a*) The holder of a ground instructor licence may not perform the duties of a ground instructor unless, within the preceding 12 months—

(i) the person has served for at least 3 months as a ground instructor; or

(ii) the person has received an endorsement from an authorized ground or flight instructor certifying that the person has demonstrated satisfactory proficiency with the standards prescribed in this part for the authorization and rating.

Division X—Designated Pilot Examiners

Requirements and skill test

86.—(1) Age: An applicant for a designated pilot examiner shall be at least 21 years of age.

(2) Medical: An applicant for a designated pilot examiner shall have a Class 1 medical certificate.

(3) General eligibility: An applicant for a designated pilot examiner shall—

(*a*) hold at least the licence and/or class/type ratings as applicable for which examining authority is sought;

(*b*) hold at least the flight instructor ratings for which examining authority is sought or be serving in a comparable position as an air operator check airman or check pilot or comparable position in an Approved Training Organization;

(*c*) have a reputation for integrity and dependability in the industry and the community;

(*d*) have a good record as a pilot and flight instructor in regard to accidents, incidents, and violations; and

(*e*) have pilot and instructor licence/ratings that have never been revoked for falsification or forgery.

(4) Knowledge: The applicant for a designated pilot examiner shall pass a pre-designation knowledge test in the areas appropriate to the category of aircraft for which designation is sought.

(5) Skill test. The applicant for a designated pilot examiner shall pass a skill test conducted by an inspector of the Authority who holds a current and valid licence with appropriate category, and if applicable class and type ratings, in the areas of operation described in IS 2:86 contained in the Schedule hereto.

(6) Maintaining currency. After designation, a designated pilot examiner shall maintain currency by—

(*a*) attending initial and recurrent training provided by the Authority, and

(*b*) maintain a current and valid—

(i) pilot licence, and if applicable, class/type ratings appropriate to the designation;

(ii) flight instructor licence and ratings applicable to the designation; and

(iii) class 1 medical certificate.

(7) Privileges: Subject to compliance with the requirements specified in this Regulation, the privileges of the examiner's designation are to conduct skill tests and proficiency checks for a licence and rating(s) as listed on the designated pilot examiner's certificate of designation and identification card.

(8) Validity: Subject to compliance with the requirements specified in this Regulation, the validity period of an examiner's designation is 3 years.

(9) Renewal—

(*a*) Renewal will be at the discretion of the Authority;

(*b*) An applicant for renewal shall pass the appropriate skill test on the areas of operation listed in IS 2:86 in the Schedule hereto.

(10) Additional designations: When the Authority deems it necessary for a designated pilot examiner to receive additional designations, the designated pilot examiner—

(*a*) shall meet all the requirements in these Regulations for the designation;

(*b*) need not take an additional knowledge test provided the designation is within the same aircraft category.

(11) The requirements for the designation of a pilot examiner are included in IS 2:86 contained in the Schedule hereto.

Experience requirements for private pilot examiner (PPE)

87.—(1) Experience: PPE-Aeroplane Category. The applicant shall have at least—

(*a*) A CPL(A), appropriate class rating(s) and in IR(A);

(*b*) a valid flight instructor licence with an aeroplane category and appropriate class rating(s);

(*c*) 2,000 hours as PIC which includes at least—

(i) 1,000 hours in aeroplanes, of which 300 hours were accrued within the past year;

(ii) 300 hours in the class of airplane for which the designation is sought; and

(iii) 100 hours in aeroplanes at night;

(*d*) 500 hours as a flight instructor in aeroplane which includes at least 100 hours of flight instruction given in the class of aeroplane appropriate to the designation sought.

(2) Experience: PPE-Helicopter Category. The applicant shall have at least—

(*a*) a CPL(H), appropriate class rating(s);

(*b*) a valid flight instructor licence with a helicopter category and appropriate class rating(s);

(*c*) 1,000 hours as PIC which includes at least—

(i) 500 hours in helicopters, of which 100 hours were accrued within the past year; and

(ii) 250 hours in helicopters as appropriate for the designation sought;

(*d*) 200 hours as a flight instructor in helicopters, as appropriate for the designation sought.

(3) Experience: PPE-Powered-Lift Category. The applicant shall have at least—

(*a*) A CPL powered-lift category with an instrument powered-lift rating;

(*b*) A valid flight instructor licence with a powered-lift category;

(*c*) 2,000 hours as PIC which includes at least—

(i) 1,000 hours in powered-lift, of which 300 hours were accrued within the past year; and

(ii) 100 hours in powered-lift at night;

(*d*) 500 hours as a flight instructor in powered-lift.

(4) Experience: PPE-Airship Category. The applicant shall have at least—

(*a*) a CPL airship category and any applicable class rating(s).

(*b*) A valid flight instructor licence with an airship category and any applicable class rating(s).

(*c*) 1,000 hours as PIC which includes at least—

(i) 500 hours in airships, of which 200 hours were accrued within the past year; and

(ii) 50 hours in airships at night;

(*d*) 100 hours as a flight instructor in airships.

(5) Experience: PPE-Balloon Category. The applicant shall have at least—

(*a*) a CPL balloon category and applicable class rating(s);

(*b*) a valid flight instructor licence with a balloon category and appropriate class rating(s);

(*c*) 200 hours as PIC which includes at least—

(i) 100 hours in balloons; and

(ii) 20 hours in balloons in the class for which the designation is sought within the past year, including 10 flights in balloons of at least 30 minutes duration each;

(*d*) 50 hours as a flight instructor in balloons in the class for which the designation is sought, of which 10 hours were accrued within the past year.

(6) Experience: PPE-Glider Category. The applicant shall have at least—

(*a*) a CPL glider category rating;

(*b*) a valid flight instructor licence with a glider category rating;

(*c*) 500 hours as PIC which includes at least—

(i) 200 hours in gliders; and

(ii) 10 hours in gliders within the past year that includes at least 10 flights in gliders;

(*d*) 100 hours as a flight instructor in gliders.

Experience requirements for commercial and instrument rating Pilot Examiner (CIRE)

88.—(1) Experience: CIRE-Aeroplane Category. The examiner applicant shall have at least—

(*a*) a commercial pilot licence with an aeroplane category rating, appropriate class rating(s) and an Instrument -Aeroplane rating;

(*b*) a valid flight instructor certificate with an aeroplane category rating, the appropriate class rating(s) and an Instrument-Aeroplane rating;

(*c*) 2,000 hours as PIC, which includes at least—

(i) 1,000 hours in aeroplanes, of which 300 hours were accrued within the past year;

(ii) 500 hours in the class of aeroplane for which the designation is sought;

(iii) 100 hours at night in aeroplanes;

(iv) 100 hours of instrument flight time in actual or simulated conditions; and

(v) for authority to conduct skill tests in large or turbine-powered aeroplanes—

(A) 300 hours in large or turbine-powered aeroplanes, of which 50 hours are in the type of aeroplane for which designation is sought; and

(B) 25 hours for each additional type of large aeroplane for which designation is sought;

(*d*) 500 hours as a flight instructor in aeroplanes which include at least—

(i) 100 hours of flight instruction given in the class of aeroplane applicable to the designation sought; and

(ii) 250 hours of instrument flight instruction, of which 200 hours were given in aeroplanes.

(2) Experience: CIRE-Helicopter Category. The examiner applicant shall have at least—

(*a*) a commercial pilot licence with a helicopter category rating, appropriate class rating(s) and an Instrument -Helicopter rating;

(*b*) a valid flight instructor certificate with a helicopter category rating, the appropriate class rating(s) and an Instrument-Helicopter rating;

(*c*) 2,000 hours as PIC, which includes at least—

(i) 500 hours in helicopters, of which 100 hours were accrued within the past year;

(ii) 100 hours of instrument flight time in actual or simulated conditions.

(iii) for authority to conduct skill tests in large or turbine-powered aeroplanes—

(A) 100 hours in large helicopters, of which 50 hours are in the type of helicopter for which designation is sought; and

(B) 25 hours for each additional type of large helicopter for which designation is sought;

(*d*) 250 hours as a flight instructor in helicopters, which include at least—

(i) 100 hours of flight instruction given in the helicopters; and

(ii) 50 hours of instrument flight instruction in helicopters.

(3) Experience: CIRE-Powered-Lift Category. The examiner applicant shall have at least—

(*a*) a commercial pilot licence with a powered-lift category rating, any applicable class rating(s) and an Instrument -Powered-lift rating.

(*b*) a valid flight instructor certificate with a powered-lift category rating, any applicable class rating(s) and an Instrument-Powered-lift rating;

(*c*) 2,000 hours as PIC, which includes at least—

(i) 1,000 hours in powered-lifts, of which 300 hours were accrued within the past year;

(ii) 100 hours at night in powered-lifts;

(iii) 100 hours of instrument flight time in actual or simulated conditions; and

(iv) for authority to conduct skill tests in large or turbine-engine powered-lifts—

(A) 300 hours in large or turbine-engine powered-lifts, of which 50 hours are in the type of powered-lift for which designation is sought, and

(B) 25 hours for each additional type of large aeroplane for which designation is sought.

(*d*) 500 hours as a flight instructor in powered-lifts, which include at least—

(i) 250 hours of instrument flight instruction, of which 200 hours were given in powered-lifts.

Experience requirements commercial pilot examiner (CE)

89.—(1) Experience: CE-Helicopter Category. The examiner applicant for commercial pilot—

(*a*) a commercial pilot licence with a helicopter category rating;

(*b*) a valid flight instructor certificate with a helicopter category rating;

(*c*) 2,000 hours as PIC, which includes at least—

(i) 500 hours in helicopters, of which 100 hours were accrued within the past year;

(ii) for authority to conduct skill tests in large helicopters-

(iii) 100 hours in large helicopters, of which 50 hours are in the type of helicopter for which designation is sought; and

(iv) 25 hours for each additional type of large helicopter for which designation is sought;

(*d*) 250 hours as a flight instructor in helicopters, which include at least 50 hours of instrument flight instruction in helicopters.

(2) Experience: CE-Airship Category. The applicant shall have at least—

(*a*) a CPL with airship category rating and any applicable class rating(s);

(*b*) a valid flight instructor licence with an airship category and any applicable class rating(s).

(*c*) 1,000 hours as PIC which includes at least—

(i) 500 hours in airships, of which 200 hours were accrued within the past year; and

(ii) 50 hours in airships at night;

(*d*) 100 hours as a flight instructor in airships;

(3) Experience: CE-Balloon Category. The applicant shall have at least—

(*a*) a CPL balloon category and applicable class rating(s);

(*b*) a valid flight instructor licence with a balloon category and applicable class rating(s);

(*c*) 200 hours as PIC which includes at least—

(i) 100 hours in balloons; and

(ii) 20 hours in balloons in the class for which the designation is sought within the past year, including 10 flights in balloons of at least 30 minutes duration each;

(*d*) held a commercial pilot licence with balloon category rating and applicable class rating for at least 1 year prior to designation;

(*e*) 50 hours as a flight instructor in balloons in the class for which the designation is sought, of which 10 hours were accrued within the past year.

(4) Experience: CE-Glider Category. The applicant shall have at least—

(*a*) a CPL with glider category rating;

(*b*) a valid flight instructor licence with a glider category rating;

(*c*) 500 hours as PIC which includes at least—

(i) 250 hours in gliders; and

(ii) 20 hours in gliders within the past year that includes at least 50 flights in gliders;

(*d*) 200 hours as a flight instructor, including 100 hours of flight instruction given in gliders.

Experience requirements for airline transport pilot (ATPL) examiner (ATPE)

90.— (1) Experience: ATPE-Aeroplane Category. The examiner applicant shall have at least—

(*a*) an ATPL with an aeroplane category rating, appropriate class rating(s) and an Instrument-Aeroplane rating;

(*b*) a valid flight instructor certificate with an aeroplane category rating, the appropriate class rating(s) and an Instrument-Aeroplane rating;

(*c*) 2,000 hours as PIC, which includes at least—

(i) 1,500 hours in aeroplanes, of which 300 hours were accrued within the past year;

(ii) 500 hours in the class of aeroplane for which the designation is sought;

(iii) 100 hours at night in aeroplanes;

(iv) 200 hours in complex aeroplanes;

(v) 100 hours of instrument flight time in actual or simulated conditions;

(vi) for authority to conduct skill tests in large or turbine-powered aeroplanes—

(A) 300 hours in large or turbine-powered aeroplanes, of which 50 hours are in the type of aeroplane for which designation is sought; and

(B) 25 hours for each additional type of large aeroplane for which designation is sought;

(*d*) 500 hours as a flight instructor in aeroplanes which include at least—

(i) 100 hours of flight instruction given in the class of aeroplane applicable to the designation sought;

(ii) 250 hours of instrument flight instruction, of which 200 hours were given in aeroplanes; and

(iii) 150 hours flight instruction given for either a CPL(A) or ATPL(A) or an IR(A).

(2) Experience: ATPE-Helicopter Category. The examiner applicant shall have at least—

(*a*) an ATPL with a helicopter category rating, appropriate class rating(s) and an Instrument -Helicopter rating;

(*b*) a valid flight instructor certificate with a helicopter category rating, the appropriate class rating(s) and an Instrument-Helicopter rating;

(*c*) 2,000 hours as PIC, which includes at least—

(i) 1,200 hours in helicopters, of which 100 hours were accrued within the past year;

(ii) 100 hours of instrument flight time in actual or simulated conditions; and

(iii) for authority to conduct skill tests in large helicopters—

(A) 100 hours in large helicopters, of which 50 hours are in the type of helicopter for which designation is sought; and

(B) 25 hours for each additional type of large helicopter for which designation is sought;

(*d*) 250 hours as a flight instructor in helicopters, which include at least—

(i) 100 hours of flight instruction given in the helicopters; and

(ii) 50 hours of instrument flight instruction in helicopters.

(3) Experience: ATPE-Powered-Lift Category. The examiner applicant shall have at least—

(*a*) an ATPL with a powered-lift category rating, any applicable class rating(s) and an Instrument -Powered-lift rating;

(*b*) a valid flight instructor certificate with a powered-lift category rating, any applicable class rating(s) and an Instrument-Powered-lift rating;

(*c*) 2,000 hours as PIC, which includes at least—

(i) 1,500 hours in powered-lifts, of which 300 hours were accrued within the past year;

(ii) 100 hours at night in powered-lifts;

(iii) 100 hours of instrument flight time in actual or simulated conditions; and

(iv) for authority to conduct skill tests in large or turbine-engine powered-lifts—

(A) 300 hours in large or turbine-engine powered-lifts, of which 50 hours are in the type of powered-lift for which designation is sought; and

(B) 25 hours for each additional type of large aeroplane for which designation is sought.

(*d*) 500 hours as a flight instructor in powered-lifts, which include at least—

(i) 250 hours of instrument flight instruction, of which 200 hours were given in powered-lifts; and

(ii) 150 hours flight instruction given for either a CPL-powered-lift, ATPL - powered- lift or IR-powered-lift.

Experience requirements for instructor examiner (FIE)

91.—(1) The examiner applicant shall have at least—

(*a*) the requirements for a commercial examiner or a commercial instrument rating examiner designation, as appropriate for the category and class of aircraft pertinent to the FIE designation sought; and.

(*b*) have held a Commercial Examiner or Commercial and Instrument Rating Examiner designation for at least a year prior to designation as a FIE.

Part III—Flight Engineer Licence, Ratings, Instructors and Designated Flight Engineer Examiner Examiners

Division I—General

Application

92.—(1) This part prescribes the requirements for the issue, renewal and re-issue of a flight engineers licence and ratings and for designated flight engineer examiners.

General rule concerning flight engineer licences and ratings

93.—(1) A person shall not act as a flight engineer of an aircraft registered in Malawi unless a valid licence or a validation certificate is held showing compliance with the specifications of this Regulation and appropriate to the duties to be performed by that person.

(2) 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 this Regulation. This authorization will be limited in validity to the time needed to complete the specific flight.

(3) An applicant shall, before being issued with a flight engineer licence and class rating, meet such requirements in respect of age, knowledge, experience, skill, medical fitness and language proficiency as are specified for that licence or rating.

(4) An applicant for renewal or re-issue of an FE licence and class rating shall meet the requirements as are specified for the licence and rating in this Regulation.

Authority to act as a flight crewmember

94.—(1) A person shall not act as a flight crewmember of an aircraft registered in Malawi unless a valid licence or validation certificate is held showing compliance with the specifications of these Regulations and appropriate to the duties to be performed by that person.

(2) No person may act as a FE of an aircraft unless that person holds the appropriate FE licence and class rating for the aircraft to be flown.

Division II—Flight Engineer Licence, Class Rating, anf Experience Requirements

Flight engineer licence

95.—(1) Age: The applicant for a flight engineer licence and class rating shall be not less than 18 years of age.

(2) Medical: The applicant for a flight engineer licence and class rating shall have a Class 2 medical certificate.

(3) Knowledge: The applicant for a flight engineer licence and class rating shall receive and log ground training from an authorized instructor on the following subjects—

(*a*) air law—

(i) rules and regulations relevant to the holder of a flight engineer licence; rules and regulations governing the operations of civil aircraft pertinent to the duties of a flight engineer;

(*b*) aircraft general knowledge—

(i) basic principles of powerplants, gas turbines and/or piston engines, characteristics of fuels, fuel systems including fuel control, lubricants and lubrication systems, afterburners and injection systems, function and operation of engine ignition and starter systems.

(ii) principles of operation, handling procedures and operating limitations of aircraft powerplants effects of atmospheric conditions on engine performance;

(iii) airframes, flight controls, structures, wheel assemblies, brakes and anti-skid units, corrosion and fatigue life and identification of structural damage and defects;

(iv) ice and rain protection systems;

(v) pressurization and air-conditioning systems, oxygen systems;

(vi) hydraulic and pneumatic systems;

(vii) basic electrical theory, electric systems (AC and DC), aircraft wiring systems, bonding and screening;

(viii) principles of operation of instruments, compasses, autopilots, radio communication equipment, radio and radar navigation aids, flight management systems, displays and avionics;

(ix) limitations of appropriate aircraft;

(x) fire protection, detection suppression and extinguishing systems;

(xi) use and serviceability checks of equipment and systems of appropriate aircraft.

(*c*) flight performance and planning—

(i) effects of loading and mass distribution on aircraft handling, flight characteristics and performance; mass and balance calculations; and

(ii) use and practical application of performance data including procedures for cruise control;

(*d*) human performance—

(i) human performance and CRM relevant to the flight engineer, including principles of threat and error management.

(*e*) operational procedures—

(i) principles of maintenance procedures for the maintenance of airworthiness, defect reporting, pre-flight inspections, precautionary procedures for fuelling and use of external power; installed equipment and cabin systems;

(ii) normal, abnormal and emergency procedures; and

(iii) operational procedures for carriage of freight and dangerous goods;

(*f*) principles of flight—

(i) fundamentals of aerodynamics;

(*g*) radiotelephony—

(i) radiotelephony procedures and phraseology;

(h) navigation—

(i) fundamentals of navigation;

(ii) principles and operation of self-contained systems;

(i) meteorology—

(i) operational aspects of meteorology.

(4) Knowledge testing: The applicant for a FE shall—

(*a*) have received an endorsement for the knowledge test from an authorized instructor who—

(i) conducted the training on the knowledge subjects; and

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

(*b*) pass the required knowledge test.

(5) Experience—

(*a*) the applicant for a flight engineer licence and class rating 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, of which 50 hours may have been completed in a flight simulation training device approved by the Authority. This experience shall have been obtained—

(i) on an aeroplane for which a flight engineer is required; and

(ii) on an aeroplane that has at least three engines that are rated at least 800 horsepower each or the equivalent in turbine engine powered aircraft.

(*b*) the holder of a CPL/IR(A) or ATPL(A) may be credited with 30 hours towards the 100 hours of flight time;

(*c*) the applicant 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, in at least the following areas—

(i) normal procedures—

(A) pre-flight inspections;

(B) fuelling procedures, fuel management;

(C) inspection of maintenance documents;

(D) normal flight deck procedures during all phases of flight;

(E) crew coordination and procedures in case of crew incapacitation; and

(F) defect reporting;

(ii) abnormal and alternate (standby) procedures—

(A) recognition of abnormal functioning of aircraft systems; and

(B) use of abnormal and alternate (standby) procedures;

(iii) emergency procedures—

(A) recognition of emergency conditions; and

(B) use of appropriate emergency procedures.

(6) Skill: The applicant for a flight engineer licence and class rating shall—

(*a*) have received an endorsement from an authorized instructor who certifies that the person is prepared for the required skill test; and

(*b*) have demonstrated by passing the required skill test, the ability to perform as flight engineer of an aircraft, the duties and procedures described in subregulation (3) with a degree of competency appropriate to the privileges granted to the holder of a flight engineer licence, and to—

(i) use aircraft systems within the aircraft's capabilities and limitations;

(ii) exercise good judgment and airmanship;

(iii) apply aeronautical knowledge;

(iv) perform all the duties as part of an integrated crew with the successful outcome never in doubt; and

(v) communicate effectively with the other flight crewmembers;

(*c*) requirements for the skill test are given at IS 2:98 contained in the Schedule hereto.

(*d*) the use of a flight simulation training device for training or testing any of the required manoeuvres shall be appropriate to the task and approved by the Authority.

(7) Privileges: Subject to compliance with the requirements specified in this Regulationr, the privileges of the holder of a flight engineer licence and class rating shall be to act as flight engineer of any type of aircraft on which the holder has demonstrated a level of knowledge and skill.

(8) Validity: Subject to compliance with the requirements specified in this Regualtion, the validity period of the flight engineer licence and class rating is 5 years.

(9) Renewal: The Flight Engineer Licence may be renewed by presenting to the authority evidence of successfully passing a proficiency check on the areas of operation listed in IS: 2:98 contained in the Schedule hereto.

(10) Re-issue: If the Flight Engineer Licence has expired, the applicant shall have received refresher training acceptable to the Authority.

Flight engineer class ratings

96.—(1) The Authority may issue the following class ratings to be placed on a flight engineer's licence when the applicant completes the requirements in this Regulation for the rating sought—

(*a*) reciprocating engine powered;

(*b*) turbopropeller powered; and

(*c*) turbojet powered.

(2) Additional ratings: To be eligible for an additional class rating, an applicant shall—

(*a*) successfully complete an approved flight engineer training course that is appropriate to the additional class rating sought;

(*b*) pass the knowledge test that is appropriate to the class for which an additional rating is sought; and

(*c*) pass the skill test that is appropriate to the class for which an additional rating is sought.

Recent experience requirements

97.—(1) No person holding a flight engineer licence and class rating shall exercise the privileges of the flight engineer licence unless he/she has completed within the past 6 calendar months—

(*a*) at least 50 hours of flight time as a flight engineer, or

(*b*) completed a proficiency check.

Flight engineer: skill test and proficiency check

98.—(1) The requirements for the skill test and proficiency check for the flight engineer licence are included in IS 2:98 contained in the Schedule hereto.

Division III—Instructors for Flight Engineer Licences

Requirements for flight engineer instructor licence and class rating

99.—(1) Age: An applicant for a flight engineer instructor licence and class rating shall be at least 18 years of age.

(2) Medical: An applicant for a flight engineer instructor licence shall hold a Class 2 medical certificate.

(3) Knowledge—

(*a*) an applicant for a flight engineer instructor licence shall have met the instructor requirements in regulation 31 of these Regulations; and

(*b*) any additional requirements as may be specified by the Authority.

(4) Experience: The applicant for a flight engineer instructor licence and class rating shall hold at least a current and valid flight engineer licence and class rating for which the instructor licence is sought and have a minimum of 1,500 hours flight time as a flight engineer.

(5) Flight instruction: Received flight instruction from an authorized instructor in the areas of—

(*a*) flight instructional techniques including demonstration, student performance, student practices, recognition and correction of common student errors; and

(*b*) have practised instructional techniques in those flight manoeuvres and procedures in which it is intended to provide flight instruction.

(6) Privileges: The privileges of a flight engineer instructor licence and class rating are to give flight and ground instruction to flight engineer licence applicants and to endorse those applicants for a knowledge or skill test as applicable.

(7) Validity: Subject to compliance with the requirements specified in this Regulation, the validity period of the flight engineer instructor licence is 2 years.

(8) Renewal: A flight engineer instructor licence that has not expired may be renewed for an additional 24 calendar months if the holder presents to the Authority evidence that he/she has within the past 12 months preceding the expiry date—

(*a*) received refresher training acceptable to the Authority; or

(*b*) conducted at least one of the following parts of an approved course for a flight engineer licence or class rating;

(*c*) one simulator session of at least 3 hours; or

(*d*) one flight exercise of at least 1 hour including at least 2 take-offs and landings.

(9) Re-issue: If the flight engineer instructor licence has expired, the applicant shall—

(*a*) have received refresher training acceptable to the Authority; and

(*b*) pass a skill test on the areas of operation listed in IS 2:98 contained in the Schedule hereto.

Instructor authorization for flight simulation training

100.—(1) Current or former holders of flight engineer licences, having instructional experience may apply for an authorization to provide flight instruction in a flight simulation training device, provided the applicant has at least 1 year experience as instructor in flight simulation training devices—

(*a*) skill: the applicant shall have demonstrated in a skill test, in the category and in the class or type of aircraft for which instructor authorization privileges are sought, the ability to instruct in those areas in which ground instruction is to be given;

(*b*) privileges: subject to compliance with the requirements specified in this Regulation, the privileges of the holder of an authorization are to carry out instruction in a flight simulation training device for the issue of a class or type rating in the appropriate category of aircraft;

(*c*) validity: Subject to compliance with the requirements specified in this Regulation, the validity period of an instructor authorization for flight simulation training is 1 year;

(*d*) renewal: Renewal of the authorization requires the successful completion of a proficiency check;

(*e*) reissue: If the authorization has expired, the applicant must complete refresher training and successfully pass a skill test in the category and class or type of aircraft for which instructor authorization privileges are sought.

Division IV—Designated Flight Engineer Examiners

Requirements

101.—(1) Age: An applicant for a designated flight engineer examiner shall be at least 21 years of age.

(2) Medical: An applicant for a designated flight engineer examiner shall hold a Class 2 medical certificate.

(3) Eligibility. An applicant for a designated flight engineer examiner shall—

(*a*) hold at least the flight engineer licence and class rating for which examining authority is sought;

(*b*) have a minimum of 1,500 hours flight time as a flight engineer;

(*c*) have held a flight engineer instructor licence or company flight engineer check airman authorization for preferably at least 1 year;

(*d*) have a reputation for integrity and dependability in the industry and the community;

(*e*) have a good record as a flight engineer in regard to accidents, incidents, and violations;

(*f*) have flight engineer licence/class ratings and flight engineer instructor licence or check airman authorization that have never been revoked for falsification or forgery.

(4) Knowledge: The applicant for a designated flight engineer examiner shall pass a pre-designation knowledge test in the areas appropriate to the licence/class rating for which designation is sought.

(5) Skill test: The applicant for a designated flight engineer examiner shall pass a skill test on the items in IS 2:102 conducted by an inspector of the Authority who holds a current and valid flight engineer licence with appropriate class rating.

(6) Maintaining currency: After designation, a designated flight engineer examiner shall maintain currency by—

(*a*) attending initial and recurrent training provided by the Authority; and

(*m*) maintain a current and valid—

(i) flight engineer licence and applicable class rating; and

(ii) Class 1 medical certificate.

(7) Privileges. Subject to compliance with the requirements specified in this Regulation, the privileges of the flight engineer examiner's designation are to conduct skill tests and proficiency checks for a flight engineer licence and applicable class rating as listed on the designated flight examiner's certificate of designation and identification card.

(8) Validity: Subject to compliance with the requirements specified in this Regulation, the validity period of the designated flight engineer examiner's designation is 3 years.

(9) Renewal—

(*a*) renewal will be at the discretion of the Authority;

(*b*) an applicant for renewal shall pass the appropriate skill test on the areas of operation listed in IS 2:102 contained in the Schedule hereto.

(10) Additional designations: When the Authority deems it necessary for a designated flight engineer examiner to receive additional class rating designations, the designated flight engineer examiner shall meet all the requirements in this Regulations for the designation.

Skill test designated flight engineer examiners

102.—(1) The requirements for the skill test for designated flight engineer examiners is included in IS 2:102 contained in the Schedule hereto.

Part IV—Flight Navigator Licence

Division I—Flight Navigator Licence, Instructors and Designated Examiners

Application

103.—(1) This Part prescribes the requirements for the issue, renewal and re-issue of a flight navigator licence.

Authority to act as a flight crewmember

104.—(1) A person shall not act as a flight navigator of an aircraft registered in Malawi unless a valid licence is held showing compliance with the specifications of these Regulations and appropriate to the duties to be performed by that person.

(2) An applicant shall, before being issued with a flight navigator licence, meet such requirements in respect of age, knowledge, experience, skill, medical fitness and language proficiency as are specified for that licence.

(3) An applicant shall for renewal or re-issue of a flight navigator licence, meet the requirements as are specified for that licence in these Regulations.

Authority to act as a flight crewmember

105.—(1) A person shall not act as a flight crewmember of an aircraft registered in Malawi unless a valid licence is held showing compliance with the specifications of this Regulation and appropriate to the duties to be performed by that person.

(2) No person may act as the flight navigator of an aircraft unless that person holds the appropriate flight navigator licence.

Division II—Fight Navigator Licence

General requirements

106.—(1) Age: The applicant for a flight navigator licence shall be not less than 18 years of age.

(2) Medical: The applicant for a flight navigator licence shall have a Class 2 medical certificate.

(3) Knowledge: The applicant for a flight navigator licence shall receive and log ground training from an authorized instructor on the following subjects to the level of knowledge appropriate for the privileges of a flight navigator:

(*a*) air law—

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

(*b*) flight performance and planning—

(i) effects of loading and mass distribution on aircraft performance;

(ii) use of take-off, landing and other performance data including procedures for cruise control; and

(iii) pre-flight and en-route operational flight planning; preparation and filing of air traffic services flight plans; appropriate air traffic services procedures; altimeter setting procedures.

(*c*) human performance—human performance relevant to the flight navigator, including principles of threat and error management;

(*d*) meteorology—

(i) interpretation and practical 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; and

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

(*e*) navigation—

(i) dead-reckoning, pressure-pattern and celestial navigation procedures; the use of aeronautical charts, radio navigation aids and area navigation systems; specific navigation requirements for long-range flights;

(ii) use, limitation and serviceability of avionics and instruments necessary for the navigation of the aircraft;

(iii) use, accuracy and reliability of navigation systems used in departure, en-route and approach phases of flight; identification of radio navigation aids;

(iv) principles, characteristics and use of self-contained and external-referenced navigation systems; operation of airborne equipment;

(v) the celestial sphere including the movement of heavenly bodies and their selection and identification for the purpose of observation and reduction of sights; calibration of sextants; the completion of navigation documentation; and

(vi) definitions, units and formulae used in air navigation.

(*f*) operational procedures—

(i) interpretation and use of aeronautical documentation such as AIP, NOTAM, aeronautical codes, abbreviations, and instrument procedure charts for departure, en-route, descent and approach;

(*g*) principles of flight: principles of flight;

(*h*) radiotelephony: radiotelephony procedures and phraseology.

(4) Knowledge testing—

(*a*) an applicant for a flight navigator licence shall have received an endorsement for the knowledge test from an authorized instructor who—

(i) conducted the training on the knowledge subjects;

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

(*b*) pass the required knowledge test on the subjects listed in subregulation (3).

(5) Experience: The applicant for a flight navigator licence—

(*a*) shall present satisfactory evidence, such as a logbook, of the following experience—

(i) the applicant shall have completed in the performance of the duties of a flight navigator, not less than 200 hours of flight time acceptable to the Authority, in aircraft engaged in cross-country flights, using celestial and radio navigation and dead reckoning, including not less than 30 hours by night; and

(ii) the applicant shall produce evidence of having satisfactorily determined the aircraft's position in flight, and used that information to navigate the aircraft, as follows—

(A) by night-not less than 25 times by celestial observations; and

(B) by day-not less than 25 times by celestial observations in conjunction with self-contained or external-referenced navigation systems.

(*b*) may be credited with 30 hours of flight time as the holder of a pilot licence towards the 200 hours of flight time required in subregulation (5) (1).

(6) Skill: The applicant shall have demonstrated by passing the required skill test on the items in IS 2:107 the ability to perform as flight navigator of an aircraft with a degree of competency appropriate to the privileges granted to the holder of a flight navigator licence, and to—

(*a*) recognise and manage threats and errors;

(*b*) exercise good judgment and airmanship;

(*c*) apply aeronautical knowledge;

(*d*) perform all duties as part of an integrated crew; and

(*e*) communicate effectively with the other flight crewmembers.

(7) Privileges: Subject to compliance with the requirements specified in this Regulation, the privileges of the holder of a flight navigator licence shall be to act as flight navigator of any aircraft.

(8) Validity: Subject to compliance with the requirements specified in this Regulation, the validity period of the licence is 5 years.

(9) Recent experience requirements: No person holding a flight navigator licence shall exercise the privileges of the flight navigator licence unless he/she has completed within the past 6 calendar months—

(*a*) at least 30 hours of flight time as a flight navigator, or

(*b*) completed a proficiency check.

(10) Renewal of the flight navigator licence: For renewal of the licence, the applicant shall pass a proficiency check on the areas of operation in IS 2:107 contained in the Schedule hereto.

(11) Re-issue: If the Flight Navigator Licence has expired, the applicant shall have received refresher training acceptable to the Authority.

Flight navigator licence: skill test and proficiency check

107.—(1) The areas of operation for the skill test and proficiency check, are included in IS 2:107 contained in Schedule hereto.

Division III—Instructor Requirements for Flight Navigators

Requirements for flight navigator instructor licence

108.—(1) Age: An applicant for a flight navigator instructor licence shall be at least 18 years of age.

(2) Medical. An applicant for a flight navigator instructor licence shall hold a Class 2 medical certificate.

(3) Knowledge—

(*a*) an applicant for a flight navigator instructor licence shall have met the instructor knowledge requirements in regulation 31 of this Regulation; and

(*b*) meet any additional requirements as may be specified by the Authority.

(4) Experience: The applicant for a flight navigator instructor licence shall hold at least a current and valid flight navigator licence for which the instructor licence is sought and have a minimum of 1,500 hours flight time as a flight navigator.

(5) Flight instruction: Received flight instruction from an authorized instructor in the areas of—

(*a*) flight instructional techniques including demonstration, student performance, student practices, recognition and correction of common student errors; and

(*b*) have practised instructional techniques in those procedures in which it is intended to provide flight instruction.

(6) Privileges: The privileges of a flight navigator instructor licence are to give flight and ground instruction to flight navigator licence applicants and to endorse those applicants for a knowledge or skill test as applicable.

(7) Validity: Subject to compliance with the requirements specified in this Regulation, the validity period of the flight navigator instructor licence is 2 years.

(8) Renewal: A flight navigator instructor licence that has not expired may be renewed for an additional 24 calendar months if the holder presents to the Authority evidence that he/she has within the past 12 months preceding the expiry date—

(*a*) conducted at least two flight exercises in an approved course for a flight navigator licence or class rating in which the aircraft position was determined by use of celestial, ground based and electronic navigational systems; or

(*b*) received refresher training acceptable to the Authority.

(9) Re-issue. If the flight navigation instructor licence has expired, the applicant shall—

(*a*) have received refresher training acceptable to the Authority; and

(*b*) passed a skill test on the areas of operation listed in IS: 2:107 contained in the Schedule hereto.

Division IV—Designated Flight Navigator Examiners

Requirements

109.—(1) Age: An applicant for a designated flight navigator examiner shall be at least 21 years of age.

(2) Medical: An applicant for a designated flight navigator examiner shall hold a Class 1 medical certificate.

(3) Eligibility: An applicant for a designated flight navigator examiner shall—

(*a*) hold the flight navigator licence for which examining authority is sought;

(*b*) have a reputation for integrity and dependability in the industry and the community;

(*c*) have a good record as a flight navigator in regard to accidents, incidents, and violations; and

(*d*) have a flight navigator licence that has never been revoked for falsification or forgery.

(4) Knowledge: The applicant for a designated flight navigator examiner shall pass a pre-designation knowledge test in the areas appropriate to the licence rating for which designation is sought.

(5) Skill test: The applicant for a designated flight navigator examiner shall pass a skill test on the areas of operation listed in IS 2:110 conducted by an inspector of the Authority who holds a current and valid flight navigator licence.

(6) Maintaining currency: After designation, a designated flight navigator examiner shall maintain currency by—

(*a*) attending initial and recurrent training provided by the Authority; and

(*b*) maintain a current and valid—

(i) flight navigator licence; and

(ii) class 2 medical certificate.

(7) Privileges: Subject to compliance with the requirements specified in this Regulation, the privileges of the flight navigator examiner's designation are to conduct skill tests and proficiency checks for a flight navigator licence as listed on the designated flight navigator examiner's certificate of designation and identification card.

(8) Validity: Subject to compliance with the requirements specified in this Regulation, the validity period of the designated flight navigator examiner's designation is 3 years.

(9) Renewal—

(*a*) renewal will be at the discretion of the Authority;

(*b*) an applicant for renewal shall pass the appropriate skill test on the areas of operation listed in IS 2:110.

Skill test for designated flight navigator examiner

110.—(1) The requirements for a skill test for designated flight navigator examiners are included in IS 2:110 in the Schedule hereto.

Part VI—Aircraft maintenance Licencing, Instructors and Designated Examiners

Division I—General

Application

111.—(1) This Part prescribes the requirements for issuing the following licences and associated ratings and/or authorizations for—

(*a*) Aircraft Maintenance Engineers;

(*b*) Inspection Authorizations;

(*c*) Aviation Repairman.

Division II—Aircraft Maintenance Engineers (*AME*)

Applicability

112. The term "Aviation Maintenance Engineer" is used in this section, but under ICAO Annex 1, 4.2, the terms "Aircraft Maintenance Technicians and "Aircraft Maintenance Mechanic" are accepted with equal validity. The term "Licensed Mechanic" is used by other states where the maintenance function is performed by individuals not working for an Approved Maintenance Organisation (AMO).

Issuance of licence

113. This Division prescribes the requirements for issuance of an AME licence and associated ratings.

Eligibility requirements: general

114.—(1) An applicant for an AME licence and any associated rating shall—

(*a*) be at least 18 years of age;

(*b*) demonstrate the ability to read, write, speak, the Malawi English language, by reading and explaining appropriate maintenance publications and by writing defect and repair statements;

(*c*) comply with the knowledge, experience, and competency requirements prescribed for the licence and rating sought;

(*d*) pass all of the prescribed tests for the licence and rating sought, within a period of 24 months.

(2) A licensed AME who applies for an additional rating must meet the requirements of regulation 118 and, within a period of 24 months, pass the tests prescribed by regulation 117 and regulation 119 for the additional rating sought.

Rating

115.—(1) The following ratings are issued under this subpart—

(*a*) airframe;

(*b*) powerplant;

(*c*) avionics;

(*d*) other ratings as may be determined by the Authority.

Knowledge for the AME licence

116.—(1) The applicant for an aircraft maintenance engineer/mechanic licence shall have passed a general knowledge test covering at least the following areas—

(*a*) air law and airworthiness requirements: rules and regulations relevant to an aircraft maintenance technician licence holder including—

(i) applicable airworthiness requirements governing certification and continuing airworthiness of aircraft; and

(ii) approved aircraft maintenance organization procedures.

(*b*) natural science and aircraft general knowledge—

(i) basic mathematics;

(ii) units of measurement; and

(iii) fundamental principles and theory of physics and chemistry applicable to aircraft maintenance.

(*c*) aircraft engineering: characteristics and applications of the materials of aircraft construction including—

(i) principles of construction and functioning of aircraft structures;

(ii) fastening techniques;

(iii) powerplants and their associated systems;

(iv) mechanical, fluid, electrical and electronic power sources;

(v) aircraft instrument and display systems;

(vi) aircraft control systems; and

(vii) airborne navigation and communication systems.

(*d*) aircraft maintenance: tasks required to ensure the continuing airworthiness of an aircraft including—

(i) methods and procedures for the overhaul, repair, inspection, replacement, modification or defect rectification of aircraft structures, components and systems in accordance with the methods prescribed in the relevant Maintenance Manuals and the applicable requirements of airworthiness.

(*e*) human performance—

(i) human performance, including principles of threat and error management, relevant to the duties of an aircraft maintenance licence holder.

Knowledge requirements for the ratings

117.—(1) The applicant for an airframe rating shall pass a knowledge test covering at least the following areas—

(*a*) wood structures;

(*b*) aircraft covering;

(*c*) aircraft finishes;

(*d*) sheet metal and non-metallic structures;

(*e*) welding;

(*f*) assembly and rigging;

(*g*) airframe inspection;

(*h*) fuel systems;

(*i*) aircraft landing gear systems;

(*j*) hydraulic and pneumatic power systems;

(k) cabin atmosphere control systems;

(*l*) aircraft instrument systems;

(*m*) communication and navigation systems;

(*n*) aircraft fuel systems;

(*o*) aircraft electrical systems;

(*p*) position and warning systems;

(*q*) ice and rain control systems;

(*r*) fire protection systems.

(2) The applicant for a powerplant rating shall pass a knowledge test covering at least the following areas—

(*a*) reciprocating systems;

(*b*) turbine engines;

(*c*) engine inspection;

(*d*) engine instrument systems;

(*e*) engine fire protection systems;

(*f*) engine electrical systems;

(*g*) lubrication systems;

(*h*) ignition and starting systems;

(*i*) fuel metering;

(*j*) engine fuel systems;

(*k*) induction and engine airflow systems;

(*l*) engine cooling systems;

(*m*) engine exhaust and reverser systems;

(*n*) propellers; and

(*o*) auxiliary power units.

(3) The applicant for an avionics rating shall pass a knowledge test covering at least the following areas—

(*a*) aircraft electrical systems;

(*b*) aircraft instrument systems;

(*c*) automatic flight control systems;

(*d*) aircraft radio and radio navigation systems,

(*e*) aircraft navigation systems; and

(*f*) aircraft systems/components - avionics.

(4) The applicant shall pass each section of the test before applying for the skill tests prescribed by regulation 119.

Experience requirements

118.—(1) An applicant for an AME licence and associated ratings may qualify by either practical experience or through completion of approved training in an ATO.

(2) Practical experience. Each applicant for an AME licence and rating(s) relying on practical experience shall provide documentary evidence, acceptable to the Authority, of the following experience in the inspection, servicing and maintenance of aircraft or its components—

(*a*) airframe rating - 30 months;

(*b*) powerplant rating - 30 months;

(*c*) airframe and powerplant ratings - 48 months;

(*d*) avionics rating - 36 months;

(*e*) airframe, powerplant and Avionics ratings - 60 months.

(3) Approved training: Each applicant for an AME licence relying on completion of training in an Approved Training Organization shall provide documentary evidence, acceptable to the Authority, of the following training—

(*a*) airframe rating - 24 months;

(*b*) powerplant rating - 24 months;

(*c*) airframe and powerplant ratings - 30 months;

(*d*) avionics rating- 18 months in an ATO and 12 months practical work experience;

(*e*) airframe, Powerplant and Avionics ratings - 42 months in an ATO and 12 months practical work experience.

Skill requirement

119.—(1) Each applicant for an AME licence or rating must pass a skill test on the licence or rating that he/she seeks. The tests cover the applicant's basic skill in performing practical projects on the subjects covered by the knowledge test for the licence or rating, and shall contain at least the subjects in the Implementing Standard 2:119 contained in the Schedule appropriate to the licence or rating sought.

Privileges and limitations

120.—(1) Except as specified in subregulations (5) and (6) of this Regulation, a licensed AME may perform or supervise the maintenance, preventive maintenance , or modification of, or after inspection, approve for return to service, any aircraft, airframe, aircraft engine, propeller, appliance, component, or part thereof, for which he or she is rated, provided the licensed AME has—

(*a*) satisfactorily performed the work at an earlier date;

(*b*) demonstrated the ability to perform the work to the satisfaction of the Authority;

(*c*) received training acceptable to the Authority on the tasks to be performed; or

(*d*) performed the work while working under the direct supervision of a licensed AME or a licensed aviation repairman who is appropriately rated and has—

(i) had previous experience in the specific operation concerned; or

(ii) received training acceptable to the Authority on the task to be performed.

(2) Except as specified in subregulations (5) and (6) of this Regulation, a licensed AME with an airframe rating may after he/she has performed the 100-hour inspection required by the Aviation (Operations) Regulations, 2013, on an airframe, or any related part or appliance, and approve and return it to service.

(3) Except as specified in subregulations (5) and (6) , a licensed AME with a powerplant rating may perform the 100-hour inspection required by the Aviation (Operations) Regulation, 2013, on a powerplant or propeller or any related part or appliance, and approve and return it to service.

(4) Except as specified in subregulation (5) of this regulation, an licensed AME with an Avionics rating may inspect, repair, maintain, function test and return to service aircraft avionics systems and components.

(5) An AME with an airframe or powerplant or avionics rating may not—

(*a*) supervise the maintenance, preventive maintenance, or modification of, or approve and return to service, any aircraft, airframe, aircraft engine, propeller, appliance, component, or part thereof, for which he/she is rated unless he/she has satisfactorily performed the work concerned at an earlier date;

(*b*) exercise the privileges of the licence unless the licensed AME understands the current instructions for continued airworthiness and the maintenance instructions for the specific operation concerned;

(*c*) perform a major repair or major modification of a propeller;

(6) an AME with an Airframe or Powerplant rating may not—

(*a*) perform or supervise (unless under the direct supervision and control of an AOC holder that is authorized to perform maintenance, preventative maintenance, or modifications under an equivalent system in accordance with subregulation 60(i) in the Aviation (Air Operator Certification and Administration) Regulations, 2013, any repair or alteration of instruments.

(*b*) approve for return to service—

(i) any aircraft, airframe, aircraft engine, propeller, appliance, component, or part thereof after completion of a major alteration or major repair; or

(ii) any instrument after completion of any repair or alteration.

Duration of AME licence

121.—(1) Validity. The duration of the AME licence is five years.

(2) Renewal: An AME licence that has not expired may be renewed for an additional 5 years if the holder presents evidence to the Authority that he/she has within the past 24 months exercised the privileges of the licence.

(3) Re-issue: If the AME licence has expired, the applicant shall have received refresher training acceptable to the Authority.

Recent expreince requirements

122. A licensed AME may not exercise the privileges of his/her licence or rating unless, within the preceding 24 months—

(*a*) the Authority has found that he/she is able to do that work; or

(*b*) for at least 6 months within the preceding 24 months—

(i) served as an AME under his/her licence and rating;

(ii) technically supervised other AMEs;

(iii) provided aviation maintenance instruction or served as the direct supervisor of persons providing aviation maintenance instruction for an AME course or programme acceptable to the Authority;

(iv) supervized the maintenance, preventive maintenance, or alteration of any aircraft, airframe, aircraft engine, propeller, appliance, component, or part thereof; or

(v) been engaged in any combination of subregulation 122 (1)(*a*)(i) to 122 (1)(*a*)(iv) of this Regulation.

Display of licence

123. Each person who holds an AME licence shall keep it within the immediate area where he/she normally exercises the privileges of the licence and shall present it for inspection upon the request of the Authority or an authorized representative of the Director of Civil Aviation, or local law enforcement officer.

Division III—Inspection Authorizations

Application

124. This Division prescribes the requirements for issuance of inspection authorizations, and the conditions under which these authorizations are necessary.

Eligibility requirements: general

125.—(1) An applicant for an Inspection Authorization shall—

(*a*) hold a currently effective and valid AME licence with both an airframe and powerplant rating, each of which is currently effective and has been in effect for a total of at least 5 years;

(*b*) have been actively engaged, for at least the 2-year period before the date of application, in the maintenance of certificated aircraft and maintained in accordance with these Regulations;

(*c*) have a fixed base of operations at which the applicant may be located in person or by telephone during a normal working week but which need not be the place where the applicant will exercise inspection authority;

(*d*) have available the equipment, facilities, and inspection data necessary to properly inspect airframes, aircraft engines, propellers, or any related component, part, or appliance;

(*e*) pass a knowledge test that demonstrates the applicant's ability to inspect according to safety standards for approving aircraft for return to service after major and minor repairs, major and minor modifications, annual inspections, and progressive inspections, which are performed under the Aviation (Airworthiness) Regulations, 2013.

(2) an applicant who fails the knowledge test prescribed in subregulation (1) (*e*) of this Regulation may not apply for retesting until at least 90 days after the date he/she failed the test.

Knowledge requirements dor the IA

126.—(1) The applicant for the IA shall pass a knowledge test covering at least the following areas—

(*a*) certification procedures for products and parts;

(*b*) airworthiness standards - aircraft;

(*c*) airworthiness standards - rotorcraft;

(*d*) airworthiness directives;

(*e*) maintenance, preventive maintenance, rebuilding, and alteration;

(*f*) identification and registration marking;

(*g*) certification - maintenance licensing;

(*h*) general operating and flight rules;

(*i*) aircraft weight and balance.

Inspection authorization: duration

127.—(1) Each inspection authorization expires on June 31 of each year.

(2) An inspection authorization ceases to be effective whenever any of the following occurs—

(*a*) the authorization is surrendered, suspended, or revoked;

(*b*) the holder no longer has a fixed base of operation;

(*c*) the holder no longer has the equipment, facilities, and inspection data required by subregulation 125 (1)(*c*) and 125 (1) (*d*) for issuance of his/her authorization.

(3) The holder of an inspection authorization that is suspended or revoked shall return it to the Authority.

Renewal of authorization

128.—(1) To be eligible for renewal of an Inspection Authorization for a 1-year period, an applicant shall, within 90 days prior to the expiration of the authorization, present evidence to the Authority that the applicant still meets the requirements of regulation 125 and show that, during the current period of authorization, the applicant has—

(*a*) performed at least one annual inspection during each 3 month period the applicant held the authorization;

(*b*) performed inspections of at least two major repairs or major modifications for each 3 month period the applicant held the authorization;

(*c*) performed or supervized and approved at least one progressive inspection in accordance with standards prescribed by the Authority for each 12 month period the applicant held the authorization;

(*d*) performed any combination of subregulation (1)(*a*) to (1)(*c*);

(*e*) successfully completed an Inspection Authorization refresher course or series of courses acceptable to the Authority, of not less than 16 hours of instruction during the12-month period preceding the application for renewal; or

(*f*) passed a knowledge test administered by the Authority to determine that the applicant's knowledge of applicable regulations and standards is current.

(2) The holder of an inspection authorization that has been in effect for less than 3 months before the expiration date need not comply with subregulation (1)(*a*) to (1)(*c*).

Privileges and limitations

129.—(1) When exercising the privileges of an IA, the holder shall keep it available for inspection by the aircraft owner and the AME submitting the aircraft, repair, or alteration for approval (if any), and shall present it at the request of the Authority or an authorized representative of the Director, or at the request of any national, or local law enforcement officer.

(2) The holder of an Inspection Authorization (IA) with a current and valid AME licence may—

(*a*) inspect and approve for return to service any aircraft, airframe, aircraft engine, propeller appliance, component, or part thereof on any aircraft with a 5,700 kg maximum take-off weight or less, after completion of a major repair or major alteration performed in accordance with the Aviation (Airworthiness) Regulation, 2013, and done in accordance with technical data approved by the Authority;

(*b*) perform an annual inspection, or perform or supervise a progressive inspection, according to the Airworthiness Regulations, 2013 on any aircraft with a 5,700 kg maximum take-off weight or less, except those aircraft on a continuous maintenance programme, and approve the aircraft for return to service;

(*c*) the holder of an IA with a current and valid AME licence may not—

(i) exercise the privileges of the authorization unless he or she holds a current and valid AME licence with airframe and powerplant ratings;

(ii) inspect and approve for return to service any aircraft over 5,700 kg maximum take-off weight;

(iii) inspect and approve any airframe, aircraft engine, propeller, appliance, component, or part thereof, which is subject to a maintenance programme under the Airworthiness Regulations;

(iv) inspect and approve for return to service any aircraft maintained in accordance with a continuous maintenance programme approved under the Aviation (Air Operator Certification and Administration) Regulations, 2013;

(v) exercise any privilege of an Inspection Authorization whenever that person no longer—

(i) has a fixed base of operation; and

(ii) has access to the equipment, facilities, or inspection data required by regulation 125 (1)(*c*) and 125 (1)(*d*).

(vi) exercise the privileges of the authorization until he or she has notified the Authority in writing of any changes in the fixed base of operation and equipment, facilities or inspection data and received approval in writing from the Authority for the proposed change.

Division IV—Aviation Repairman

Applications

130.—(1) This Division prescribes the requirements for issuance of Aviation Repairman (AR) licences and ratings, and the conditions under which those licences and ratings are necessary.

(2) When employed by an air operator with the authorization to perform and approve for return to service maintenance under an equivalent system in the Aviation (Air Operator Certification and Administration) Regulations, 2013, an aviation repairman licence should correspond to the speciality shop or group in which they perform, supervise, or approve for return to service an aeronautical product or aircraft. For example, Hydraulic component overhaul, landing gear overhaul, special inspections, non-destructive testing, turbine disc overhaul, etc.

Aviation repairman licences: eligibility

131.—(1) An applicant for an aviation repair specialist licence and shall—

(*a*) be at least 18 years of age;

(*b*) demonstrate the ability to read, write, speak, and understand the English language by reading and explaining appropriate maintenance publications and by writing defect and repair statements;

(*c*) demonstrate a level of knowledge relevant to the privileges to be granted and appropriate to the duties to be performed;

(*d*) by specially qualified to perform maintenance on aircraft or components thereof, appropriate to the job for which he/she was employed;

(*e*) be employed for a specific job requiring those special qualifications by an approved maintenance organisation certificated under the Aviation (Approved Maintenance Organization) Regulations 2013 or an air operator certificated under the Aviation (Air Operator Certification and Administration) Regulations, 2013 that is required by its operating certificate or approved specific operating provisions to provide maintenance, preventive maintenance, or modifications to aircraft approved with a continuous maintenance programme according to its maintenance control manual;

(*f*) be recommended for certification by his employer, to the satisfaction of the Authority, as able to satisfactorily maintain aircraft or components, appropriate to the job for which he is employed;

(*g*) have either of the following—

(i) at least 24 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) completed formal training that is acceptable to the Authority and is specifically designed to qualify the applicant for the job on which the applicant is to be employed.

Ratings

132.—(1) The following ratings may be issued under this subpart—

(*a*) propeller;

(*b*) computer;

(*c*) instrument;

(*d*) accessory;

(*e*) components;

(*f*) welding;

(*g*) non-destructive Testing (NDT); and

(*h*) other as may be designated by the Authority.

(2) At no instance shall an aviation repairman licence be issued with an airframe and/or powerplant or avionics rating to circumvent the process of obtaining an AME licence.

(3) Ratings for an applicant employed by an approved maintenance organization shall coincide with the rating(s) issued at the approved maintenance organisation limited to the specific job for which the person is employed to perform, supervise, or approve for return to service.

(4) At no instance shall an aviation repairman licence be issued a rating in which the AMO has not been issued.

(5) Ratings for an applicant employed by an air operator shall coincide with the approved specific operating provisions and the approved maintenance control manual that identifies the air operator's authorizations limited to the specific job for which the person is employed to perform, supervise, or approve for return to service.

Aviation repairman licences: privileges and limitations

133.—(1) An aviation repairman specialist may perform or supervise the maintenance, preventive maintenance, or alteration of aircraft, airframes, aircraft engines, propellers, appliances, components, and parts appropriate to the designated speciality area for which the aviation repair specialist is licensed and rated, but only in connection with employment by an AMO approved under the Approved Maintenance Organization Regulations or an AOC holder that is authorized to perform maintenance, preventive maintenance, or modifications under an equivalent system in accordance with subregulation (60) (i) of the Aviation (Air Operator Certification and Administration) Regulations, 2013.

(2) An aviation repair specialist may not perform or supervise duties unless the aviation repair specialist understands the current instructions of the employing certificate holder and the instructions for continued airworthiness, which relate to the specific operations concerned.

(3) An aviation repair specialist licence must be surrendered to the Authority at the time the licence holder leaves the employ of the AMO or AOC holder.

Display of licence

134. Each person who holds an aviation repairman licence shall keep it within the immediate area where he/she normally exercises the privileges of the licence and shall present it for inspection upon the request of the Authority or an authorized representative of the Director of Civil Aviation or local law enforcement officer.

Division V —Instructors for Aircraft Maintenance Engineers Licences

Requirement for aircraft maintenance engineers instructor licence and rating

135.—(1) Age: An applicant for aircraft maintenance engineer licence and rating shall be at least 21 years of age.

(2) Knowledge—

(*a*) an applicant for aircraft maintenance engineer instructor licence shall have met the instructor requirements in regulation 31 of these Regulations; and

(*b*) any additional requirements as may be specified by the Authority.

(3) Experience: The applicant for an aviation mechanic instructor licence and rating shall hold at least a current and valid aircraft maintenance engineer licence and rating for which the instructor licence is sought and have a minimum of three years experience as an aircraft mechanic.

(4) Privileges: The privileges of aircraft maintenance engineer instructor licence are to give instruction to aircraft maintenance engineer licence applicants and to endorse those applicants for a knowledge or skill test as applicable.

(5) Validity: Subject to compliance with the requirements specified in this Regulation, the validity period of the aircraft maintenance engineer instructor licence is 2 years.

(6) Renewal: An aircraft maintenance engineer instructor licence that has not expired may be renewed for an additional 24 calendar months if the holder presents to the Authority evidence that he/she has within the past 12 months preceding the expiry date—

(*a*) conducted at least six exercises in an approved course for aircraft maintenance engineer licence or rating; or

(*b*) received refresher training acceptable to the Authority.

(7) Re-issue: If the aircraft maintenance engineer instructor licence has expired, the applicant shall have received refresher training acceptable to the Authority.

Division VI—Designated Maintenance Engineers Examiners

General requirements

136.—(1) Age: An applicant for a designated aircraft maintenance engineer examiner shall be at least 23 years of age.

(2) Medical: There are no medical requirements for an aircraft maintenance engineer examiner.

(3) General eligibility—

(*a*) show evidence of a high level of aeronautical knowledge in the subject areas for AME certification in both reciprocating and turbine engine aircraft;

(*b*) have held a valid AME with the ratings for which a designation is to issue for five years;

(*c*) have been actively exercising the privileges of that AME certificate in the previous three years;

(*d*) have a good record as an AME and a person engaged in the industry and community with a reputation for honesty and dependability;

(*e*) the applicant must have for test conducted using the skill test standard (STS) a fixed base of operation adequately equipped to test at least 25 percent of all level 1, level 2, level 3 skill elements listed in Objective 3 of each subject area in the STS for the General, Airframe and

Powerplant. Additionally, be equipped to perform all of the core competencies elements identified in Objective 2 of each subject area in the STS for General, Airframe and Powerplant ratings;

(*f*) the applicant must have a fixed base of operation; equipment and materials must be adequate for an applicant to demonstrate the basic skills of the rating sought;

(*g*) the applicant must have an airworthy aircraft, other aircraft, aircraft subassemblies, operational mock-ups, and other aids that may be used for testing;

(*h*) the applicant must have tools, equipment, material, current publications, and necessary apparatus required to complete a project assignment must be the type recommended by the aircraft manufactures or accepted in the aviation industry.

Knowledge

137.—(1) The applicant shall pass a pre-designation test on the following—

(*a*) air law and regulations for AME personnel;

(*b*) current practices for the fleet of aircraft to be utilized;

(*c*) best industry practices; and

(*d*) recent improvement in technology, testing and tooling.

Skill

138.—(1) The applicant shall be observed conducting a complete, actual skill test using the approved STS in a satisfactory manner.

(2) The applicant shall be observed completing the required documentation required by the Authority in a satisfactory manner.

Currency

139. After designation, a Maintenance Engineer examiner shall maintain currency by—

(*a*) attending initial and recurrent training conducted by the Authority; and

(*b*) maintaining a current and valid AME licence and applicable ratings;

(*c*) the AME examiner shall conduct at least 6 skill tests during any 12 calendar month period in order to the designation remain current;

(*d*) the AME examiner shall be observed by the Authority in the conduct of skill test at least once each 12 calendar months.

Privileges

140. The AME examiner may conduct skill test in accordance with the STS standards.

Validity

141. The AME examiner designation shall be valid for one year.

Renewal

142. The AME examiner designation may be renewed by Authority if—

(*a*) the need for the designation remains valid;

(*b*) the performance of the AME examiner has been satisfactory;

(*c*) The AME examiner has attended the AME examiner training conducted by the Authority in the previous 12 calendar months.

PART VII—AIR TRAFFIC CONTROLLER LICENCES, CATEGORIES AND RATINGS

Application

143. This Part prescribes the requirements for the issue, renewal and re-issue of an air traffic controller licence and ratings.

General

144.—(1) An applicant shall, before being issued with an air traffic controllers licence, meet such requirements in respect of age, knowledge, experience, skill, medical fitness and language proficiency as are specified for that licence or rating.

(2) An applicant shall for renewal or re-issue of a licence, rating or authorization meet the requirements as are specified for that licence, rating or authorization.

AIR TRAFFIC CONTROLLER LICENCE AND RATINGS

Student air traffic controller

145.—(1) The Authority shall take the appropriate measures to ensure that student air traffic controllers do not constitute a hazard to air navigation.

(2) Medical fitness: Authority shall not permit a student air traffic controller to receive instruction in an operational environment unless that student air traffic controller holds a current Class 3 Medical Certificate.

Air traffic controller licence

146.—(1) Age: The applicant for an air traffic controller licence shall be not less than 21 years of age.

(2) Medical: The applicant for an air traffic controller licence shall hold a Class 3 medical certificate issued under these Regulations.

(3) Knowledge: The applicant for an air traffic controller licence shall receive knowledge instruction through an approved training course on the knowledge areas appropriate to the holder of an air traffic controller licence—

(*a*) air law—rules and regulations relevant to the air traffic controller;

(*b*) air traffic control equipment— principles, use and limitations of equipment used in air traffic control;

(*c*) general knowledge— principles of flight; principles of operation and functioning of aircraft, powerplants and systems; aircraft performances relevant to air traffic control operations;

(*d*) human performance: including principles of threat and error management;

(*e*) meteorology— aeronautical meteorology; use and appreciation of meteorological documentation and information; origin and characteristics of weather phenomena affecting flight operations and safety; altimetry;

(*f*) navigation— principles of air navigation; principle, limitation and accuracy of navigation systems and visual aids;

(*g*) operational procedures—air traffic control, communication, radiotelephony and phraseology procedures (routine, non-routine and emergency); use of the relevant aeronautical documentation; safety practices associated with flight.

(4) Knowledge testing: An applicant for an air traffic controller licence shall—

(*a*) have received an endorsement for the knowledge test from an authorized instructor who—

(i) conducted the training on the knowledge areas; and

(ii) certifies that the person is prepared for the required knowledge test.

(*b*) pass the required knowledge test.

(5) Experience: The applicant shall have completed an approved training course and not less than three months' satisfactory service engaged in the actual control of air traffic under the supervision of an appropriately rated air traffic controller. The experience requirements specified for air traffic controller ratings in regulation 146 will be credited as part of the experience specified in this paragraph.

(6) Validity: Subject to compliance with the requirement specified in this Regulation, the validity period of the licence is 5 years. For renewal of the licence, see regulations under Division 4 of Part 1, of these Regulations.

Air traffic controller ratings

147.—(1) Air traffic controller ratings shall comprise the following categories—

(*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 surveillance control rating.

(2) Knowledge: The applicant for an air traffic controller rating shall receive knowledge instruction through an approved training course on the knowledge areas appropriate to the holder of an air traffic controller rating on the subjects as specified below for each rating sought—

(*a*) aerodrome control rating—

(i) aerodrome layout. physical characteristics and visual aids;

(ii) airspace structure;

(iii) applicable rules, procedures and source of information;

(iv) air navigation facilities;

(v) air traffic control equipment and its use;

(vi) terrain and prominent landmarks;

(vii) characteristics of air traffic;

(viii) weather phenomena; and

(ix) emergency 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) characteristics of air traffic and traffic flow.

(vii) weather phenomena.

(viii) emergency and search and rescue plans.

(*c*) approach control surveillance, approach precision radar control and area control surveillance ratings. The applicant shall meet the requirements specified in (*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 services, as appropriate, including procedures to ensure appropriate terrain clearance.

(3) Knowledge testing: An applicant for an air traffic controller rating shall—

(*a*) have received an endorsement for the knowledge test from an authorized instructor who—

(i) conducted the training on the knowledge areas; and

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

(*b*) pass the required knowledge test.

(4) Experience: The applicant for an air traffic controller licence shall have—

(*a*) satisfactorily completed an approved training course.

(*b*) provided, satisfactorily, under the supervision of an appropriately rated air traffic controller—

(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. 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.

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

(*d*) the experience specified under subregulation (*b*) (ii) shall have been completed within the 6-month period immediately preceding application.

(5) Skill: The applicant shall have demonstrated by passing the required skill test, at a level appropriate to the privileges being granted, the skill, judgment and performance required to provide a safe, orderly and expeditious control service, including the recognition and management of threats and errors.

(6) Privileges and limitations—

(*a*) subject to compliance with the requirements specified in these Regulations, the privileges of the holder of an air traffic controller licence with the following applicable rating(s) shall be—

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

(ii) 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;

(iii) approach control surveillance rating: to provide and/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;

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

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

(vi) area radar control surveillance rating: to provide and/or supervise the provision of area control service with the use of an ATS surveillance system, within the control area or portion thereof, for which the licence holder is rated;

(*b*) before exercising the privileges indicated in subregulation 147 (4), the licence holder shall be familiar with all pertinent and current information;

(*c*) a holder of an air traffic controller licence and ratings(s) shall not provide instruction in an operational environment unless the licence holder has received proper authorization from the Authority.

(7) Validity of ratings: A rating shall become invalid when an air traffic controller has ceased to exercise the privileges of the rating for a period of 6 months. A rating shall remain invalid until the controller's ability to exercise the privileges of the rating has been re-established.

Part VIII—Flight Operations Officer Licence, Instructors, and Designated Examiners

Division I—General

Application

148. This Part prescribes the requirements for the issue, renewal and re-issue of a flight operations officer licence, instructors for flight operations officer licences and designation of flight operations officer examiner.

General

149.—(1) An applicant shall, before being issued with a flight operations officer licence, meet such requirements in respect of age, knowledge, experience, skill, medical fitness and language proficiency as are specified for that licence.

(2) An applicant shall for renewal or re-issue of a licence meet the requirements as are specified for that licence.

Division II—Flight Operations Officer Licence

General requirements

150.—(1) Age: The applicant for a flight operations officer licence shall be not less than 21 years of age.

(2) Knowledge: The applicant for a flight operations officer licence shall receive and log training from an authorized instructor on following subjects appropriate to the privileges of the flight operations officer—

(*a*) air law—

(i) rules and regulations relevant to the holder of a flight operations officer licence; and

(ii) appropriate air traffic services practices and procedures.

(*b*) aircraft general knowledge—

(i) principles of operation of aeroplane powerplants, systems and instruments;

(ii) operating limitations of aeroplanes and powerplants; and

(iii) minimum equipment list.

(*c*) flight performance calculation, planning procedures and loading—

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

(ii) operational flight planning; fuel consumption and endurance calculations; alternate airport selection procedures; en-route cruise control; extended range operation;

(iii) preparation and filing of air traffic services flight plans; and

(iv) basic principles of computer-assisted planning systems.

(*d*) human performance— human performance relevant to dispatch duties, including principles of threat and error management.

(*e*) meteorology—

(i) Aeronautical meteorology; the moment of pressure systems; the structure of fronts, and the origin and characteristics of significant weather phenomena which affect take-off, en-route and landing conditions.

(ii) interpretation and application of aeronautical meteorological reports, charts and forecasts, codes and abbreviations; use of, and procedures for obtaining, meteorological information.

(*f*) navigation—principles of air navigation with particular reference to instrument flight.

(*g*) operational procedures—

(i) use of aeronautical documentation;

(ii) Operational procedures for the carriage of freight and dangerous goods;

(iii) Procedures relating to aircraft accidents and incidents; emergency flight procedures;

(iv) procedures relating to unlawful interference and sabotage of aircraft;

(*h*) principles of flight—principles of flight relating to the appropriate category of aircraft.

(*i*) radio communication—procedures for communicating with aircraft and relevant ground stations.

(3) The applicant for the Fight Operations Officer licence shall:

(*a*) have received an endorsement for the knowledge test from an authorized instructor who—

(i) conducted the training on the knowledge areas; and

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

(*b*) pass the required knowledge test.

(4) Experience—

(*a*) the applicant for a flight operations officer licence shall have gained the following experience—

(i) a total of 2 years' service in any one or in any combination of the capacities specified in (A) to (C) inclusive, provided that in any combination of experience the period serviced in any capacity shall be at least one year—

(A) a flight crewmember in air transportation; or

(B) a meteorologist in an organization dispatching aircraft in air transportation; or

(C) an air traffic controller; or a technical supervisor of flight operations officers or air transportation flight operations systems;

(ii) at least one year as an assistant in the dispatching of air transport;

(iii) have satisfactorily completed a course of approved training;

(*b*) the applicant 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.

(5) Skill. The applicant shall have demonstrated the ability, by passing a skill test on the subjects listed in IS 2:151 contained in the Schedule hereto—

(*a*) make an accurate and operationally acceptable weather analysis from a series of daily weather maps and weather reports; provide an operationally valid briefing on weather conditions prevailing in the general neighbourhood of a specific air route; forecast weather trends pertinent to air transportation with particular reference to destination and alternates;

(*b*) determine the optimum flight path for a given segment, and create accurate manual and/or computer generated flight plans;

(*c*) provide operating supervision and all other assistance to a flight in actual or simulated adverse weather conditions as appropriate to the duties of the holder of a flight operations officer licence;

(*d*) recognize and manage threats and errors.

(6) Privileges: Subject to compliance with the requirements specified in this Regulation, 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 in ICAO Annex 6, as contained in the Aviation (Operations) and (Air Operator Certification and Administration) Regulations, 2013.

(7) Validity: The validity period of the licence is 5 years. A licence shall become invalid when a flight operations officer has ceased to exercise the privileges of the licence for a period of 6 months. A licence shall remain invalid until the flight operations officer's ability to exercise the privileges of the licence has been re-established.

(8) Renewal: The Flight Operations Officer Licence may be renewed by presenting to the authority evidence of successfully passing a competency check on the areas of operation listed in IS: 2:151 in the Schedule hereto.

(9) Re-issue: If the Flight Operations Officer Licence has expired, the applicant shall have received refresher training acceptable to the Authority.

Skill test for the flight operations officer licence

151.—(1) Implementing Standard (IS) 2:151 contained in the Schedule hereto contains the list of operations included in the flight operations officer licence skill test.

Requirements for flight operations officer instructor licence

152.—(1) Age: An applicant for Flight Operations Officer instructor licence and rating shall be at least 21 years of age.

(2) Knowledge—

(*a*) an applicant for a Flight Operations Officer instructor licence shall have met the instructor requirements in regulation 31 of these Regulations; and

(*b*) any additional requirements as may be specified by the Authority.

(3) Experience: The applicant for a Flight Operations Officer instructor licence shall hold at least a current and valid Flight Operations Officer licence and have a minimum of three years experience as a Flight Operations Officer.

(4) Privileges: The privileges of a Flight Operations Officer instructor licence are to give instruction to Flight Operations Officer licence applicants and to endorse those applicants for a knowledge or skill test as applicable.

(5) Validity: Subject to compliance with the requirements specified in this Regulation, the validity period of the Flight Operations Officer instructor licence is 2 years.

(6) Renewal: A Flight Operations Officer instructor licence that has not expired may be renewed for an additional 24 calendar months if the holder presents to the Authority evidence that he/she has within the past 12 months preceding the expiry date—

(*a*) conducted at least six exercises in an approved course for a Flight Operations Officer licence; or

(*b*) received refresher training acceptable to the Authority.

(7) Re-issue: If the Flight Operations Officer instructor licence has expired, the applicant shall have received refresher training acceptable to the Authority.

Division III—Designated Examiners fpr Flight Operation Officers

General requirements

153.—(1) Age: An applicant for a flight operations officer examiner licence shall be at least 23 years of age.

(2) General eligibility—

(*a*) show evidence of a high level of aeronautical knowledge in the subject areas for the Flight Operations Officer (FOO) certification;

(*b*) have held a FOO licence for at least five years prior to the designation;

(*c*) have been actively exercising the privileges of the FOO licence in commercial air transport in the previous three years;

(*d*) have a good record as a FOO and a person engaged in the industry and community with a reputation for honestly and dependability;

(*e*) have satisfactorily completed the FOO examiner orientation programme with the Authority;

(*f*) the applicant must have available a test site that is fully capable of doing all items required for the proper dispatch of a commercial flight in accordance with the regulatory requirements: this may be the Flight Operations Office of an active commercial airline.

Knowledge

154.—(1) The applicant shall have passed a pre-designation test on the following—

(*a*) air law and regulations for FOO personnel;

(*b*) aircraft knowledge on the aircraft used for testing;

(*c*) flight performance calculation and planning procedures;

(*d*) human performance;

(*e*) meteorology;

(*f*) navigation;

(*g*) radio communication; and

(*h*) recent changes in technology to include fly by wire aircraft systems, GPS navigation, required navigation performance (RNP) requirements, TCAS, ADS-B, as well and Enhanced Wind Shear Systems.

Skill

155.—(1) The Authority shall observe the applicant conducting a complete actual FOO certification using the approved STS in a satisfactory manner.

(2) The applicant shall complete all required paper work for the certification as required by the Authority.

Currency

156.—(1) After designation, a FOO examiner shall maintain currency by

(2) Attending initial and recurrent training conducted by the Authority, and

(3) Maintaining a current and valid FOO licence.

(4) The FOO examiner shall conduct at least 6 skill tests during any 12 calendar month period in order for the designation to remain current.

(5) The FOO examiner shall be observed by the Authority in the conduct of a skill test at least once each 12 calendar months.

Privileges

157.—(1) The FOO examiner may conduct Skill test for the Flight Operation Officer licence in accordance with approved STS standard.

(2) The FOO examiner may conduct or monitor any portion of a computerised knowledge test.

Validity

158. The FOO examiner licence shall be valid for one year.

159. The FOO examiner designation may be renewed by the Authority if— Renewal

(*a*) the need for the designation remains valid;

(*b*) the performance of the examiner has been satisfactory; and

Part IX—Aeronautical Station Operator and Meterological Personnel

160.—(1) This Part prescribes the requirements for the issue, renewal or re-issue of an aeronautical station operator licence. Application

161.—(1) An applicant shall, before being issued with an aeronautical station operator licence, meet such requirements in respect of age, knowledge, experience, skill, medical fitness and language proficiency as are specified for that licence. General

(2) An applicant shall for renewal or re-issue of a licence, rating or authorization meet the requirements as are specified for that licence.

(3) Aeronautical meteorological personnel shall be trained and qualified in accordance with the requirements of the World Meteorological Organisation respecting the working arrangements between ICAO and WMO.

162.—(1) Age: The applicant for an aeronautical station operator licence shall be not less than 18 years of age. Aeronautical station operator licence

(2) Knowledge. The applicant for an aeronautical station operator licence shall receive and log ground training from an authorized instructor on the following subjects appropriate to the privileges of an aeronautical station operator—

(*a*) general knowledge: air traffic services provided within Malawi;

(*b*) operational procedures: radiotelephony procedures; phraseology; telecommunication network;

(*c*) rules and regulations: rules and regulations applicable to the aeronautical station operator;

(*d*) telecommunication equipment: principles, use and limitations of telecommunication equipment in an aeronautical station.

(3) Knowledge testing: An applicant for an aeronautical station operator licence shall—

(*a*) have received an endorsement for the knowledge test from an authorized instructor who—

(i) conducted the training on the knowledge areas; and

(ii) certifies that the person is prepared for the required knowledge test.

(*b*) pass the required knowledge test.

(4) Experience: The applicant for an aeronautical station operator licence shall have—

(*a*) satisfactorily completed an approved training course within the 12-month period immediately preceding application, and have served satisfactorily under a qualified aeronautical station operator for not less than 2 months; or

(*b*) satisfactorily served under a qualified aeronautical station operator for not less than 6 months during the 12-month period immediately preceding application.

(5) Skill. The applicant for an aeronautical station operator licence shall demonstrate, or have demonstrated, competency in—

(*a*) operating the telecommunication equipment in use; and

(*b*) transmitting and receiving radiotelephony messages with efficiency and accuracy.

(6) Privileges: Subject to compliance with the requirements specified in this Regulation, the privileges of the holder of an aeronautical station operator licence shall be to act as an operator in an aeronautical station. Before exercising the privileges of the licence, the holder shall be familiar with all pertinent and current information regarding the types of equipment and operating procedures used at that aeronautical station.

(7) Validity: The validity period of the licence is 5 years. A licence shall become invalid when an aeronautical station operator has ceased to exercise the privileges of the licence for a period of 6 months. A licence shall remain invalid until the aeronautical station operator's ability to exercise the privileges of the licence has been re-established.

(8) Renewal: An aeronautical station operator licence that has not expired may be renewed for an additional five years if the holder presents to the Authority evidence that he/she has within the past 6 months preceding the expiry date—

(*a*) be actively engaged in the duties of an aeronautical station operator; or

(*b*) received refresher training acceptable to the Authority.

(9) Re-issue: If the Aeronautical Station Operator licence has expired, the applicant shall have received refresher training acceptable to the Authority.

Part X—Parachute Rigger Licences Instructors and Designated Parachute Rigger Examiners

Application

163.—(1) This Part prescribes the requirements for issuance of a parachute rigger licences and ratings, and the conditions under which those licences and ratings are necessary.

Eligibility requirements: general

164. To be eligible for a parachute rigger licence, a person shall be—

(*a*) a at least 18 years of age.

(*b*) able to read, speak, write, and understand English language, as required by the Authority.

(*c*) comply with the sections of this subpart that apply to the licence and type rating he or she seeks.

Licence required

165.—(1) No person may pack, maintain, or alter any personnel-carrying parachute intended for emergency use in connection with civil aircraft of Malawi unless he or she holds an appropriate current licence and type rating issued under this Part and complies with this Part.

(2) Except as allowed by subregulation (3) of this Regulation, no person may pack, maintain, or alter any main parachute of a dual parachute pack to be used for intentional jumping from a civil aircraft of Malawi unless he or she has an appropriate valid licence issued under this Part.

(3) A person who does not hold a licence may pack the main parachute of a dual parachute pack that is to be used by him or her for intentional jumping.

(4) Each person who holds a parachute rigger licence shall present it for inspection upon the request of the Authority or an authorized representative of the Director of Civil Aviation.

(5) The following parachute rigger licences are issued under this part—

(*a*) senior parachute rigger.

(*b*) master parachute rigger.

(6) Regulations 171 to 174 do not apply to parachutes packed, maintained, or altered for the use of the armed forces.

Senior parachute rigger licence-experience, knowledge, and skill requirements

166.—(1) An applicant for a senior parachute rigger licence shall—

(2) Present evidence satisfactory to the Authority that he or she has packed at least 20 parachutes of each type for which he or she seeks a rating, in accordance with the manufacturer's instructions and under the supervision of a licensed parachute rigger holding a rating for that type or a person holding an appropriate military rating.

(3) Pass a knowledge test, with respect to a parachute applicable to at least one type parachute appropriate to the type rating sought, on—

(*a*) construction, packing, and maintenance;

(*b*) the manufacturer's instructions; and

(*c*) the regulations of this Part.

(4) Pass skill test showing the ability to pack and maintain at least one type of parachute appropriate to the type rating sought. Requirements for the skill test are contained in IS 2:166 contained in the Schedule hereto.

Master parachute rigger licence-experience, kowledge, and skill requirements

167.—(1) An applicant for a master parachute rigger licence shall meet the following requirements—

(*a*) present evidence satisfactory to the Authority of at least 3 years of experience as a parachute rigger and having satisfactorily packed at least 100 parachutes of each of two types appropriate to type ratings held, in accordance with the manufacturer's instructions—

(i) while a licensed and appropriately rated senior parachute rigger; or

(ii) while under the supervision of a licensed and appropriately rated parachute rigger or a person holding appropriate military ratings.

(iii) an applicant may combine experience specified in subregulation (1) (*a*) and (1)(*b*) to meet the requirements of this Regulation;

(*b*) if the applicant is not the holder of a senior parachute rigger licence, pass a knowledge test, with respect to parachutes appropriate to the type rating sought, on—

(i) their construction, packing, and maintenance;

(ii) the manufacturer's instructions; and

(iii) the regulations of this part.

(*c*) pass skill test showing the ability to pack and maintain two types of parachutes appropriate to the type ratings sought: requirements for the skill test are contained in IS 2:167 contained in the Schedule hereto.

Type ratings

168.—(1) The following type ratings are issued under this subpart—

(*a*) seat;

(*b*) back;

(*c*) chest; and

(*d*) lap.

(2) The skill test requirements for a type rating are contained in IS 2:168 contained in the Schedule hereto.

(3) The holder of a senior parachute rigger licence who qualifies for a master parachute rigger licence is entitled to have placed on the senior parachute rigger licence the ratings that were on the parachute rigger licence.

Additional type ratings: requirements

169.—(1) A licensed parachute rigger who applies for an additional type rating shall—

(*a*) present evidence satisfactory to the Authority of having packed at least 20 parachutes of the type rating sought, in accordance with the manufacturer's instructions and under the supervision of a licensed parachute rigger holding a rating for that type or a person holding an appropriate military rating; and

(*b*) pass a skill test, to the satisfaction of the Authority, showing the ability to pack and maintain the type of parachute for which the applicant seeks a rating.

Privileges

170.—(1) A licensed senior parachute rigger may—

(*a*) pack or maintain (except for major repair) any type of parachute for which he or she is rated; and

(*b*) supervise other persons in packing any type of parachute for which he or she is rated.

(2) A licensed master parachute rigger may—

(*a*) pack, maintain, or alter any type of parachute for which he or she is rated; and

(*b*) supervise other persons in packing, maintaining, or altering any type of parachute for which he or she is rated.

(3) A licensed parachute rigger need not comply with regulations 171 to 173 (related to facilities, equipment, performance standards, records, recent experience, and seal) in packing, maintaining, or altering (if authorized) the main parachute of a dual parachute pack to be used for intentional jumping.

Facilities and equipment

171.—(1) No licensed parachute rigger shall exercise the privileges of his licence unless he or she has at least the following facilities and equipment available—

(*a*) a smooth top table at least three feet wide by 40 feet long;

(*b*) suitable housing that is adequately heated, lighted, and ventilated for drying and airing parachutes;

(*c*) enough packing tools and other equipment to pack and maintain the types of parachutes serviced; and

(*d*) adequate housing facilities to perform applicable duties and to protect tools and equipment.

Performance standards

172.—(1) No licensed parachute rigger may—

(*a*) pack, maintain, or alter any parachute unless he or she is rated for that type;

(*b*) pack a parachute that is not safe for emergency use;

(*c*) pack a parachute that has not been thoroughly dried and aired;

(*d*) alter a parachute in a manner that is not specifically authorized by the Authority or the manufacturer;

(*e*) pack, maintain, or alter a parachute in any manner that deviates from procedures approved by the Authority or the manufacturer of the parachute; or

(*f*) exercise the privileges of the licence and type rating unless he or she understands the current manufacturer's instructions for the operation involved and has—

(i) performed duties under the licence for at least 90 days within the preceding 12 months; or

(ii) shown to the Authority the ability to perform those duties.

Records

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

(2) Each licensed parachute rigger who packs a parachute shall enter on the parachute packing record attached to the parachute, the date and place of the packing, a notation of any defects found during any inspection, and shall sign that record with his or her name and licence number.

(3) Each parachute rigger shall sign the record required by subregulation (2) with the name and the number of his or her licence.

(4) The record required by subregulation (1) shall contain, with respect to each parachute worked on, a statement of—

(*a*) its type and make;

(*b*) its serial number;

(*c*) the name and address of its owner or user;

(*d*) the kind and extent of the work performed;

(*e*) the date when and place where the work was performed; and

(*f*) the results of any drop tests made with it.

(5) Each person who makes a record under subregulation (4) (*a*) of this Regulation shall keep it for at least 2 years after the date it is made.

Seal

174—(1) Each licensed parachute rigger shall have a seal with an identifying mark prescribed by the Authority, and a seal press.

(2) After packing a parachute, the parachute rigger shall seal the pack with his or her seal in accordance with the manufacturer's recommendation for that type of parachute.

Durations of parachute rigger licence

175.—(1) Validity: The validity period of the licence is 5 years. A licence shall become invalid when a parachute rigger has ceased to exercise the privileges of the licence for a period of 6 months. A licence shall remain invalid until the parachute rigger's ability to exercise the privileges of the licence has been re-established.

(2) Renewal: An parachute rigger licence that has not expired may be renewed for an additional five years if the holder presents to the Authority evidence that he/she has within the past 6 months preceding the expiry date—

(*a*) be actively engaged in the duties of a parachute rigger; or

(*b*) received refresher training acceptable to the Authority.

(3) Re-issue: If the parachute rigger licence has expired, the applicant shall have received refresher training acceptable to the Authority.

Display of licence

176.—(1) Each person who holds a parachute rigger licence shall keep it within the immediate area where he/she normally exercises the privileges of the licence and shall present it for inspection upon the request of the Authority or an authorized representative of the Director of Civil Aviation.

PARACHUTE RIGGER INSTRUCTOR REQUIREMENTS

Requirements for a parachute rigger instructor licence

177.—(1) Age: An applicant for parachute rigger instructor licence and rating shall be at least 21 years of age.

(2) Knowledge—

(*a*) an applicant for a parachute rigger instructor licence shall have met the instructor requirements in regulation 31 of these Regulations; and

(*b*) any additional requirements as may be specified by the Authority.

(3) Experience: The applicant for a parachute rigger instructor licence shall hold at least a current and valid parachute rigger licence and ratings applicable to the instructor licence sought, and have a minimum of three years experience as a parachute rigger.

(4) Privileges: The privileges of a parachute rigger instructor licence and rating are to give instruction to parachute rigger licence applicants and to endorse those applicants for a knowledge or skill test as applicable.

(5) Validity: Subject to compliance with the requirements specified in this Part, the validity period of the parachute rigger instructor licence is 2 years.

(6) Renewal: A parachute rigger instructor licence that has not expired may be renewed for an additional 24 calendar months if the holder presents to the Authority evidence that he/she has within the past 12 months preceding the expiry date—

(*a*) conducted at least six exercises in an approved course for a parachute rigger licence; or

(*b*) received refresher training acceptable to the Authority.

(7) Re-issue: If the parachute rigger instructor licence has expired, the applicant shall have received refresher training acceptable to the Authority.

DESIGNATED PARACHUTE RIGGER EXAMINER REQUIREMENT

General requirements for a parachute rigger examiner

178.—(1) Age. An applicant for a Designated Parachute Rigger Examiner (DPRE) licence shall be at least 23 years of age.

(2) General eligibility—

(*a*) show evidence of a high level of aeronautical knowledge in the subject areas for the DPRE certification;

(*b*) have held a DPR licence for at least five years prior to the designation;

(*c*) have been actively exercising the privileges of the DPR for the previous three years;

(*d*) have a good record as a DPR and a person engaged in the industry and community with a reputation for honestly and dependability;

(*e*) have satisfactorily completed the DPRE orientation programme with the Authority;

(*f*) the applicant must have fixed base of operations adequately equipped to all practical Subject Areas to return to service condition;

(*g*) the applicant shall have at the fixed base of operation adequate equipment to test the Tasks in each Area of Operation listed in the PTS;

(*h*) the applicant shall have tools, equipment, current publications, and materials required to complete a project assignment as recommended by the parachute manufacture or industry standards.

Knowledge

179.—(1) The applicant shall have passed a pre-designation test on the following—

(*a*) air law and regulations for DPR personnel;

(*b*) packing and maintaining a wide variety of parachutes;

(*c*) alterations of parachutes in accordance with manufactures and industry standards;

(*d*) proper use of Seals for identification purposes;

(*e*) proper record keeping requirements.

Skill

180.—(1) The Authority shall observe the applicant conducting a complete actual Senior Parachute or Master Parachute Rigger certification using the approved PTS in a satisfactory manner.

(2) The applicant shall complete all required paper work for the certification as required by the Authority.

Currency

181.—(1) After designation, a DPRE shall maintain currency by—

(*a*) attending initial and recurrent training conducted by the Authority; and

(*b*) maintaining a current and valid parachute rigger licence and applicable ratings;

(*c*) the DPRE shall conduct at least 6 Skill test during any 12 calendar month period in order for the designation to remain current;

(*d*) the DPRE shall be observed by the Authority in the conduct of a Skill test at least once each 12 calendar months.

Privileges

182.—(1) The DPRE may conduct Skill test for the Senior Parachute Rigger and Master Parachute Rigger licence in accordance with approved PTS standard.

(2) The DPRE may conduct or monitor any portion of a computerized knowledge test.

Validity

183. The DPRE examiner designation shall be valid for one year.

Renewal

184. The DPRE examiner designation may be renewed by the Authority if—

(*a*) the need for the designation remains valid;

(*b*) the performance of the examiner has been satisfactory;

(*c*) the DPRE examiner has attended the DPRE examiner seminar conducted by the Authority in the previous 12-month period.

Part XI—Medical Provisions for Licensing

Division 1—General

Safety management principles

185.—(1)The Authority shall apply, as part of its State safety programme, basic safety management principles to the medical assessment process of licence holders that as a minimum include—

(2) Routine analysis of in-flight incapacitation events and medical findings during medical assessments to identify areas of increased medical risk; and

(3) Continuous re-evaluation of the medical assessment process to concentrate on identified areas of increased medical risk.

Applicability

186. This Section prescribes the requirements and procedures for issuing, renewing and reissuing Class1, Class 2 and Class 3 medical certificates.

Medical fitness

187.—(1) The applicants for a flight crew licence and air traffic controller licence shall hold a medical certificate issued in accordance with this Part.

(2) The flight crewmembers or air traffic controllers shall not exercise the privileges of their licence unless they hold a current medical certificate appropriate to the licence.

Aviation medical examiners (AMEX)

188.—(1) Subject to compliance with the requirements specified in this Part, the Authority may designate qualified and licensed physicians in the practice of medicine, to be authorized as an AMEX and conduct medical examinations of fitness of applicants for the issue, renewal or re-issue of the licences or ratings specified in this Part. AMEXs may be designated outside of Malawi.

(2) AMEXs shall have had, or shall receive initial and recurrent training in aviation medicine. Initial training shall include—

(*a*) basic training in aviation medicine for Class 2 and 3 medical examinations on the subjects listed in IS 2:188 (a); and

(*b*) advanced training in aviation medicine for Class 1 medical examinations on the subjects listed in IS 2:188 (b).

(3) AMEXs should acquire knowledge and experience of the conditions in which the holders of licences and ratings carry out their duties—

(i) examples of practical knowledge and experience are flight experience, simulator experience, on-site observation or any other hands-on experience deemed by the appropriate Licensing Authority to meet this requirement.

(4) The AMEX shall be required to submit sufficient information to the Licensing Authority to enable that Authority to undertake Medical Assessments audits—

(i) the purpose of such auditing is to ensure that medical examiners meet applicable standards for good medical practice and aeromedical risk assessment.

(5) The authorization of an AMEX is valid for 3 years. The AMEX shall have completed at least 10 examinations for a medical certificate per year. Renewal of the AMEX designation will be at the discretion of the Authority.

(6) Having completed the medical examination of an applicant in accordance with this regulation, the AMEX shall submit a signed report to the Authority, detailing the results of the examination.

(7) If the medical examination is carried out by a constituted group of AMEXs, the head of the group will be appointed by the Authority, who will be responsible for coordinating the results of the examination and signing the report—if the medical report is submitted to the Authority in electronic format, adequate identification of the examiner shall be established.

(8) The Authority retains the right to reconsider any action of an AMEX.

(9) The AMEX shall respect medical confidentiality at all times.

(10) The AMEX shall securely hold all medical reports and records with accessibility restricted to authorized personnel.

Aviation medical examinations

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

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

(3) Each applicant for a medical certificate shall provide the medical examiner with a personally certified statement of medical facts concerning personal, familial and hereditary history.

(4) Each applicant for a medical certificate shall produce proof of identification as specified in regulation 29 (3).

(5) 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.

(6) The applicant shall complete the appropriate application form as prescribed by the Authority.

Special circumstances

190.—(1) If the medical requirements prescribed in these Regulations for a particular licence are not met, the appropriate medical certificate will not be issued, renewed or re-issued 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 jeopardise 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 by the Authority with any special limitation or limitations when the safe performance of the licence holder's duties is dependent on compliance with such limitation or limitations.

(2) The AMEX shall report to the Authority any individual case where, in the AMEX's judgment, 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 jeopardise flight safety.

Decrease of medical fitness

191. Holders of licences provided for in these Regulations shall not exercise the privileges of their licences and related ratings at any time when they are aware of any decrease in their medical fitness which might render them unable to safely and properly exercise these privileges.

Use of psychoactive

192.—(1) Holders of licences provided for in these Regulations shall not exercise the privileges of their licences and related ratings while under the influence of any psychoactive substance which might render them unable to safely and properly exercise these privileges.

(2) Holders of licences provided for in these Regulations shall not engage in any problematic use of substances.

Medical certificate

193.—(1) The medical certificate shall be in a form and manner prescribed by the Authority. The items required on the licence are indicated in IS 2:193 contained in the Schedule hereto.

(2) Issue of medical certificates—

(*a*) a medical certificate will be issued to any person who meets the medical requirements prescribed in this Subpart, based on medical examination and evaluation of the applicant's history and condition—

(i) the issue of the Class 1 medical certificate may be specifically delegated to an AMEX.

(ii) the issue of Class 2 and 3 medical certificates may be delegated to any authorized AMEX.

(*b*) each person to be issued a medical certificate shall undergo a medical examination based on the physical and mental requirements contained in this Subpart.

(*c*) any person who does not meet the medical requirements of this Subpart may apply for the discretionary issuance of a certificate under regulation 190.

(3) Validity—

(*a*) the validity period of the medical certificate shall be—

(i) 12 months for the Class 1 for the CPL and ATPL licences;

(ii) 12 months for the Class 2 for the FE and FN licences;

(iii) 60 months for the Class 2 for the PPL licences;

(iv) 48 months for the Class 3 for the air traffic controller licence;

(*b*) the exceptions for the validity period of the medical certificate are—

(i) when the holders have passed their 40th birthday—

(A) the 60 month interval specified for the PPL and the 48 month interval specified for air traffic controller licence shall be reduced to 24 months; and

(B) the 12-month interval specified for the CPL and ATPL who are carrying passengers in single-pilot operations shall be reduced to 6 months;

(ii) when holders have passed their 50th birthday—

(A) the 24-month interval specified for the PPL and air traffic controller licence shall be reduced to 12 months.

(*c*) for initial issuance of the medical certificate, the period of validity shall begin on the date the medical examination is performed. The period of validity shall for the last month counted, include the day that has the same calendar number as the date of the medical examination or, if that month has no day with that number, the last day of that month.

(*d*) the period of validity of a Medical Certificate may be extended at the discretion of the Licensing Authority, up to 45 days—

(i) the Authority may let the calendar day on which the Medical Certificate expires remain constant year after year by allowing the expiry date of the current Medical Certificate to be the beginning of the new validity period under the proviso that the

medical examination takes place during the period of validity of the current Medical Certificate but no more than 45 days before it expires.

(*e*) the period of validity of a medical certificate may be reduced when clinically indicated.

(4) Renewal or re-issue of a medical certificate—

(*a*) the requirements to be met for the renewal or re-issue of a medical certificate are the same as those for the initial certificate except where otherwise specifically stated;

(*b*) the renewal of the Class 1, 2 and 3 medical certificates may be delegated to the AME;

(*c*) re-issue of the Class 1 medical certificate will either be done by the Authority or specifically delegated to an AME;

(*d*) re-issue of the Class 2 and 3 medical certificates may be delegated to an AME.

(5) Limitation or denial—

(*a*) the Authority may, for medical reasons justified and notified to the applicant, limit or deny a medical certificate.

(6) suspension or revocation of a medical certificate.

(*a*) the Authority may in accordance with regulations 35,36 and 37 suspend or revoke a medical certificate issued, if it is established that an applicant or a certificate holder has not met, or no longer meets the requirements of Part 2.

Medical assessor

194.—(1) The CAA medical assessor will periodically evaluate the competence of each AMEX.

(2) The Authority will use the services of physicians experienced in the practice of aviation medicine when it is necessary to evaluate reports submitted to the Authority by medical examiners.

Division II— Medical Requirements

General

195.—(1) An applicant for a Medical Certificate issued in accordance with these Regulations, shall undergo a medical examination based on the following requirements—

(*a*) physical and mental;

(*b*) visual and colour perception; and

(*c*) hearing.

Physical and mental requirements

196.—(1) 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 medication taken; such as would entail a degree of functional incapacity which is likely to interfere with the safe operation of an aircraft or with the safe performance of duties.

(2) An applicant 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; mental and behavioural disorders are defined in accordance with the clinical descriptions and diagnostic guidelines of the World Health Organisation as given in the International Statistical Classification of Diseases and Related Health Problems,10th Edition - Classification of Mental and Behavioural Disorders, WHO 1992. This document contains detailed descriptions of the diagnostic requirements, which may be useful for their application to medical assessment.

Visual acuity test

197.—(1) Visual acuity tests must be conducted in an environment with a level of illumination that corresponds to ordinary office illumination (30-60cd/m²).

(2) Visual acuity must be measured by means of a series of Landolt rings or similar optotypes, placed at a distance from the applicant appropriate to the method of testing adopted.

Colour perception requirements

198.—(1) The applicant shall be required to demonstrate the ability to perceive readily those colours the perception of which is necessary for the safe performance of duties.

(2) The 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 illuminants C or D65 as specified by the International Commission of Illumination (CIE).

(3) An applicant obtaining a satisfactory result as prescribed by the Authority shall be assessed as fit. An applicant failing to obtain a satisfactory result in such a test shall be assessed as unfit unless able to readily distinguish the colours used in air navigation and correctly identify aviation coloured lights. Applicants who fail to meet these criteria shall be assessed as unfit except for Class 2 assessment with the following restriction: valid daytime only.

Hearing test requirements

199.—(1) Applicants shall be required to demonstrate hearing performance sufficient for the safe exercise of their licence and rating privileges.

(2) The hearing test may be conducted using a pure tone audiometer or alternate method that will provide equivalent results. This test shall be performed at the first medical examination and then at specified intervals according to the class of medical examination and age of the applicant.

(3) If a pure tone audiometer is used, the reference zero for calibration is that of the International Organization for Standardization (ISO) Recommendation R389, 1964.

(4) For hearing tests where audiometry is not performed, applicants shall be tested in a quiet room by whispered and spoken voice tests under the following conditions—

(*a*) a quiet room is a room in which the intensity of the background noise is less than 35 dB(A) when measured on "slow" response of an "A"-weighted sound level meter;

(*b*) the sound level of an average conversational voice at 1 m from the point of output is 60dB(A) and that of a whispered voice is 45dB(A). At 2 m from the speaker, the sound is 6 dB(A) lower.

(5) The holder of a PPL with an instrument rating shall meet the hearing requirements for the Class 1 medical certificate.

Class 1 medical certificate

200.—(1) certificate issue and renewal—

(*a*) 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;

(*b*) an applicant for a CPL or ATPL shall undergo an initial medical examination for the issue of a Class 1 Medical Certificate;

(*c*) except where otherwise stated in this subpart, holders of CPL or ATPL shall have their Class 1 medical certificate renewed at intervals not exceeding those specified below;

(*d*) in alternate years, for Class 1 applicants under 40 years of age, the AUTHORITY may, at its discretion, allow medical examiners to omit certain routine examination items related to the assessment of physical fitness, while increasing the emphasis on health education and prevention of ill health;

(*e*) a Class 1 medical certificate will be issued when the applicant complies with the requirements of this Part.

(2) Physical and mental requirements—

(*a*) the applicant shall not suffer 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;

(*b*) the applicant shall have no established medical history or clinical diagnosis of any of the following such as might render the applicant unable to safely exercise the privileges of the licence applied for or held—

(i) an organic mental disorder;

(ii) a mental or behavioural disorder due to use of psychoactive substances; this induces dependence syndrome induced by alcohol or other psychoactive substances;

(iii) schizophrenia or a schizotypal or delusional disorder;

(iv) a mood (affective) disorder;

(v) a neurotic, stress-related or somatoform disorder;

(vi) a disorder of adult personality or behaviour, particularly if manifested by repeated overt acts;

(vii) mental retardation;

(viii) a disorder of psychological development;

(ix) a behavioural or emotional disorder, with onset in childhood or adolescence; or

(x) a mental disorder not otherwise specified;

(*c*) the applicant shall have no established medical history or clinical diagnosis of any of the following—

(i) a progressive or non-progressive disease of the nervous system, the effects of which, according to accredited medical conclusion, are likely to interfere with the safe exercise of the applicant's licence and rating privileges;

(ii) epilepsy; or

(iii) any disturbance of consciousness without satisfactory medical explanation of cause;

(*d*) the applicant shall not have suffered any head injury, the effects of which, according to accredited medical conclusion, are likely to interfere with the safe exercise of the applicant's licence and rating privileges shall be assessed as unfit;

(*e*) 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. A history of proven myocardial infarction shall be disqualifying;

(*f*) 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 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;

(*g*) an applicant with an abnormal cardiac rhythm shall be assessed as unfit unless the cardiac arrhythmia has been investigated and evaluated in accordance with the safe exercise of the applicant's licence or rating privileges;

(*h*) electrocardiography shall form part of the heart examination for the first issue of a medical certificate;

(*i*) electrocardiography shall be included in re-examination of applicants over the age of 50 at least annually; the purpose of routine electrocardiography is case finding. It does not provide sufficient evidence to justify disqualification without further thorough cardiovascular investigation;

(*j*) the systolic and diastolic blood pressures shall be within normal limits;

(*k*) the use of drugs for control of high blood pressure is disqualifying except for those drugs, the use of which, according to accredited medical conclusion is compatible with the safe exercise of the applicant's licence and rating privileges;

(*l*) there shall be no significant functional or structural abnormality of the circulatory system;

(*m*) there shall be no acute 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;

(*n*) radiography should form a part of the initial chest examination;

(*i*) periodic chest radiography is usually not necessary but may be a necessity in situations where asymptomatic pulmonary disease can be expected;

(*o*) applicant's 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;

(*p*) applicant’s with asthma causing significant symptoms or likely to cause incapacitating symptoms during normal or emergency operations shall be assessed as unfit;

(*q*) 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;

(*r*) applicants with active pulmonary tuberculosis shall be assessed as unfit;

(*s*) applicants with quiescent or healed lesions which are known to be tuberculous, or are presumably tuberculous in origin, may be assessed as fit;

(*t*) applicants with significant impairment of the function of the gastrointestinal tract or its adnexa shall be assessed as unfit;

(*u*) the applicant shall be completely free from those hernias that might give rise to incapacitating symptoms;

(*v*) applicants with sequela of disease of, or surgical intervention on any part of the digestive tract or its adnexa, likely to cause incapacity in flight, in particular any obstructions due to structure or compression shall be assessed as unfit;

(*w*) 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 should be assessed as unfit until such time as the medical Authority designated for the purpose by Malawi and having access to the details of the operation concerned considers that the effects of the operation are not likely to cause incapacity in flight;

(*x*) applicants with metabolic, nutritional or endocrine disorders that are likely to interfere with the safe exercise of the applicant's licence and rating privileges shall be assessed as unfit;

(*y*) applicants with insulin-treated diabetes mellitus shall be assessed as unfit;

(*z*) applicants with non-insulin-treated diabetes mellitus shall be assessed as unfit 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;

(*aa*) applicants with disease of the blood and/or the lymphatic system shall be assessed as unfit unless adequately investigated and their condition found unlikely to interfere with the safe exercise of the applicant's licence and rating privileges— sickle cell trait or other haemoglobinopathic traits are usually compatible with a fit assessment;

(*bb*) applicants with renal or genitourinary disease shall be assessed as unfit, unless adequately investigated and their condition found unlikely to interfere with the safe exercise of the applicant's licence and rating privileges;

(*cc*) urine examination shall form part of the medical examination and abnormalities shall be adequately investigated;

(*dd*) applicants with sequelae of disease or surgical procedures on the kidneys or the genitourinary tract, in particular any obstructions due to stricture or compression, shall be assessed as unfit unless the applicant's 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 the applicant's licence or rating privileges;

(*ee*) applicants who have undergone nephrectomy shall be assessed as unfit unless the condition is well compensated;

(*ff*) applicants who are seropositve 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— early diagnosis and active management of HIV disease with antiretroviral therapy reduces morbidity and improves prognosis and thus increases the likelihood of a fit assessment;

(*gg*) applicants who are pregnant shall be assessed as unfit unless obstetrical evaluation and continued medical supervision indicate a low-risk, uncomplicated pregnancy. The fit assessment period may be limited from the end of the 12th week until the end of the 26th week of gestation;

(*hh*) 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 has been assessed as fit to safely exercise the privileges of her licence and ratings;

(*ii*) 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; any sequelae after lesions affecting the bones, joints, muscles or tendons, and certain anatomical defects will normally require functional assessment to determine fitness;

(*jj*) 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;

(*kk*) there shall be—

(i) no disturbance of vestibular function;

(ii) no significant dysfunction of the Eustachian tubes; and

(iii) no unhealed perforation of the tympanic membranes;

(*ll*) a single dry perforation of the tympanic membrane need not render the applicant unfit;

(*mm*) there shall no nasal obstruction and no malformation nor 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;

(*nn*) applicants with stuttering or other speech defects sufficiently severe to cause impairment of speech communication shall be assessed as unfit.

(3) Visual requirements—

(*a*) the function of the eyes and their adnexae shall be normal; there shall be no active pathological condition, acute or chronic, or any sequelae of surgery or trauma of the eyes or their adnexae 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 6/9 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—

(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;

(iii) 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: both uncorrected and correct 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;

(*c*) applicants may use contact lenses to meet the requirement of (b) provided that—

(i) the lenses are monofocal and non-tinted;

(ii) the lenses are well tolerated; and

(iii) a pair of suitable correcting spectacles is kept readily available during the exercise of the licence privileges;

(iv) 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;

(*d*) a pplicants with a large refractive error shall use contact lenses or high-index spectacle lenses;

(*e*) 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 certificate and every five years thereafter;

(i) the purpose of the required ophthalmic examination is 1) to ascertain normal visual performance and 2) to identify any significant pathology;

(*f*) 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;

(*g*) the applicant shall have the ability to read, while wearing the correcting lenses, if any, 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. 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 correcting already prescribed in accordance with this paragraph; 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—

(i) N5 and N14 refer to the size of typeface used. As detailed in the Manual of Civil Aviation Medicine (Doc 8984);

(ii) any 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;

(iii) 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;

(*h*) when near correction is required in accordance with this paragraph, a second pair of near-correction spectacles shall be kept available for immediate use;

(*i*) the applicant shall be required to have normal fields of vision;

(*j*) the applicant shall be required to have normal binocular function;

(*k*) reduced stereopsis, abnormal convergence not interfering with near vision, and ocular misalignment where the fusional reserves are sufficient to prevent asthenopia and diplopia may not be disqualifying.

(4) Hearing requirements—

(*a*) the applicant shall be tested by pure-tone audiometry—

(i) at the initial medical examination;

(ii) at least once every five years up to the age of 40 years;

(iii) at least once every three years after the age of 40 years.

(*b*) the applicant 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. However, an applicant with a hearing loss greater than the above may be declared fit provided that—

(i) the applicant has a hearing performance in each ear separately equivalent to that of a normal person, against a background noise that will simulate the masking properties of flight deck noise upon speech and beacon signals; and

(ii) the applicant has the ability to hear an average conversational voice in a quiet room, using both ears, at a distance of 2 m from the examiner, with the back turned to the examiner;

(*c*) 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 certificate

201.—(1) Certificate issue and renewal—

(*a*) an applicant for a PPL, a FE or FN licence shall undergo an initial medical examination for the issue of a Class 2 Medical Certificate;

(*b*) except where otherwise stated in this subpart, holders of a PPL, a FE or a FN licence shall have their Class 2 Medical Certificate renewed at intervals not exceeding those specified in this Part; and

(*c*) a Class 2 Medical Certificate will be issued when the applicant complies with the requirements of this Part.

(2) Physical and mental requirements—

(*a*) the applicant shall not suffer 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;

(*b*) the applicant shall have no established medical history or clinical diagnosis of any of the following such as might render the applicant unable to safely exercise the privileges of the licence applied for or held—

(i) an organic mental disorder;

(ii) a mental or behavioural disorder due to use of psychoactive substances; this induces dependence syndrome induced by alcohol or other psychoactive substances;

(iii) schizophrenia or a schizotypal or delusional disorder;

(iv) a mood (affective) disorder;

(v) a neurotic, stress-related or somatoform disorder;

(vi) a disorder of adult personality or behaviour, particularly if manifested by repeated overt acts;

(vii) mental retardation;

(viii) a disorder of psychological development;

(ix) a behavioural or emotional disorder, with onset in childhood or adolescence; or

(x) a mental disorder not otherwise specified;

(*c*) an applicant with depression, being treated with antidepressant medication, should be assessed as unfit unless the medical assessor, have access to the details of the case concerned, considers the applicants, condition as unlikely to interfere with the safe exercise of the applicant's licence and rating privileges;

(*d*) the applicant shall have no established medical history or clinical diagnosis of any of the following—

(i) a progressive or non-progressive disease of the nervous system, the effects of which, according to accredited medical conclusion, are likely to interfere with the safe exercise of the applicant's licence and rating privileges;

(ii) epilepsy; or

(iii) any disturbance of consciousness without satisfactory medical explanation of cause;

(*e*) the applicant shall not have suffered any head injury, the effects of which, according to accredited medical conclusion, are likely to interfere with the safe exercise of the applicant's licence and rating privileges shall be assessed as unfit;

(*f*) 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; a history of proven myocardial infarction shall be disqualifying;

(*g*) 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 infarection 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;

(*h*) an applicant with an abnormal cardiac rhythm shall be assessed as unfit 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;

(*i*) electrocardiography shall form part of the heart examination for the first issue of a medical certificate—

(i) after the age of 40; and

(ii) in re-examinations every two years after the age of 50;

(iii) the purpose of routine electrocardiography is case finding; it does not provide sufficient evidence to justify disqualification without further thorough cardiovascular investigation;

(*j*) the systolic and diastolic blood pressures shall be within normal limits;

(*k*) the use of drugs for control of high blood pressure is disqualifying except for those drugs, the use of which, according to accredited medical conclusion is compatible with the safe exercise of the applicant's licence and rating privileges;

(*l*) there shall be no significant functional or structural abnormality of the circulatory system;

(*m*) there shall be no acute 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;

(i) radiography should form a part of the initial chest examination;

(ii) periodic chest radiography is usually not necessary but may be a necessity in situations where asymptomatic pulmonary disease can be expected;

(*n*) applicant's 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;

(*o*) applicant's with asthma causing significant symptoms or likely to cause incapacitating symptoms during normal or emergency operations shall be assessed as unfit;

(*p*) 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;

(*q*) applicants with active pulmonary tuberculosis shall be assessed as unfit;

(*r*) applicants with quiescent or healed lesions which are known to be tuberculous, or are presumably tuberculous in origin, may be assessed as fit;

(*s*) applicants with significant impairment of the function of the gastrointestinal tract or its adnexae shall be assessed as unfit;

(*t*) the applicant shall be completely free from those hernias that might give rise to incapacitating symptoms;

(*u*) applicants with sequelae of disease of, or surgical intervention on any part of the digestive tract or its adnexae, likely to cause incapacity in flight, in particular any obstructions due to structure or compression shall be assessed as unfit;

(*v*) an applicant who has undergone a major surgical operation on the biliary passages or the digestive tract or its adnexae, with a total or partial excision or a diversion of any of these organs should be assessed as unfit until such time as the medical Authority designated for the purpose by Malawi and having access to the details of the operation concerned considers that the effects of the operation are not likely to cause incapacity in flight;

(*w*) applicants with metabolic, nutritional or endocrine disorders that are likely to interfere with the safe exercise of the applicant's licence and rating privileges shall be assessed as unfit;

(*x*) applicants with insulin-treated diabetes mellitus shall be assessed as unfit;

(*y*) Applicants with non-insulin-treated diabetes mellitus shall be assessed as unfit 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;

(*z*) applicants with disease of the blood and/or the lymphatic system shall be assessed as unfit unless adequately investigated and their condition found unlikely to interfere with the safe exercise of the applicant's licence and rating privileges; Sickle cell trait or other haemoglobinopathic traits are usually compatible with a fit assessment;

(*aa*) applicants with renal or genitor-urinary disease shall be assessed as unfit, unless adequately investigated and their condition found unlikely to interfere with the safe exercise of the applicant's licence and rating privileges;

(*bb*) urine examination shall form part of the medical examination and abnormalities shall be adequately investigated;

(*cc*) applicants with sequelae of disease or surgical procedures on the kidneys or the genitourinary tract, in particular any obstructions due to stricture or compression, shall be assessed as unfit unless the applicant's 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 the applicant's licence or rating privileges;

(*dd*) applicants who have undergone nephrectomy shall be assessed as unfit unless the condition is well compensated;

(*ee*) applicants who are seropositve 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; early diagnosis and active management of HIV disease with antiretroviral therapy reduces morbidity and improves prognosis and thus increases the likelihood of a fit assessment;

(*ff*) applicants who are pregnant shall be assessed as unfit unless obstetrical evaluation and continued medical supervision indicate a low-risk, uncomplicated pregnancy.

(*gg*) for applicants with a low-risk uncomplicated pregnancy, evaluated and supervised in accordance with item (ff) above, the fit assessment should be limited to the period from the end of the 12th week until the end of the 26th week of gestation;

(*hh*) 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 has been assessed as fit to safely exercise the privileges of her licence and ratings;

(*ii*) 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— any sequelae after lesions affecting the bones, joints, muscles or tendons, and certain anatomical defects will normally require functional assessment to determine fitness;

(*jj*) 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.

(*kk*) there shall be—

(i) no disturbance of vestibular function;

(ii) no significant dysfunction of the Eustachian tubes; and

(iii) no unhealed perforation of the tympanic membranes;

(*ll*) a single dry perforation of the tympanic membrane need not render the applicant unfit;

(*mm*) there shall be no nasal obstruction and no malformation nor 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;

(*nn*) applicants with stuttering or other speech defects sufficiently severe to cause impairment of speech communication shall be assessed as unfit.

(3) Visual requirements—

(*a*) the function of the eyes and their adnexae shall be normal; there shall be no active pathological condition, acute or chronic, or any sequelae of surgery or trauma of the eyes or their adnexae 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;

(iii) 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: both uncorrected and correct 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;

(*c*) applicants may use contact lenses to meet the requirement of (b) provided that—

(i) the lenses are monofocal and non-tinted;

(ii) the lenses are well tolerated; and

(iii) a pair of suitable correcting spectacles is kept readily available during the exercise of the licence privileges;

(iv) 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;

(*d*) applicants with a large refractive error shall use contact lenses or high-index spectacle lenses; if spectacles are used, high-index lenses are needed to minimize peripheral field distortion;

(*e*) 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 certificate and every five years thereafter;

(*i*) the purpose of the required ophthalmic examination is 1) to ascertain normal visual performance and 2) to identify any significant pathology;

(*f*) 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;

(*g*) the applicant shall have the ability to read, while wearing the correcting lenses, if any, the N5 chart or its equivalent at a distance selected by that applicant in the range of 30 to 50 cm: 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 correcting already prescribed in accordance with this paragraph; 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—

(i) N5 refers to the size of typeface used as detailed in the Manual of Civil Aviation Medicine (Doc 8984);

(ii) any 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;

(iii) 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;

(*h*) when near correction is required in accordance with this paragraph, a second pair of near-correction spectacles shall be kept available for immediate use;

(*i*) the applicant shall be required to have normal fields of vision;

(*j*) the applicant shall be required to have normal binocular function;

(*k*) reduced stereopsis, abnormal convergence not interfering with near vision, and ocular misalignment where the fusional reserves are sufficient to prevent asthenopia and diplopia may not be disqualifying.

(4) hearing requirements—

(*a*) the applicant shall be tested by pure-tone audiometry;

(i) at the initial medical examination;

(ii) at least once every two years after the age of 50 years;

(*b*) 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;

(*c*) the applicant shall have the ability to hear an average conversational voice in a quiet room, using both ears, at a distance of 2 m from the examiner, with the back turned to the examiner or be assessed as unfit;

(*d*) the applicant who holds a PPL with an IR shall meet the hearing requirements for a Class 1 medical certificate.

Class 3 medical certificate

202.—(1) Certificate issue and renewal—

(*a*) an applicant for an Air Traffic Controller licence shall undergo an initial medical examination for the issue of a Class 3 Medical Certificate;

(*b*) except where otherwise stated in this subpart, holders of an Air Traffic Controller licence shall have their Class 3 Medical Certificate renewed at intervals not exceeding those specified in this subpart;

(*c*) a Class 3 Medical Certificate will be issued when the applicant complies with the requirements of this Regulation.

(2) Physical and mental requirements—

(*a*) the applicant shall not suffer 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;

(*b*) the applicant shall have no established medical history or clinical diagnosis of any of the following such as might render the applicant unable to safely exercise the privileges of the licence applied for or held—

(i) an organic mental disorder;

(ii) a mental or behavioural disorder due to use of psychoactive substances; this induces dependence syndrome induced by alcohol or other psychoactive substances;

(ii) schizophrenia or a schizotypal or delusional disorder;

(iv) a mood (affective) disorder;

(v) a neurotic, stress-related or somatoform disorder;

(vi) a disorder of adult personality or behaviour, particularly if manifested by repeated overt acts;

(vii) mental retardation;

(viii) a disorder of psychological development;

(ix) a behavioural or emotional disorder, with onset in childhood or adolescence; or

(x) a mental disorder not otherwise specified;

(*c*) an applicant with depression, being treated with antidepressant medication, should be assessed as unfit unless the medical assessor, have access to the details of the case concerned, considers the applicants, condition as unlikely to interfere with the safe exercise of the applicant's licence and rating privileges—

(i) mental and behavioural disorders are defined in accordance with the clinical descriptions and diagnostic guidelines of the World Health Organization as given in the International Statistical Classification of Diseases and Related health Problems 10th Edition- Classification of Mental and Behavioural Disorders, WHO 1992;

(*d*) the applicant shall have no established medical history or clinical diagnosis of any of the following—

(i) a progressive or non-progressive disease of the nervous system, the effects of which, according to accredited medical conclusion, are likely to interfere with the safe exercise of the applicant's licence and rating privileges;

(ii) epilepsy; or

(iii) any disturbance of consciousness without satisfactory medical explanation of cause;

(*e*) the applicant shall not have suffered any head injury, the effects of which, according to accredited medical conclusion, are likely to interfere with the safe exercise of the applicant's licence and rating privileges shall be assessed as unfit;

(*f*) 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; a history of proven myocardial infarction shall be disqualifying;

(*g*) 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 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;

(*h*) an applicant with an abnormal cardiac rhythm shall be assessed as unfit 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;

(*i*) electrocardiography shall form part of the heart examination for the first issue of a medical certificate and in re-examinations every two years after the age of 50— the purpose of routine electrocardiography is case finding. It does not provide sufficient evidence to justify disqualification without further thorough cardiovascular investigation;

(*j*) the systolic and diastolic blood pressures shall be within normal limits;

(*k*) the use of drugs for control of high blood pressure is disqualifying except for those drugs, the use of which, according to accredited medical conclusion is compatible with the safe exercise of the applicant's licence and rating privileges;

(*l*) there shall be no significant functional or structural abnormality of the circulatory system;

(*m*) there shall be no acute 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: radiography should form a part of the initial chest examination; periodic chest radiography is usually not necessary but may be a necessity in situations where asymptomatic pulmonary disease can be expected;

(*n*) applicant's 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;

(*o*) applicant's with asthma causing significant symptoms or likely to cause incapacitating symptoms during normal or emergency operations shall be assessed as unfit;

(*p*) 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;

(*q*) applicants with active pulmonary tuberculosis shall be assessed as unfit;

(*r*) applicants with quiescent or healed lesions which are known to be tuberculous, or are presumably tuberculous in origin, may be assessed as fit;

(*s*) applicants with significant impairment of the function of the gastrointestinal tract or its adnexae shall be assessed as unfit;

(*t*) applicants with sequelae of disease of, or surgical intervention on any part of the digestive tract or its adnexae, likely to cause incapacity in flight, in particular any obstructions due to structure or compression shall be assessed as unfit;

(*u*) an applicant who has undergone a major surgical operation on the biliary passages or the digestive tract or its adnexae, with a total or partial excision or a diversion of any of these organs should be assessed as unfit until such time as the medical Authority designated for the purpose by Malawi and having access to the details of the operation concerned considers that the effects of the operation are not likely to cause incapacity in flight;

(*v*) applicants with metabolic, nutritional or endocrine disorders that are likely to interfere with the safe exercise of the applicant's licence and rating privileges shall be assessed as unfit;

(*w*) applicants with insulin-treated diabetes mellitus shall be assessed as unfit;

(*x*) applicants with non-insulin-treated diabetes mellitus shall be assessed as unfit 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;

(*y*) applicants with disease of the blood and/or the lymphatic system shall be assessed as unfit unless adequately investigated and their condition found unlikely to interfere with the safe exercise of the applicant's licence and rating privileges; sickle cell trait or other haemoglobinopathic traits are usually compatible with a fit assessment;

(*z*) applicants with renal or genitor-urinary disease shall be assessed as unfit, unless adequately investigated and their condition found unlikely to interfere with the safe exercise of the applicant's licence and rating privileges;

(*aa*) urine examination shall form part of the medical examination and abnormalities shall be adequately investigated;

(*bb*) applicants with sequelae of disease or surgical procedures on the kidneys or the genito- urinary tract, in particular any obstructions due to stricture or compression, shall be assessed as unfit unless the applicant's 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 the applicant's licence or rating privileges;

(*cc*) applicants who have undergone nephrectomy shall be assessed as unfit unless the condition is well compensated;

(*dd*) applicants who are seropositve 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: early diagnosis and active management of HIV disease with antiretroviral therapy reduces morbidity and improves prognosis and thus increases the likelihood of a fit assessment;

(*ee*) applicants who are pregnant shall be assessed as unfit unless obstetrical evaluation and continued medical supervision indicate a low-risk, uncomplicated pregnancy;

(*ff*) 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;

(*gg*) for applicants with a low-risk uncomplicated pregnancy, evaluated and supervised in accordance with (*ee*) the fit assessment should be limited to the period until the end of the 34th week of gestation;

(*hh*) 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 has been assessed as fit to safely exercise the privileges of her licence and ratings;

(*ii*) 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;

(i) any sequelae after lesions affecting the bones, joints, muscles or tendons, and certain anatomical defects will normally require functional assessment to determine fitness;

(*jj*) 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;

(*kk*) there shall no malformation or 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;

(*ll*) applicants with stuttering or other speech defects sufficiently severe to cause impairment of speech communication shall be assessed as unfit.

(3) Visual requirements—

(*a*) the function of the eyes and their adnexa shall be normal: 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;

(*b*) 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—

(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;

(iii) 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: both uncorrected and correct 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;

(*c*) Applicants may use contact lenses to meet the requirement of (*b*) provided that—

(i) the lenses are monofocal and non-tinted;

(ii) the lenses are well tolerated; and

(iii) a pair of suitable correcting spectacles is kept readily available during the exercise of the licence privileges;

(i) 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;

(*d*) applicants with a large refractive error shall use contact lenses or high-index spectacle lenses;

(i) if spectacles are used, high-index lenses are needed to minimise peripheral field distortion;

(*e*) applicants whose uncorrected distant visual acuity in either eye is worse than 6/60 should be required to provide a full ophthalmic report prior to initial Medical Certificate and every five years thereafter;

(i) the purpose of the required ophthalmic examination is 1) to ascertain normal visual performance and 2) to identify any significant pathology;

(*f*) 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;

(*g*) the applicant shall have the ability to read, while wearing the correcting lenses, if any, required by (b), 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. 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 correcting already prescribed in accordance with (b); 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—

(i) N5 and N14 refer to the size of typeface used as detailed in the Manual of Civil Aviation Medicine (Doc 8984);

(ii) any applicant who needs near correction to meet this requirement will require "look-over", bifocal or perhaps multi-focal 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;

(iii) 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;

(*h*) when near correction is required in accordance with this paragraph, a second pair of near-correction spectacles shall be kept available for immediate use;

(*i*) the applicant shall be required to have normal fields of vision;

(*j*) the applicant shall be required to have normal binocular function: defective stereopsis, abnormal convergence not interfering with near vision, and ocular misalignment where the fusional reserves are sufficient to prevent asthenopia and diplopia may not be disqualifying.

(4) Hearing requirements—

(*a*) the applicant shall be tested by pure-tone audiometry—

(i) at the initial medical examination;

(ii) at least once every four years up to the age of 40 years;

(iii) at least once every two years after the age of 40 years;

(*b*) 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;

(*c*) 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 will reproduces or simulates that experience in a normal air traffic control working environment;

(*d*) 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.

SCHEDULE

IMPLEMENTING STANDARDS FOR (PERSONNEL LICENSING)

IS 2:4 Issue, Renewal and Re-issue of Licences, Ratings, Authorizations Designations, Designations, and Certificate

1. Issue, renewal and re-issue of licences, ratings, authorizations, designations and certificates will take place when the applicant meets the requirements of the Regulations for issue, renewal and re-issue for these licences, ratings authorizations and certificates.

2. Issue, renewal and re-issue of licences, ratings, authorizations, designations and certificates will be performed by the Authority.

3. Notwithstanding 2, renewal of ratings and category II/III pilot authorizations may be performed by the Examiner, when delegated by the Authority.

4. Notwithstanding 2, renewal of medical certificates may be performed by the AME, when delegated by the Authority.

5. Application for the issue, renewal and re-issue of licences, ratings, authorizations, designations or certificates by the Authority shall be done by submitting to the Authority a properly filled out form, which can be obtained from the Authority. This form must be submitted to the Authority at least 14 days before the expiry date.

IS 2: 12 LANGUAGE PROFICIENCY

1. General

To meet the language proficiency requirements contained in regulation 12 an applicant for a licence or a licence holder shall demonstrate, in a manner acceptable to the Authority, compliance with the holistic descriptors in paragraph (b) below and with the Operational Level (Level 4) of the Language Proficiency Rating Scale as mentioned in paragraph 2(3) below.

2. Holistic descriptors: Proficient speakers shall:

(1) Communicate effectively in voice-only (telephone/radiotelephone) and in face-to-face situations.

(2) Communicate on common, concrete and work-related topics with accuracy and clarity.

(3) Use appropriate communicative strategies to exchange messages and to recognise and resolve misunderstandings (e.g. to check, confirm, or clarify information) in a general or work-related context.

(4) 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.

(5) Use a dialect or accent which is intelligible to the aeronautical community.

3. Rating scale—

(1) Pre-elementary Level (Level 1)—

(*a*) pronunciation: performs at a level below the Elementary Level;

(*b*) structure: performs at a level below the Elementary Level;

(*c*) vocabulary: performs at a level below the Elementary Level;

(*d*) fluency: performs at a level below the Elementary Level;

(*e*) comprehension: performs at a level below the Elementary Level;

(*f*) interactions: performs at a level below the Elementary Level.

(2) Elementary Level (Level 2)—

(*a*) pronunciation: pronunciation, stress, rhythm, and intonation are heavily influenced by the first language or regional variation and usually interfere with ease of understanding;

(*b*) structure: shows only limited control of a few simple memorised grammatical structures and sentence patterns;

(*c*) vocabulary: limited vocabulary range consisting only of isolated words and memorised phrases;

(*d*) fluency: can produce very short, isolated, memorised utterances with frequent pausing and a distracting use of fillers to search for expressions and to articulate less familiar words;

(*e*) comprehension: comprehension is limited to isolated, memorised phrases when they are carefully and slowly articulated;

(*f*) Interactions: response time is slow and often inappropriate. Interaction is limited to simple routine exchanges.

(3) Pre-operational Level (Level 3)—

(*a*) pronunciation: pronunciation, stress, rhythm, and intonation are influenced by the first language or regional variation and frequently interfere with ease of understanding;

(*b*) structure: basic grammatical structures and sentence patterns associated with predictable situations are not always well controlled. Errors frequently interfere with meaning;

(*c*) vocabulary: vocabulary range and accuracy are often sufficient to communicate on common, concrete, or work-related topics, but range is limited and the word choice often inappropriate. Is often unable to paraphrase successfully when lacking vocabulary;

(*d*) fluency: produces stretches of language, but phrasing and pausing are often inappropriate; hesitations or slowness in language processing may prevent effective communication; fillers are sometimes distracting;

(*f*) comprehension: comprehension is often accurate on common, concrete, and work-related topics when the accent or variety used is sufficiently intelligible for an international community of users. May fail to understand a linguistic or situational complication or an unexpected turn of events.

(*g*) interaction: responses are sometimes immediate, appropriate, and informative; can initiate and maintain exchanges with reasonable ease on familiar topics and in predictable situations; generally inadequate when dealing with an unexpected turn of events.

(4) Operational Level (Level 4)—

(*a*) pronunciation: pronunciation, stress, rhythm and intonation are influenced by the first language or regional variation but only sometimes interfere with understanding;

(*b*) 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;

(*c*) 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;

(*d*) 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;

(*e*) 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;

(*f*) 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.

(5) Extended Level (Level 5)—

(*a*) pronunciation: pronunciation, stress, rhythm, and intonation, though influenced by the first language or regional variation, rarely interfere with ease of understanding;

(*b*) structure: basic grammatical structures and sentence patterns are consistently well controlled; complex structures are attempted but with errors which sometimes interfere with meaning;

(*c*) 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;

(*d*) 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;

(*e*) 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;

(*f*) interactions: responses are immediate, appropriate, and informative; managers the speaker/listener relationship effectively.

(6) Expert Level (Level 6)—

(*a*) pronunciation: pronunciation, stress, rhythm, and intonation, thought possibly influenced by the first language or regional variation, almost never interfere with ease of understanding;

(*b*) structure: both basic and complex grammatical structures and sentence patterns are consistently well controlled;

(*c*) 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;

(*d*) fluency: able to speak at length with a natural, effortless flow. Varies speech flow for stylistic effect, e.g. to emphasise a point. Uses appropriate discourse markers and connectors spontaneously;

(*e*) comprehension: comprehension is consistently accurate in nearly all contexts and includes comprehension of linguistic and cultural subtleties;

(*f*) interactions: interacts with ease in nearly all situations; is sensitive to verbal and non-verbal cues, and responds to them appropriately.

IS 2:13 Credit for Military Pilots

1. Requirements for a military pilot to meet the requirements of regulation 13.

2. Military pilots on active flying status within the past 12 months. The holder of a military pilot licence (or certificate) who has been on active flying status within the 12 months before applying shall—

   (1) Pass a knowledge test on the appropriate parts of these regulations that apply to pilot privileges and limitations, air traffic and general operating rules, and accident reporting rules.

   (2) Present documentation showing compliance with the requirements of paragraph (*c*) of this subsection for at least one aircraft category rating; and

   (3) Present documentation showing that the applicant is or was, at any time during the 12 calendar months before the month of application the holder of a military pilot licence (or certificate) on active flying status in an armed force of Malawi.

3. Aircraft category, class and type ratings. The Authority may issue to the holder of a military pilot licence (or certificate) an aircraft category, class or type rating to a commercial pilot licence if the pilot present documentary evidence that shows satisfactory accomplishment of—

   (1) A military pilot check and instrument proficiency check of Malawi in that aircraft category, class or type, if applicable, as PIC during the 12 calendar months before the month of application; and

   (2) At least 10 hours of PIC time in that aircraft category, class or type, if applicable, during the 12 calendar months before the month of application.

4. Instrument rating: The holder of a military pilot licence (or certificate) may apply for an aeroplane or helicopter instrument rating to be added to his or her commercial pilot licence if the pilot has, within the 12 calendar months preceding the month of application—

   (1) Passed an instrument proficiency check by an armed force of Malawi in the aircraft category for the instrument rating sought; and

(2) Received authorization from an armed force of Malawi to conduct IFR flights on airways in that aircraft category and class for the instrument rating sought.

5. Aircraft type rating. The Authority will issue an aircraft type rating only for aircraft types that the Authority has certified for civil operations.

6. Aircraft type rating placed on an airline transport pilot licence. The Authority may issue to the holder of a military pilot licence (or certificate) who holds an airline transport pilot licence an aircraft type rating provided that the pilot—

(1) Holds a category and type rating for that type of aircraft at the airline transport pilot licence level.

(2) Passed an official military pilot of Malawi check and instrument proficiency check in that type of aircraft as PIC during the 12 calendar months before the month of application.

7. Evidentiary documents: The Authority may accept the following documents as satisfactory evidence of military pilot status—

(1) an official identification card issued to the pilot by an armed force to demonstrate membership in the armed forces.

(2) an original or a copy of a certificate of discharge or release from an armed force of Malawi.

(3) at least one of the following—

(*a*) an order of an armed force of Malawi to flight status as a military pilot;

(*b*) an armed force form or logbook showing military pilot status; or

(*c*) an order showing that the applicant graduated from a military pilot school of Malawi and received a rating as a military pilot;

(4) a certified armed force logbook or an appropriate official armed force form or summary to demonstrate flight time in military aircraft as a member of an armed force of Malawi.

(5) an official armed force of Malawi record of a military designation as PIC;

(6) an official record of satisfactory accomplishment of an instrument proficiency check during the 12 calendar months preceding the month of application.

IS 2:17 Procedures for Validation of Flightcrew Licences by Reliance Upon the Licensing system of Another Contracting State

1. The Authority should, before making the agreement mentioned in regulation 17 (*a*) and (*c*) be convinced, that the other Contracting State issues licences in conformity with this paragraph by conducting a regulatory comparison of the licensing systems and requirements.

2. An inspector, legal counsel and/ or licensing subject matter experts from Malawi, or from another Contracting State delegated by the Authority of Malawi, must visit the other Contracting State to be convinced that the licensing system in the other Contracting State is in conformity with this paragraph. A

report describing the bases for the decision shall be made to the Authority of Malawi. The report, and the regulatory comparison noted in paragraph 2 shall serve the basis for a government-to-government agreement between the involved States regarding use or reliance of the licensing system.

3. An Air Law test must be arranged if the air law system of Malawi is different from the Air Law system from the other Contracting State. Other areas that may require knowledge testing are meteorology, operational procedures and radiotelephony if those areas are different between Malawi and the other Contracting State.

4. Application for the validation certificate shall be done by submitting to the Authority a properly filled out form, which form can be obtained from the Authority.

IS 2:18 Procedures for Conversion of Flightcrew Licences by Reliance Upon the Licensing System of Another Contracting State

1. The Authority that issues a converted licence based on a licence from another Contracting State remains responsible for the converted licence.

2. The Authority should, before making the agreement mentioned in regulation 18 (1) (*c*) be convinced, that the other Contracting State issues licences in conformity with the regulation by conducting a regulatory comparison of the licensing systems and requirements.

3. An inspector, legal counsel and/ or licensing subject matter experts from Malawi, or from another Contracting State delegated by the Authority of Malawi, must visit the other Contracting State to be convinced that the licensing system in the other Contracting State is in conformity with the Regulations. A report describing the bases for the decision shall be made to the Authority of Malawi. The report, and the regulatory comparison noted in paragraph 2 of IS 2:17 shall serve the basis for a government-to-government agreement between the involved States regarding use or reliance of the licensing system: an Air Law test must be arranged if the air law system of Malawi is different from the air law system from the other Contracting State. Other areas that may require knowledge testing are meteorology, operational procedures and radiotelephony if those areas are different between Malawi and the other Contracting State.

4. Renewal and re-issue of converted licences and ratings—

   (1) When examiners are available in Malawi to perform proficiency checks for the renewal of rating(s) or skill tests for the re-issue of the licence or rating(s), these tests/checks will be performed by the authorized examiners of Malawi.

   (2) When examiners are not available in Malawi to perform proficiency checks for the renewal of the rating(s) or skill test for the re-issue of the licence or rating(s), the availability of examiners for these tests/checks from the other Contracting State can be arranged in the agreement mentioned in regulation 18 (1) (*c*).

5. Application for the conversion of a licence from another Contracting State shall be done by submitting to the Authority a properly filled out form, which form can be obtained from the Authority.

6. The conversion of medical certificates, and/or reliance on medical examinations conducted in the other State, may also be addressed in the government-to-government agreement between the States.

IS 2:22 PROCEDURES FOR VALIDATION OF AMT LICENCES BY RELIANCE UPON THE LICENSING SYSTEM OF ANOTHER CONTRACTING STATE.

1. The Authority should, before making the agreement mentioned in regulation 22 (1) (*c*) be convinced, that the other Contracting State issues licences in conformity with this Regulation by conducting a regulatory comparison of the licensing systems and requirements.

2. An inspector, legal counsel and/ or licensing subject matter experts from Malawi, or from another Contracting State delegated by the Authority of Malawi, must visit the other Contracting State to be convinced that the licensing system in the other Contracting State is in conformity with this Regulation. A report describing the bases for the decision shall be made to the Authority of Malawi. The report, and the regulatory comparison noted in paragraph 2 of IS 2:17 shall serve the basis for a government-to-government agreement between the involved States regarding use or reliance of the licensing system.

3. An Air Law test must be arranged if the Air Law system of Malawi is different from the Air Law system from the other Contracting State. The knowledge test may also include Malawi airworthiness requirements governing certification and continuing airworthiness, and approved maintenance organizations and procedures if those regulations are different from the Contracting State.

4. Application for the validation certificate shall be done by submitting to the Authority a properly filled out form, which form can be obtained from the Authority.

IS 2:23 PROCEDURES FOR CONVERSION OF AMT LICENCES BY RELIANCE UPON THE LICENSING SYSTEM OF ANOTHER CONTRACTING STATE.

1. The Authority that issues a converted licence based on a licence from another Contracting State remains responsible for the converted licence.

2. The Authority should, before making the agreement mentioned in regulation 23 (1) (*c*) be convinced, that the other Contracting State issues licences in conformity with this Regulation by conducting a regulatory comparison of the licensing systems and requirements.

3. An inspector, legal counsel and/ or licensing subject matter experts from Malawi, or from another Contracting State delegated by the Authority of Malawi, must visit the other Contracting State to be convinced that the licensing system in the other Contracting State is in conformity with this Regulation. A report describing the bases for the decision shall be made to the Authority of Malawi. The report, and the regulatory comparison noted in paragraph 2 of IS 2:17 shall serve the basis for a government-to-government agreement between the involved States regarding use or reliance of the licensing system. An Air

Law test must be arranged if the Air Law system of Malawi is different from the Air Law system from the other Contracting State. The knowledge test may also include Malawi airworthiness requirements governing certification and continuing airworthiness, and approved maintenance organizations and procedures if those regulations are different from the Contracting State.

4. Renewal and re-issue of converted licences and ratings—

(1) When examiners are available in Malawi to perform proficiency checks for the renewal of rating(s) or skill tests for the re-issue of the licence or rating(s), these tests/checks will be performed by the authorized examiners of Malawi.

(2) When examiners are not available in Malawi to perform proficiency checks for the renewal of the rating(s) or skill test for the re-issue of the licence or rating(s), the availability of examiners for these tests/checks from the other Contracting State can be arranged in the agreement mentioned in regulation18 (1) (*c*).

5. Application for the conversion of a licence from another Contracting State shall be done by submitting to the Authority a properly filled out form, which form can be obtained from the Authority.

IS 2:33 Specifications and Format of the Licence.

1. The following details shall appear on the licence and the numbering scheme shall be in Roman numerals—

(1) name of Malawi (in bold type);

(2) title of licence (in very bold type)

(3) serial number of the licence, in Arabic numerals, given by the authority issuing the licence;

(4) name of holder in full;

(5) date of birth;

(6) address of holder;

(7) nationality of holder;

(8) signature of holder;

(9) authority and, where necessary, conditions under which the licence is issued;

(10) certification concerning validity and authorization for holder to exercise privileges appropriate to the licence;

(11) signature of officer issuing the licence and the date of such issue;

(12) seal or stamp of authority issuing the licence;

(13) ratings, (e.g. Category, class, type of aircraft, airframe, aerodrome control, etc.);

(14) remarks, (i.e. special endorsements relating to limitations and endorsements for privileges, including from 5 March 2008 an endorsement of language proficiency, and other information required in pursuance to Article 39 of the Chicago Convention);

(15) any other details desired by the State issuing the licence.

2. The privileges and ratings shall be clearly identified on the licence in paragraphs (IX) and (XII).

IS 2:43 Recording of Flight Time

1. The details in the records of flights flown as pilot shall contain the items in (2) and (3) below.

2. For the purpose of meeting the requirements of regulation 43 each person shall enter the following information for each flight or lesson logged—

(1) Personal details—

(*a*) name of the holder; and

(*b*) address of the holder.

(2) for each flight—

(*a*) name of PIC;
(*b*) date of flight;
(*c*) place and time of departure and arrival; and
(*d*) type of aircraft and registration.

(3) for each session in a flight simulation training device—

(*a*) type and qualification number of flight simulation training device;
(*b*) flight simulation training device instruction;
(*c*) date; and
(*d*) total time of session.

(4) pilot function—

(*a*) solo;
(*b*) PIC;
(*c*) co-pilot;
(*d*) dual; and
(*e*) flight instructor.

3. Logging of flight time—

(1) Logging of solo flight time—A student pilot may log as solo flight time only that flight time when the pilot is the sole occupant of the aircraft.

(2) Logging of PIC flight time—

(*a*) the applicant or the holder of a pilot licence may log as PIC time all that flight time during which that person is—

(i) the sole manipulator of the controls of an aircraft for which the pilot is rated; and

(ii) acting as PIC of an aircraft on which more than one pilot is required under the type certification of the aircraft or the regulations under which the flight is conducted.

(*b*) an authorized instructor may log as PIC time all of the flight time while acting as an authorized instructor.

(*c*) a student pilot may log as PIC time all solo flight time and flight time as student pilot-in-command provided that such time is countersigned by the instructor.

(3) Logging of co-pilot time—A person may log co-pilot time only when occupying a pilot seat as co-pilot in an aircraft on which more than one pilot is required under the type certification of the aircraft or the regulations under which the flight is conducted.

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

(5) Instruction time—

(*a*) a person may log instruction time when that person receives training from an authorized instructor in an aircraft or flight simulation training device;

(*b*) the instruction time shall be logged in a record (e.g. logbook) and shall be endorsed by the authorized instructor.

IS 2:48 Category II and III Authorization

1. The Authority will issue a Category II or Category III pilot authorization by letter, as a part of an applicant's instrument rating or airline transport pilot certificate;

2. Upon original issue the authorization will contain the following limitations—

(1) For Category II operations, 1,600 feet RVR and a 150-foot decision height; and

(2) For Category III operations, as specified in the authorization document.

3. To remove the limitations on a Category II or Category III pilot authorization—

(1) A Category II limitation holder may remove the limitation by showing that, since the beginning of the sixth preceding month, the holder has made three Category II ILS approaches with a 150-foot decision height to a landing under actual or simulated instrument conditions; or

(2) A Category III limitation holder may remove the limitation by showing experience as specified in the authorization.

4. An authorization holder or an applicant for an authorization may use a flight simulator or flight training device if it is approved by the Authority for such use, to meet the experience requirement of paragraph (e) of this subsection, or for the practical test required by the Regulations for a Category II or a Category III pilot authorization, as applicable.

5. Category II: skill test requirements—

(1) An applicant for the following authorizations shall pass a skill test—

(*a*) issuance or renewal of a Category II pilot authorization.

(*b*) the addition of another type aircraft to a Category II pilot authorization.

(2) To be eligible for the skill test for an authorization under this subsection, an applicant shall—

(*a*) meet the requirements of regulation 24; and

(*b*) if the applicant has not passed a skill test for this authorization during the 12 calendar months preceding the month of the test—

(*c*) meet the requirements of regulation 33; and

(*d*) have performed at least six ILS approaches during the 6 calendar months preceding the month of the test, of which at least three of the approaches shall have been conducted without the use of an approach coupler

(3) An applicant shall accomplish the approaches specified in paragraph 5(2)(*b*) of this subsection—

(*a*) under actual or simulated instrument flight conditions;

(*b*) to the minimum decision height for the ILS approach in the type aircraft in which the practical test is to be conducted, except that the approaches need not be conducted to the decision height authorized for Category II operations;

(*c*) to the decision height authorized for Category II operations only if conducted in an approved flight simulator or an approved flight training device; and

(*d*) in an aircraft of the same category and class, and type, as applicable, as the aircraft in which the practical test is to be conducted or in an approved flight simulator that—

(i) represents an aircraft of the same category and class, and type, as applicable, as the aircraft in which the authorization is sought; and

(ii) is used in accordance with an approved course conducted by an ATO certified under the Aviation (Approved Training Organization) Regulations, 2013.

(4) The flight time acquired in meeting the requirements of paragraph 5(2)(*b*) of this subsection may be used to meet the requirements of paragraph 5(2)(*b*) of this subsection.

6. Category II: skill test procedures. The skill test consists of an oral increment and a flight increment—

(1) Oral increment: In the oral increment of the practical test an applicant shall demonstrate knowledge of the following—

(*a*) required landing distance;

(*b*) recognition of the decision height;

(*c*) missed approach procedures and techniques using computed or fixed attitude guidance displays;

(*d*) use and limitations of RVR;

(*e*) use of visual clues, their availability or limitations, and altitude at which they are normally discernible at reduced RVR readings;

(*f*) procedures and techniques related to transition from nonvisual to visual flight during a final approach under reduced RVR;

(*g*) effects of vertical and horizontal windshear;

(*h*) characteristics and limitations of the ILS and runway lighting system;

(*i*) characteristics and limitations of the flight director system, auto approach coupler (including split axis type if equipped), auto throttle system (if equipped), and other required Category II equipment;

(*j*) assigned duties of the SIC during Category II approaches, unless the aircraft for which authorization is sought does not require an SIC; and

(*k*) instrument and equipment failure warning systems.

(2) Flight increment: The following requirements apply to the flight increment of the practical test—

(*a*) the flight increment shall be conducted in an aircraft of the same category, class, and type, as applicable, as the aircraft in which the authorization is sought or in an approved flight simulator that—

(i) represents an aircraft of the same category and class, and type, as applicable, as the aircraft in which the authorization is sought; and

(ii) is used in accordance with an approved course conducted by an ATO certified under the (Approved Training Organization), Regulations, 2013.

(*b*) the flight increment shall consist of at least two ILS approaches to 100 feet AGL including at least one landing and one missed approach;

(*c*) all approaches performed during the flight increment shall be made with the use of an approved flight control guidance system, except if an approved auto approach coupler is installed, at least one approach shall be hand flown using flight director commands;

(*d*) if a multiengine aeroplane with the performance capability to execute a missed approach with one engine inoperative is used for the practical test, the flight increment shall include the performance

of one missed approach with an engine, which shall be the most critical engine, if applicable, set at idle or zero thrust before reaching the middle marker;

(*e*) if an approved multiengine flight simulator or approved multiengine flight training device is used for the practical test, the applicant shall execute a missed approach with the most critical engine, if applicable, failed;

(*f*) for an authorization for an aircraft that requires a type rating, the applicant shall pass a practical test in co-ordination with a SIC who holds a type rating in the aircraft in which the authorization is sought;

(*g*) an inspector or evaluator may conduct oral questioning at any time during a practical test.

7. Category III: skill test requirements—

(1) The Authority will require that an applicant pass a skill test for—

(*a*) issuance or renewal of a Category III pilot authorization;

(*b*) the addition of another type of aircraft to a Category III pilot authorization.

(2) To be eligible for the skill test an applicant shall—

(*a*) meet the requirements of regulation 9; and

(*b*) if the applicant has not passed a practical test for this authorization during the 12 calendar months preceding the month of the test—

(i) meet the requirements of regulation 33; regulation 224 and regulation 236 of the Aviation (Operations) Regulations, 2013; and

(ii) have performed at least six ILS approaches during the 6 calendar months preceding the month of the test, of which at least three of the approaches shall have been conducted without the use of an approach coupler.

(3) An applicant shall conduct the approaches specified in paragraph (2) (*b*) (ii) of this subsection—

(*a*) under actual or simulated instrument flight conditions;

(*b*) to the alert height or decision height for the ILS approach in the type aircraft in which the practical test is to be conducted;

(*c*) not necessarily to the decision height authorized for Category III operations;

(*d*) to the alert height or decision height, as applicable, authorized for Category III operations only if conducted in an approved flight simulator or approved flight training device; and

(*e*) in an aircraft of the same category and class, and type, as applicable, as the aircraft in which the practical test is to be conducted or in an approved flight simulator that—

(i) represents an aircraft of the same category and class, and type, as applicable, as the aircraft for which the authorization is sought; and

(ii) is used in accordance with an approved course conducted by an ATO certified under chapter 3, Part III.

(4) Knowledge requirements: An applicant shall demonstrate knowledge of the following—

(*a*) required landing distance;

(*b*) determination and recognition of the alert height or decision height, as applicable, including use of a radar altimeter;

(*c*) recognition of and proper reaction to significant failures encountered prior to and after reaching the alert height or decision height, as applicable;

(*d*) missed approach procedures and techniques using computed or fixed attitude guidance displays and expected height loss as they relate to manual go around or automatic go around, and initiation altitude, as applicable;

(*e*) use and limitations of RVR, including determination of controlling RVR and required transmissometers;

(*f*) use, availability, or limitations of visual cues and the altitude at which they are normally discernible at reduced RVR readings including—

(i) unexpected deterioration of conditions to less than minimum RVR during approach, flare, and rollout;

(ii) demonstration of expected visual references with weather at minimum conditions;

(iii) the expected sequence of visual cues during an approach in which visibility is at or above landing minima; and

(iv) procedures and techniques for making a transition from instrument reference flight to visual flight during a final approach under reduced RVR.

(*g*) effects of vertical and horizontal windshear;

(*h*) characteristics and limitations of the ILS and runway lighting system;

(*i*) characteristics and limitations of the flight director system auto approach coupler (including split axis type if equipped), auto throttle system (if equipped), and other Category III equipment;

(*j*) assigned duties of the SIC during Category III operations, unless the aircraft for which authorization is sought does not require a SIC;

(*k*) recognition of the limits of acceptable aircraft position and flight path tracking during approach, flare, and, if applicable, rollout;

(*l*) recognition of, and reaction to, airborne or ground system faults or abnormalities, particularly after passing alert height or decision height, as applicable;

(5) Flight skill requirements—

(*a*) an applicant may conduct the practical test in an aircraft of the same category and class, and type, as applicable, as the aircraft for which the authorization is sought, or in an approved flight simulator that—

(i) represents an aircraft of the same category and class, and type, as applicable, as the aircraft in which the authorization is sought; and

(ii) is used in accordance with an approved course conducted by an ATO certified under the Aviation (Approved Training Organization) Regulations, 2013.

(*b*) the practical test shall consist of at least two ILS approaches to 100 feet AGL, including one landing and one missed approach initiated from a very low altitude that may result in a touchdown during the go around manoeuvre;

(*c*) the applicant shall perform all approaches during the practical test with the approved automatic landing system or an equivalent landing system approved by the Authority;

(*d*) if a multiengine aircraft with the performance capability to execute a missed approach with one engine inoperative is used for the practical test, the practical test shall include the performance of one missed approach with the most critical engine, if applicable, set at idle or zero thrust before reaching the middle or outer marker;

(*e*) if an approved multiengine flight simulator or approved multiengine flight training device is used, the applicant shall execute a missed approach with an engine, which shall be the most critical engine, if applicable, failed;

(*f*) For an authorization for an aircraft that requires a type rating, the applicant shall pass a practical test in co-ordination with a SIC who holds a type rating in the aircraft in which the authorization is sought; and

(*g*) subject to the limitations of this paragraph, for Category III operations predicated on the use of a fail passive rollout control

system, the applicant shall execute at least one manual rollout using visual reference or a combination of visual and instrument references. The applicant shall initiate this manoeuvre by a fail passive disconnect of the rollout control system—

(i) after main gear touchdown;

(ii) prior to nose gear touchdown;

(iii) in conditions representative of the most adverse lateral touchdown displacement allowing a safe landing on the runway; and

(iv) in weather conditions anticipated in Category IIIb operations

(*h*) An inspector or evaluator may conduct oral questioning at any time during the practical test.

IS 2:53 Student Pilots

A student pilot who is receiving training for solo flight shall receive and log flight training for the following manoeuvres and procedures, as applicable for each category and class rating as specified in the applicable subsection to this IS.

Note: When (SE) is indicated, the item is only for single engine aircraft. When (ME) is indicated, the item is only for multi-engine aircraft.

IS 2:54 Student Pilots: Manouvres and Procedures for Pre-Solo Flight Training—Aeroplane Category

A student pilot who is receiving training for solo flight in an aeroplane shall receive and log flight training for the following manoeuvres and procedures—

(1) Proper flight preparation procedures, including preflight planning and preparation, powerplant operation and aircraft systems.

(2) Taxiing, or surface operations, including runups.

(3) Take-offs and landings, including normal and crosswind.

(4) Straight and level flight and turns in both directions.

(5) Climbs and climbing turns.

(6) Aerodrome traffic patterns including entry and departure procedures.

(7) Collision avoidance, windshear avoidance and wake turbulence avoidance.

(8) Descents, with and without turns, using high and low drag configurations.

(9) Flight at various airspeeds from cruise to slow flight.

(10) 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.

(11) Emergency procedures and equipment malfunctions.

(12) ground reference manoeuvres.

(13) approaches to a landing area with simulated engine malfunctions.

(14) slips to a landing (SE only).

(15) go-arounds.

IS 2:55 STUDENT PILOTS: MANOEUVRES AND PROCEDURES FOR PRE-SOLO FLIGHT TRAINING—HELICOPTER CATEGORY

A student pilot who is receiving training for solo flight in a helicopter shall receive and log flight training for the following manoeuvres and procedures—

(1) Proper flight preparation procedures, including preflight planning and preparation, power plant operation and aircraft systems.

(2) Taxiing, or surface operations, including runups.

(3) Take-offs and landings, including normal and crosswind.

(4) Straight and level flight and turns in both directions.

(5) Climbs and climbing turns.

(6) Aerodrome traffic patterns including entry and departure procedures.

(7) Collision avoidance, windshear avoidance and wake turbulence avoidance.

(8) Descents, with and without turns, using high and low drag configurations.

(9) Flight at various airspeeds.

(10) Emergency procedures and equipment malfunctions.

(11) Ground reference manoeuvres.

(12) Approaches to the landing area.

(13) Hovering and hovering turns.

(14) Go-arounds.

(15) Simulated emergency procedures, including autorotational descents with a power recovery and power recovery to hover.

(16) Rapid decelarations.

(17) Simulated one-engine-inoperative approaches and landings for multi-engine helicopters (ME).

IS 2: 56 STUDENT PILOTS: MANOEUVRES AND PROCEDURES FOR PRE-SOLO FLIGHT TRAINING—POWERED-LIFT CATEGORY

A student pilot who is receiving training for solo flight in a powered-lift shall receive and log flight training for the following manoeuvres and procedures—

(1) Proper flight preparation procedures, including preflight planning and preparation, powerplant operation and aircraft systems.

(2) Taxiing, or surface operations, including runups.

(3) Take-offs and landings, including normal and crosswind.

(4) Straight and level flight and turns in both directions.

(5) Climbs and climbing turns.

(6) Aerodrome traffic patterns including entry and departure procedures.
(7) Collision avoidance, windshear avoidance and wake turbulence avoidance.
(8) Descents, with and without turn.
(9) Flight at various airspeeds from cruise to slow flight.
(10) 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.
(11) Emergency procedures and equipment malfunctions.
(12) Ground reference manoeuvres.
(13) Approaches to a landing area with simulated engine failure.
(14) Go-arounds.
(15) Approaches to the landing area.
(16) Hovering and hovering turns.
(17) Simulated one-engine-inoperative approaches and landings for multi-engine powered-lift (ME).

IS 2: 57 Student Pilots: Manoeuvres and Procedures for Pre-Solo Flight Training—Airship Category

A student pilot who is receiving training for solo flight in an airship shall receive and log flight training for the following manoeuvres and procedures—

(1) Proper flight preparation procedures, including preflight planning and preparation, powerplant operation and aircraft systems.
(2) Taxiing, or surface operations, including runups.
(3) Take-offs and landings, including normal and crosswind.
(4) Straight and level flight and turns in both directions.
(5) Climbs and climbing turns.
(6) Aerodrome traffic patterns including entry and departure procedures.
(7) Collision avoidance, windshear avoidance and wake turbulence avoidance.
(8) Descents, with and without turn.
(9) Flight at various airspeeds from cruise to slow flight.
(10) Emergency procedures and equipment malfunctions.
(11) Ground reference manoeuvres.
(12) Rigging, ballasting, and controlling pressure in the ballonets, and superheating.
(13) Landings with positive and with negative static trim.

IS 2: 58 Student Pilots: Manoeuvres and Procedures for Pre-Solo Flight Training—Balloon Category

A student pilot who is receiving training for solo flight in a balloon shall receive and log flight training for the following manoeuvres and procedures—

(1) Layout and assembly procedures.

(2) Proper flight preparation procedures, including preflight planning and preparation, and aircraft systems.
(3) Ascents and descents.
(4) Landing and recovery procedures.
(5) Emergency procedures and equipment malfunctions.
(6) Operation of hot air or gas source, ballast, valves, vents, and rip panels as appropriate.
(7) Use of deflation valves or rip panels for simulating an emergency.
(8) The effects of wind on climb and approach angles.
(9) Obstruction detection and avoidance techniques.

IS 2: 59 Student Pilots: Manoeuvres and Procedures for Pre-Solo Flight Training—Glider Category

A student pilot who is receiving training for solo flight in a glider shall receive and log flight training for the following manoeuvres and procedures—

(1) Proper flight preparation procedures, including preflight planning and preparation, aircraft systems, and is applicable, powerplant operations.
(2) Taxiing or surface operations, including runups, if applicable.
(3) Launches, including normal and crosswind.
(4) Straight and level flight, and turns in both directions, if applicable.
(5) Aerodrome traffic patterns, including entry procedures.
(6) Collision avoidance, windshear avoidance, and wake turbulence avoidance.
(7) Descents with and without turns using high and low drag configurations;
(8) Flight at various airspeeds.
(9) Emergency procedures and equipment malfunctions.
(10) Ground reference manoeuvres.
(11) Inspection of towline rigging and review of signals and release procedures, if applicable.
(12) Aerotow, ground tow, or self-launch procedures.
(13) Procedures for disassembly and assembly of the glider.
(14) Stall entry, stall, and stall recovery.
(15) Straight glides, turns, and spirals.
(16) Landings, including normal and crosswind.
(17) Slips to a landing.
(18) Procedures and techniques for thermalling.
(19) Emergency operations, including towline break procedures.

IS 2: 60 Private Pilot Licence

IS 2: 61 PPL Skill Test—Aeroplane Category

The skill test for the single-engine and multi-engine private pilot licence – aeroplane shall include at least the following areas of operation with CRM competencies applied and evident in all tasks—

NOTE 1: When (SE) is indicated, the item or paragraph is only for single-engine, when (ME) is indicated the Item or paragraph is only for multi-engine. When nothing is indicated, the item or paragraph is for single- engine and multi-engine.

NOTE 2: When (S) is indicated, the item is only for seaplanes, when (L) is indicated, the item is only for landplanes. When nothing is indicated, the item is for land and seaplanes.

1. Preflight preparation; including the applicant's knowledge and performance of the following tasks—
   (1) Licences and documents.
   (2) Airworthiness requirements.
   (3) Weather information.
   (4) Cross-country flight planning.
   (5) National airspace system.
   (6) Performance and limitations.
   (7) Operation of system.
   (8) Principles of flight.
   (9) Water and Seaplane Characteristics (S).
   (10) Seaplane bases, maritime rules and aids to marine navigation (S).
   (11) Aeromedical factors.
2. Preflight procedures; including the applicant's knowledge and performance of the following tasks—
   (1) Preflight inspection.
   (2) Cockpit management.
   (3) Engine Starting.
   (4) Taxiing (L).
   (5) Taxiing and Sailing (S).
   (6) Before take-off check.
3. Aerodrome and seaplane operations; including the applicant's knowledge and performance of the following tasks—
   (1) Radio communications and ATC light signals;
   (2) Traffic patterns;
   (3) Aerodrome/Seaplane Base, runway and taxiway signs, markings and lighting.
4. Take-offs, landings and go-arounds; including the applicant's knowledge and performance of the following tasks—
   (1) Normal and crosswind takeoff and climb.
   (2) Normal and crosswind approach and landing.
   (3) Soft-field takeoff and climb (SE) (L).
   (4) Soft-field approach and landing (SE) (L).

(5) Short-field (Confined area (S)) take-off and maximum performance climb.
(6) Short-field approach (Confined area (S)) and landing.
(7) Glassy Water take-off and climb (S).
(8) Glassy water approach and landing (S).
(9) Rough water take-off and climb (S).
(10) Rough water approach and landing (S).
(11) Forward slip to a landing (SE).
(12) Go-around /rejected landing.

5. Performance manoeuvre; including the applicant's knowledge and performance of the following tasks—steep turns;

6. Ground reference manoeuvres; including the applicant's knowledge and performance of the following tasks—
(1) Rectangular course;
(2) S-turns;
(3) Turns around a point;

7. Navigation; including the applicant's knowledge and performance of the following tasks—
(1) Pilotage and dead reckoning.
(2) Navigation systems and radar services.
(3) Diversion.
(4) Lost procedures.

8. Slow flight and stalls; including the applicant's knowledge and performance of the following tasks—
(1) Manoeuvring during slow flight.
(2) Power-off stalls.
(3) Power-on stalls.
(4) Spin awareness.

9. Basic instrument manoeuvres; including the applicant's knowledge and performance of the following tasks—
(1) Straight-and-level flight.
(2) Constant airspeed climbs.
(3) Constant airspeed descents.
(4) Turns to headings.
(5) Recovery from unusual flight.
(6) Radio Communications, navigation systems/facilities and radar services; including the applicant's knowledge and performance of the following tasks—

10. Emergency operations; including the applicant's knowledge and performance of the following tasks—
(1) Emergency approach and landing.

(2) Emergency descent (ME).

(3) Engine failure during takeoff before minimum controllable airspeed (VMC) (simulated) (ME).

(4) Engine failure after lift-off (simulated) (ME).

(5) Approach and landing with an inoperative engine (simulated) (ME).

(6) Systems and equipment malfunctions.

(7) Emergency equipment and survival gear.

11. Multi-engine operations (ME); including the applicant's knowledge and performance of the following tasks—

(1) Manoeuvring with one engine inoperative.

(2) VMC demonstration.

(3) Engine failure during flight (by reference to instruments).

(4) Instrument approach–one engine inoperative (by reference to instruments).

12. Night operation; including the applicant's knowledge and performance of the following tasks—night preparation.

13. Post-flight procedures; including the applicant's knowledge and performance of the following tasks—

(1) After landing, parking and securing.

(2) Anchoring (S).

(3) Docking and mooring (S).

(4) Ramping/beaching (S).

IS 2: 62 PPL Skill Test—Helicopter Category

The skill test for the private pilot licence - helicopter shall include at least the following areas of operation with CRM competencies applied and evident in all tasks—

1. Preflight preparation; including the applicant's knowledge and performance of the following tasks—

(1) Licences and documents.

(2) Weather information.

(3) Cross-country flight planning.

(4) National airspace system.

(5) Performance and limitations.

(6) Operation of system.

(7) Minimum equipment list.

(8) Aeromedical factors.

2. Preflight procedures; including the applicant's knowledge and performance of the following tasks—

(1) Preflight inspection.

(2) Cockpit management.

(3) Engine Starting and rotor engagement.

(4) Before take-off check.

3. Aerodrome and heliport operations; including the applicant's knowledge and performance of the following tasks—

(1) Radio communications and ATC light signals;

(2) Traffic patterns.

(3) Aerodrome and heliport markings and lighting.

4. Hovering manoeuvres; including the applicant's knowledge and performance of the following tasks—

(1) Vertical take-off and landing.

(2) Slope operations.

(3) Surface taxi.

(4) Hover taxi.

(5) Air taxi.

5. Take-offs, landings and go-arounds; including the applicant's knowledge and performance of the following tasks.

6. Normal and crosswind take-off and climb.

7. Normal and crosswind approach.

8. Maximum performance takeoff and climb—

(i) Steep approach.

(ii) Rolling take-off.

(iii) Shallow approach and running/roll-on landing.

(iv) Go-around.

9. Performance manoeuvre; including the applicant's knowledge and performance of the following tasks—

(i) rapid deceleration;

(ii) straight in autorotation.

10. Navigation; including the applicant's knowledge and performance of the following tasks—

(i) Pilotage and dead reckoning.

(ii) Radio navigation and radar services.

(iii) Diversion.

(iv) Lost procedures.

11. Emergency operations; including the applicant's knowledge and performance of the following tasks—

(1) Power failure at a hover.

(2) Power failure at altitude.

(3) Systems and equipment malfunctions.
(4) Settling-with-power.
(5) Low rotor RPM recovery.
(6) Dynamic rollover.
(7) Ground resonance.
(8) Low G conditions.
(9) Emergency equipment and survival gear.

12. Night operation; including the applicant's knowledge and performance of the following tasks—
(1) Physiological aspects of night flying.
(2) Lighting and equipment for night flying.

13. Post-flight procedures; including the applicant's knowledge and performance of the following tasks—after landing and securing.

IS 2: 63 PPL Skill Test—Powered- Lift Category

Reserved.

IS 2: 64 PPL Skill Test—Airship Category

The skill test for the private pilot licence- airship category shall include at least the following areas of operation with CRM competencies applied and evident in all tasks:

1. Preflight preparation, including the applicant's knowledge and performance of the following tasks—
(1) Certificates and documents.
(2) Weather information.
(3) Cross-country flight planning.
(4) National airspace system.
(5) Performance and limitations.
(6) Operation of systems.
(7) Aeromedical factors.

2. preflight procedures, including the applicant's knowledge and performance of the following tasks—
(1) Preflight inspection.
(2) Cockpit management.
(3) Engine starting.
(4) Unmasting and positioning for take-off.
(5) Ground handling.
(6) Before takeoff check.

3. Aerodrome operations, including the applicant's knowledge and performance of the following tasks—
(1) Radio communications and ATC light signals.

(2) Traffic patterns.

(3) Airport and runway markings and lighting.

4. Take-offs, landings and go-arounds, including the applicant's knowledge and performance of the following tasks—

(1) Ground weigh-off.

(2) Up-ship take-off.

(3) Wheel take-off.

(4) Approach and landing.

(5) Go-around.

5. Performance manoeuvres, including the applicant's knowledge and performance of the following tasks—

(1) Straight-and-level flight.

(2) Ascents and descents.

(3) Level turns.

(4) In-flight weigh-off.

(5) Manual pressure control.

(6) Static and dynamic trim.

6. Ground reference manoeuvres, including the applicant's knowledge and performance of the following tasks—

(1) Rectangular course.

(2) Turns around a point.

7. Navigation, including the applicant's knowledge and performance of the following tasks—

8. Pilotage and dead reckoning.

(1) Navigation systems and radar services.

(2) Diversion.

(3) Lost procedures.

9. Emergency operations, including the applicant's knowledge and performance of the following tasks—

(1) Engine fire during flight.

(2) Envelope emergencies.

(3) Free ballooning.

(4) Ditching and emergency landing.

(5) Systems and equipment malfunctions.

10. Post-flight procedures, including the applicant's knowledge and performance of the following tasks—

(i) Masting.

(ii) Post-masting.

IS 2 :65 PPL Skill Test—Balloon Category

The skill test for the private pilot licence – balloon category shall include at least the following areas of operation with CRM competencies applied and evident in all tasks:

1. Preflight preparation, including the applicant's knowledge and performance of the following tasks—
   (1) Certificates and documents.
   (2) Weather information.
   (3) Flight planning.
   (4) National airspace system.
   (5) Performance and limitations.
   (6) Operation of systems.
   (7) Aeromedical factors.
2. Preflight procedures, including the applicant's knowledge and performance of the following tasks—
   (1) Launch site selection.
   (2) Crew briefing and preparation.
   (3) Layout and assembly.
   (4) Preflight inspection.
   (5) Inflation.
   (6) Basket/gondola management.
   (7) Pre-launch check.
3. Aerodrome operations, including the applicant's knowledge and performance of the following tasks—radio communications and ATC light signals.
4. Launches and landing, including the applicant's knowledge and performance of the following tasks—
   (1) Normal launch.
   (2) Launch over obstacle.
   (3) Approach to landing.
   (4) Normal landing.
   (5) High-wind landing.
5. performance manoeuvres, including the applicant's knowledge and performance of the following tasks—
   (1) Ascents.
   (2) Altitude control (level flight).
   (3) Descents, to include recognition of, and recovery from, rapid descents.
   (4) Contour flying.
   (5) Obstacle clearance.

(6) Tethering.

(7) Winter flying.

(8) Collision and avoidance pre-cautions.

(9) Mountain flying.

6. Navigation, including the applicant's knowledge and performance of the following tasks of navigation, to include cross country flying and dead reckoning, etc.

7. Emergency operations, including the applicant's knowledge and performance of the following tasks—

(1) Systems and equipment malfunctions.

(2) Emergency equipment and survival gear.

(3) Water landing.

(4) Thermal flight.

8. Post-flight procedures, including the applicant's knowledge and performance of the following tasks—

(1) Recovery.

(2) Deflation and packing.

(3) Refuelling.

FAA Practical Test Standard: FAA-S-8081-17

IS 2: 66 PPL Skill Test—Glider Category

The skill test for the private pilot licence—glider category shall include at least the following areas of operation with CRM competencies applied and evident in all tasks:

(1) Preflight preparation, including the applicant's knowledge and performance of the following tasks—

(*a*) licences and documents;

(*b*) weather information;

(*c*) operation of systems;

(*d*) performance and limitationsl;

(*e*) aeromedical factors.

(2) Peflight procedures, including the applicant's knowledge and performance of the following tasks—

(*a*) assembly;

(*b*) ground handling;

(*c*) preflight inspection;

(*d*) cockpit management;

(*e*) visual signals.

(3) Aerodrome and gliderport operations, including the applicant's knowledge and performance of the following tasks—

(*a*) radio communications;

(*b*) traffic patterns;

(*c*) aerodrome, runway, and taxiway signs, markings, and lighting.

(4) Launches–aero tow, including the applicant's knowledge and performance of the following tasks—

(*a*) before takeoff checks;

(*b*) normal and crosswind take-off;

(*c*) maintaining tow positions;

(*d*) slack line;

(*e*) boxing the wake;

(*f*) tow release; and

(*g*) abnormal occurrences.

(5) Launches– ground tow, including the applicant's knowledge and performance of the following tasks—

(*a*) before takeoff check;

(*b*) normal and crosswind take-off;

(*c*) abnormal occurrences.

(6) Launches– self-launch, including the applicant's knowledge and performance of the following tasks—

(*a*) engine starting.

(*b*) taxiing.

(*c*) before takeoff check.

(*d*) normal and crosswind takeoff and climb.

(*e*) engine shutdown in flight.

(*f*) abnormal occurrences.

(7) Landings, including the applicant's knowledge and performance of the following tasks—

(*a*) normal and cross wind landing;

(*b*) slips to landing;

(*c*) downwind landing.

(8) Performance airspeeds, including the applicant's knowledge and performance of the following tasks—

(*a*) minimum sink airspeed;

(*b*) speed-to-fly.

(9) Soaring techniques, including the applicant's knowledge and performance of the following tasks—

(*a*) thermal soaring;

(*b*) ridge and slope soaring;

(*c*) wave soaring.

(10) Performance manoeuvres, including the applicant's knowledge and performance of the following tasks—

(*a*) straight glides;

(*b*) turns to headings; and

(*c*) steep turns.

(11) Navigation, including the applicant's knowledge and performance of the following tasks—

(*a*) flight preparation and planning; and

(*b*) national airspace system.

(12) Slow flight and stalls, including the applicant's knowledge and performance of the following tasks—

(*a*) manoeuvring at minimum control airspeed; and

(*b*) stall recognition and recovery.

(13) Emergency operations, including the applicant's knowledge and performance of the following tasks—

(i) simulated off-airport landing; and

(ii) emergency equipment and survival gear.

(14) Post-flight procedures, including the applicant's knowledge and performance of the following tasks of after-landing and securing.

IS 2: 68 CPL Skill Test—Aeroplane Category

The skill test for the single-engine and multi-engine commercial pilot licence-aeroplane shall include at least the following areas of operation with CRM competencies applied and evident in all tasks—

Note 1: When (SE) is indicated, the item or paragraph is only for single-engine; when (ME) is indicated, the item or paragraph is only for multi-engine. When nothing is indicated, the item or paragraph is for single- engine and multi-engine.

Note 2: When (S) is indicated, the item is only for seaplanes, when (L) is indicated, the item is only for landplanes. When nothing is indicated, the item is for land and seaplanes.

(1) Preflight preparation; including the applicant's knowledge and performance of the following tasks—

(*a*) licences and documents;

(*b*) airworthiness requirements;

(*c*) weather information;

(*d*) cross-country flight planning;

(*e*) national airspace system;

(*f*) performance and limitations;

(*g*) operation of system;

(*h*) principles of flight (ME);

(*i*) water and Seaplane characteristics (S);

(*j*) seaplane bases, maritime rules and aids to marine navigation (S);

(*k*) aeromedical factors.

(2) Preflight procedures; including the applicant's knowledge and performance of the following tasks—

(*a*) preflight inspection;

(*b*) cockpit management;

(*c*) engine Starting;

(*d*) taxiing (L);

(*e*) taxiing and sailing (S); and

(*f*) before takeoff check.

(3) Aerodrome and seaplane base operations; including the applicant's knowledge and performance of the following tasks—

(*a*) radio communications and ATC light signals;

(*b*) traffic patterns; and

(*c*) aerodrome/Seaplane base, runway and taxiway signs, markings and lighting.

(4) Take-offs, landings and go-arounds; including the applicant's knowledge and performance of the following tasks—

(*a*) normal and crosswind take-off and climb;

(*b*) normal and crosswind approach and landing;

(*c*) soft-field take-off and climb (SE);

(*d*) soft-field approach and landing (SE);

(*e*) short-field (Confined area (S)) takeoff and maximum performance climb;

(*f*) short-field (Confined area (S)) approach and landing;

(*g*) glassy water take-off and climb (S);

(*h*) glassy water approach and landing (S);

(*i*) rough water take-off and climb (S);

(*j*) rough water approach and landing (S);

(*k*) power-off 180 degrees accuracy approach and landing (SE);

(*l*) go-around /rejected landing.

(5) Performance manoeuvres; including the applicant's knowledge and performance of the following tasks—

(i) steep turns;

(ii) steep spiral (SE);

(iii) chandelles (SE); and

(iv) lazy eights (SE).

(6) Ground reference manoeuvres; including the applicant's knowledge and performance of the tasks of eights on pylons (SE).

(7) Navigation; including the applicant's knowledge and performance of the following tasks—

(*a*) pilotage and dead reckoning;

(*b*) navigation systems and radar services;

(*c*) diversion; and

(*d*) lost procedures.

(8) Slow flight and stalls; including the applicant's knowledge and performance of the following tasks—

(*a*) manoeuvring during slow flight;

(*b*) power-off stalls;

(*c*) power-on stalls; and

(*d*) spin awareness.

(9) Emergency operations; including the applicant's knowledge and performance of the following tasks—

(*a*) emergency approach and landing;

(*b*) emergency descent (ME);

(*c*) engine failure during takeoff before VMC (simulated) (ME);

(*d*) engine failure after lift-off (simulated) (ME);

(*e*) approach and landing with an inoperative engine (simulated) (ME);

(*f*) systems and equipment malfunctions; and

(*g*) emergency equipment and survival gear.

(10) High altitude operations; including the applicant's knowledge and performance of the following tasks—

(*a*) supplemental oxygen; and

(*b*) pressurisation.

(11) Multi-engine operations (ME); including the applicant's knowledge and performance of the following tasks—

(*a*) manoeuvring with one engine inoperative;

(*b*) VMC demonstration;

(*c*) engine failure during flight (by reference to instruments;

(*d*) Instrument approach – one engine inoperative (by reference to instruments).

(12) Post-flight procedures; including the applicant's knowledge and performance of the following tasks—

(*a*) after landing, parking and securing;

(*b*) anchoring (S);

(*c*) docking and mooring (S); and

(*d*) ramping/beaching (S).

IS 2: 69 CPL Skill Test—Helicopter Category

The skill test for the commercial pilot licence – helicopter shall include at least the following areas of operation with CRM competencies applied and evident in all tasks:

(1) Preflight preparation; including the applicant's knowledge and performance of the following tasks—

(*a*) licences and documents;

(*b*) weather information;

(*c*) cross-country flight planning;

(*d*) national airspace system;

(*e*) performance and limitations;

(*f*) operation of system;

(*g*) minimum equipment list;

(*h*) aeromedical factors;

(*i*) physiological aspects of night flying; and

(*j*) lighting and equipment for night flying.

(2) Preflight procedures; including the applicant's knowledge and performance of the following tasks—

(*a*) preflight inspection;

(*b*) cockpit management;

(*c*) engine Starting and rotor engagement; and

(*d*) before takeoff check.

(3) Aerodrome and heliport operations; including the applicant's knowledge and performance of the following tasks—

(*a*) radio communications and ATC light signals;

(*b*) traffic patterns; and

(*c*) aerodrome and heliport markings and lighting.

(4) Hovering manoeuvres; including the applicant's knowledge and performance of the following tasks—

(*a*) vertical takeoff and landing;

(*b*) slope operations;

(*c*) surface taxi;

(*d*) hover taxi; and

(*e*) air taxi.

(5) Take-offs, landings and go-arounds; including the applicant's knowledge and performance of the following tasks—

(*a*) normal and crosswind takeoff and climb;

(*b*) normal and crosswind approach and landing;

(*c*) maximum performance takeoff and climb;

(*d*) steep approach;

(*e*) rolling take-off;

(*f*) shallow approach and running/roll-on landing; and

(*g*) go-around.

(6) Performance manoeuvre; including the applicant's knowledge and performance of the following tasks—

(*a*) rapid deceleration; and

(*b*) 180 Degrees autorotation.

(7) Navigation; including the applicant's knowledge and performance of the following tasks—

(*a*) pilotage and dead reckoning;

(*b*) radio navigation and radar services;

(*c*) diversion; and

(*d*) lost procedures.

(8) Emergency operations; including the applicant's knowledge and performance of the following tasks—

(*a*) power failure at a hover;

(*b*) power failure at altitude;

(*c*) systems and equipment malfunctions;

(*d*) settling-with-power;

(*e*) low rotor RPM recovery;

(*f*) dynamic rollover;

(*g*) ground resonance;

(*h*) low G conditions; and

(*i*) emergency equipment and survival gear.

(9) Special operations; including the applicant's knowledge and performance of the following tasks—

(i) confined area operation; and

(ii) pinnacle/platform operations.

(10) Post-flight procedures; including the applicant's knowledge and performance of the tasks after landing, parking and securing.

IS 2: 70 CPL Skill Test—Power-Lift Category

Reserved.

IS 2: 71 CPL Skill Test—Airship Category

The skill test for the commercial pilot licence – airship shall include at least the following areas of operation with CRM competencies applied and evident in all tasks—

(1) Technical subjects, including the applicant's knowledge and performance of the following tasks—

(*a*) aeromedical factors.

(*b*) visual scanning and collision avoidance.

(*c*) use of distractions during flight training.

(*d*) principles of flight.

(*e*) airship weight-off, ballast, and trim.

(*f*) night operations.

(*g*) regulations and publications.

(*h*) national airspace system.

(*i*) logbook entries and licence endorsement.

(2) Preflight preparation, including the applicant's knowledge and performance of the following tasks—

(*a*) licences and documents;

(*b*) weather information;

(*c*) cross-country flight planning;

(*d*) performance and limitations; and

(*e*) operations of systems.

(3) Preflight lesson on a manoeuvre to be performed in flight, including the applicant's knowledge and performance of the tasks of manoeuvre lesson.

(4) Preflight procedures, including the applicant's knowledge and performance of the following tasks—

(*a*) preflight inspection;

(*b*) cockpit management;

(*c*) engine starting;

(*d*) unmasting and positioning for take-off;

(*e*) ground handling; and

(*f*) before takeoff check.

(5) Aerodrome operations, including the applicant's knowledge and performance of the following tasks—

(*a*) radio communications;

(*b*) traffic pattern operations; and

(*c*) aerodrome, runway, and taxiway markings and lighting.

(6) Performance manoeuvres, including the applicant's knowledge and performance of the following tasks—

(*a*) flight to, from, and at pressure height;

(*b*) in-flight weigh-off;

(*c*) manual pressure control;

(*d*) static and dynamic trim.

(7) Navigation, including the applicant's knowledge and performance of the following tasks—

(*a*) pilotage and dead reckoning.

(*b*) diversion.

(*c*) lost procedures.

(*d*) navigation systems and air traffic control radar services.

(8) Emergency operations, including the applicant's knowledge and performance of the following tasks—

(*a*) aborted take-off;

(*b*) engine failure during take-off;

(*c*) engine failure during flight;

(*d*) engine fire during flight;

(*e*) envelope emergencies;

(*f*) free ballooning;

(*g*) ditching and emergency landing; and

(*h*) systems and equipment malfunctions.

(9) Post-flight procedures, including the applicant's knowledge and performance of the following tasks—

(*a*) masting;

(*b*) post-masting.

IS 2: 72 CPL Skill Test—Balloon Category

The skill test for the commercial pilot licence – balloon shall include at least the following areas of operation with CRM competencies applied and evident in all tasks—

Note: When (BH) is indicated, the item is for hot air balloons only. When (BG) is indicated, the item is for gas balloons.

(1) Technical subjects, including the applicant's knowledge and performance of the following tasks—

(*a*) aeromedical factors;

(*b*) visual scanning and collision avoidance;

(*c*) principles of flight;

(*d*) regulations and publications;

(*e*) national airspace system;

(*f*) logbook entries and licence endorsement.

(2) preflight preparation, including the applicant's knowledge and performance of the following tasks—

(*a*) licences and documents;

(*b*) weather information;

(*c*) flight planning;

(*d*) performance and limitations;

(*e*) operations of systems.

(3) Preflight lesson on a manoeuvre to be performed in flight, including the applicant's knowledge and performance of the task of manoeuvre lesson.

(4) Preflight procedures, including the applicant's knowledge and performance of the following tasks—

(i) launch site selection;

(ii) crew briefing and preparation;

(iii) layout and assembly;

(iv) preflight inspection;

(v) inflation;

(vi) basket/gondola management; and

(vii) pre-launch check.

(5) Aerodrome operations, including the applicant's knowledge and performance of the following task of radio communications.

(6) Launches and landings, including the applicant's knowledge and performance of the following tasks—

(*a*) normal launch;

(*b*) launch over obstacle;

(*c*) approach to landing;

(*d*) steep approach to landing;

(*e*) normal landing;

(*f*) high-wind landing.

(7) Performance manoeuvres, including the applicant's knowledge and performance of the following tasks—

(*a*) ascents;

(*b*) altitude control (level flight);

(*c*) descents;

(*d*) rapid ascent and descent;

(*e*) contour flying (BH);

(*f*) high altitude flight. (BG);

(*g*) obstacle avoidance (BH);

(*h*) tethering (BH);

(*i*) winter flying; and

(*j*) mountain flying.

(8) Navigation, including the applicant's knowledge and performance of the tasks of navigation.

(9) Emergency operations, including the applicant's knowledge and performance of the following tasks—

(*a*) systems and equipment malfunctions;

(*b*) emergency equipment and survival gear;

(*c*) water landing;

(*d*) thermal flight.

(10) Post-flight procedures, including the applicant's knowledge and performance of the following tasks—

(*a*) recovery;

(*b*) deflation and pack-up;

(*c*) refueling (BH).

IS 2: 73 CPL Skill Test—Glider category

The skill test for the commercial pilot licence – glider category shall include at least the following areas of operation with CRM competencies applied and evident in all tasks—

(1) Preflight preparation, including the applicant's knowledge and performance of the following tasks—

(*a*) licences and documents;

(*b*) weather information;

(*c*) operation of systems;

(*d*) performance and limitations; and

(*e*) aeromedical factors.

(2) Preflight procedures, including the applicant's knowledge and performance of the following tasks—

(*a*) assembly;

(*b*) ground handling;

(*c*) preflight inspection;

(*d*) cockpit management; and

(*e*) visual signals.

(3) Aerodrome and gliderport operations, including the applicant's knowledge and performance of the following tasks—

(*a*) radio communications.

(*b*) traffic patterns;

(*c*) aerodrome, runway, and taxiway signs, markings, and lighting.

(4) Launches– aero tow, including the applicant's knowledge and performance of the following tasks—

(*a*) before takeoff checks;

(*b*) normal and crosswind takeoff;

(*c*) maintaining tow positions;

(*d*) slack line;

(*e*) boxing the wake;

(*f*) tow release; and

(*g*) abnormal occurrences.

(5) Launches– ground tow, including the applicant's knowledge and performance of the following tasks—

(*a*) before takeoff check;

(*b*) normal and crosswind take-off; and

(*c*) abnormal occurrences.

(6) Launches– self-launch, including the applicant's knowledge and performance of the following tasks—

(*a*) engine starting;

(*b*) taxiing;

(*c*) before take-off check;

(*d*) normal and crosswind takeoff and climb;

(*e*) engine shutdown in flight; and

(*f*) abnormal occurrences.

(7) Landings, including the applicant's knowledge and performance of the following tasks—

(*a*) normal and cross wind landing;

(*b*) slips to landing; and

(*c*) downwind landing.

(8) Performance airspeeds, including the applicant's knowledge and performance of the following tasks—

(*a*) minimum sink airspeed; and

(*b*) speed-to-fly.

(9) Soaring techniques, including the applicant's knowledge and performance of the following tasks—

(*a*) thermal soaring;

(*b*) ridge and slope soaring; and

(*c*) wave soaring.

(10) Performance manoeuvres, including the applicant's knowledge and performance of the following tasks—

(*a*) straight glides;

(*b*) turns to headings.

(*c*) steep turns.

(11) Navigation, including the applicant's knowledge and performance of the following tasks—

(*a*) flight preparation and planning.

(*b*) national airspace system.

(12) Slow flight and stalls, including the applicant's knowledge and performance of the following tasks—

(i) Manoeuvring at minimum control airspeed;

(ii) Stall recognition and recovery.

(13) Emergency operations, including the applicant's knowledge and performance of the following tasks—

(i) simulated off-aerodrome landing;

(ii) emergency equipment and survival gear.

(14) Post-flight procedures, including the applicant's knowledge and performance of the task of after-landing and securing.

IS 2: 75 Multi-Crew Pilot Licence Skill Test— Aeroplane Category

The skill test for the multicrew pilot licence shall determine that the applicant, as pilot flying and pilot not flying, possesses the required skills in the following competency areas to perform as a co- pilot of turbine-powered aeroplanes certificated for operation with at least two pilots under VFR and IFR—

(1) Apply threat and error management 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 perform after-landing and aeroplane post-flight operations.

IS 2: 77 ATPL and Aircraft Type Rating Skill Test—Aeroplane Category

The skill test for the airline transport pilot licence - aeroplanes shall include at least the following areas of operation with CRM competencies applied and evident in all tasks:

(1) Preflight preparation; including the applicant's knowledge and performance of the following tasks—

(*a*) equipment examination; and

(*b*) performance and limitations.

(2) Preflight procedures; including the applicant's knowledge and performance of the following tasks—

(*a*) preflight inspection;

(*b*) powerplant start;

(*c*) taxiing; and

(*d*) before takeoff checks.

(3) Take-offs and departure phase; including the applicant's knowledge and performance of the following tasks—

(*a*) normal take-offs with different flap settings, including expedited takeoff;

(*b*) instrument take-off;

(*c*) powerplant failure during take-off;

(*d*) rejected take-off; and

(*e*) departure procedures.

(4) In-flight manoeuvres; including the applicant's knowledge and performance of the following tasks—

(*a*) steep turns;

(*b*) approach to stalls;

(*c*) powerplant failure;

(*d*) specific flight characteristics; and

(*e*) recovery from unusual altitudes.

(5) Instrument procedures; including the applicant's knowledge and performance of the following tasks—

(*a*) standard terminal arrival/flight management system procedures;

(*b*) holding procedures;

(*c*) precision instrument approaches;

(*d*) non-precision instrument approaches;

(*e*) circling approach; and

(*f*) missed approach.

(6) Landings and approaches to landings; including the applicant's knowledge and performance of the following tasks—

(*a*) normal and crosswind approaches and landings;

(*b*) landing from a precision approach;

(*c*) approach and landing with (simulated) powerplant failure;

(*d*) landing from a circling approach;

(*e*) rejected landing;

(*f*) landing from a no-flap or a non-standard flap approach;

(*g*) normal and abnormal procedures; and

(*h*) emergency procedures.

(7) Post-flight procedures; including the applicant's knowledge and performance of the following tasks—

(*a*) after landing procedures; and

(*b*) parking and securing.

IS 2: 78 ATPL and Aircraft Type Rating Skill Test—Helicopter Category

The skill test for the airline transport pilot licence for helicopters shall include at least the following areas of operation with CRM competencies applied and evident in all tasks:

(1) Preflight preparations and checks; including the applicant's knowledge and performance of the following tasks—

(*a*) equipment examination; and

(*b*) performance and limitations.

(2) Preflight procedures; including the applicant's knowledge and performance of the following tasks—

(*a*) preflight inspection;

(*b*) powerplant start;

(*c*) taxiing; and

(*d*) pre-take-off checks.

(3) Take-off and departure phase; including the applicant's knowledge and performance of the following tasks—

(*a*) Normal and crosswind take-off;

(*b*) Instrument take-off;

(*c*) Powerplant failure during take-off;

(*d*) Rejected take-off; and

(*e*) Instrument departure.

(4) In-flight manoeuvres; including the applicant's knowledge and performance of the following tasks—

(*a*) steep turns;

(*b*) powerplant failure-multi-engine helicopter;

(*c*) powerplant failure-single-engine helicopter;

(*d*) recovery from unusual altitudes; and

(*e*) settling with power.

(5) Instrument procedures; including the applicant's knowledge and performance of the following tasks—

(*a*) instrument arrival;

(*b*) holding;

(*c*) precision instrument approaches;

(*d*) non-precision instrument approaches; and

(*e*) missed approach.

(6) Landings and approaches to landings; including the applicant's knowledge and performance of the following tasks—

(*a*) normal and crosswind approaches and landings;

(*b*) approach and landing with simulated powerplant failure-multiengine helicopter; and

(*c*) rejected landing.

(7) normal and abnormal procedures; including the applicant's knowledge and performance of the tasks;

(8) emergency procedures; including the applicant's knowledge and performance;

(9) postflight procedures; including the applicant's knowledge and performance of the following tasks—

(*a*) after landing procedures; and

(*b*) parking and securing.

IS 2: 79 ATPL and Aircraft Type Rating Skill Test—Powered-Lift Category

Reserved.

IS 2: 81 Instrument Rating Skill Test and Proficiency Check

The skill test and proficiency check for the instrument rating shall include at least the following areas of operation with CRM competencies applied and evident in all tasks appropriate to the category of aircraft—

Note: When (SE) is indicated, the item or paragraph is only for single-engine, when (ME) is indicated the item or paragraphs is only for multi-engine. When nothing is indicated, the item or paragraph is for single- engine and multi-engine.

(1) Preflight preparation; including the applicant's knowledge and performance of the following tasks—

(*a*) weather information; and

(*b*) cross-country flight planning.

(2) Preflight procedures; including the applicant's knowledge and performance of the following tasks—

(*a*) aircraft systems related to IFR operations;

(*b*) aircraft flight instruments and navigation equipment; and

(*c*) instrument cockpit check.

(3) Air traffic control clearances and procedures; including the applicant's knowledge and performance of the following tasks—

(*a*) air traffic control clearances;

(*b*) compliance with departure, en route and arrival procedures and clearances;

(*c*) holding procedures.

(4) Flight by reference to instruments; including the applicant's knowledge and performance of the following tasks—

(*a*) straight-and-level flight;

(*b*) change of airspeed;

(*c*) constant airspeed climbs and descents;

(*d*) rate climbs and descents;

(*e*) timed turns to magnetic compass headings;

(*f*) steep turns; and

(*g*) recovery from unusual flight attitudes.

(5) Navigation systems; including the applicant's knowledge and performance of the following tasks—

(*a*) intercepting and tracking navigational systems and DME Arcs.

(*b*) instrument approach procedures; including the applicant's knowledge and performance of the following tasks—

(*c*) non-precision instrument approach;

(*d*) precision ILS instrument approach;

(*e*) missed approach;

(*f*) circling approach; and

(*g*) landing from a straight-in or circling approach.

(6) emergency operations; including the applicant's knowledge and performance of the following tasks—

(*a*) loss of communications;

(*b*) one engine inoperative during straight-and-level flight and turns (ME). (iii) One engine inoperative – instrument approach (ME);

(*c*) loss of gyro attitude and/or heading indicators.

(7) post-flight procedures; including the applicant's knowledge and performance of the following tasks—Checking instruments and equipment.

IS 2: 83 Flight Instructor Skill Test and Proficiency Check

1. Aeroplane Category. The skill test and proficiency check for the flight instructor rating - aeroplane shall include at least the following areas of operation with CRM competencies applied and evident in all tasks appropriate to the category and class of aircraft—

NOTE 1: When (SE) is indicated the item or paragraph is only for single-engine, when (ME) is indicated the item or paragraphs is only for multi-engine. When nothing is indicated, the item or paragraph is for single- engine and multi-engine.

NOTE 2: When (S) is indicated, the item is only for seaplanes, when (L) is indicated, the item is only for landplanes. When nothing is indicated, the item is for land and seaplanes.

(1) Fundamentals of instruction; including the applicant's knowledge and performance of the following tasks—

(*a*) the learning process;

(*b*) the teaching process;

(*c*) teaching methods;

(*d*) evaluation;

(*e*) flight instructor characteristics and responsibilities;

(*g*) human factors; and

(*h*) planning instructional activity.

(2) Technical subject areas; including the applicant's knowledge and performance of the following tasks—

(*a*) aeromedical factors;

(*b*) visual Scanning and collision avoidance;

(*c*) principles of flight;

(*d*) aeroplane flight controls;

(*e*) aeroplane weight and balance;

(*f*) navigation and flight planning;

(*g*) night operations;

(*h*) high altitude operations;

(*i*) regulations and publications;

(*j*) use of minimum equipment list;

(*k*) national airspace system;

(*l*) navigation aids and radar services;

(*m*) logbook entries and licence endorsements;

(*n*) water and seaplane characteristics (S); and

(*p*) seaplane bases, rules and aids to marine navigation (S).

(3) Preflight preparation; including the applicant's knowledge and performance of the following tasks—

(*a*) licences and documents;

(*b*) weather information;

(*c*) operation of systems (SE);

(*d*) performance and limitations (SE); and

(*e*) airworthiness requirements.

(4) Preflight lesson on a manoeuvre to be performed in flight; including the applicant's knowledge and performance of the following task—manoeuvre lesson;

(5) Preflight procedures; including the applicant's knowledge and performance of the following tasks—

(*a*) preflight inspection;

(*b*) cockpit management;

(*c*) engine starting;

(*d*) taxiing (L);

(*e*) taxiing (S);

(*f*) sailing (S); and

(*g*) before take-off check.

(6) Aerodrome and seaplane base operations; including the applicant's knowledge and performance of the following tasks—

(*a*) radio communications and ATC light signals;

(*b*) traffic patterns; and

(*c*) aerodrome and runway markings and lighting.

(7) take-offs, landings and go-arounds; including the applicant's knowledge and performance of the following tasks—

(*a*) normal and crosswind take-off and climb;

(*b*) short field (Confined area (S)) take-off and maximum performance climb;

(*c*) soft field take-off and climb (SE);

(*d*) glossy water take-off and climb (S);

(*e*) rough water take-off and climb (S);

(*f*) normal and crosswind approach and landing;

(*g*) slip to a landing (SE);

(*h*) go-around/rejected landing;

(*i*) short field (Confined area (S)) approach and landing;

(*j*) soft field approach and landing (SEL);

(*k*) power-off 180 degrees accuracy approach and landing (SEL);

(*l*) glassy water approach and landing (S); and

(*m*) rough water approach and landing (S).

(8) Fundamentals of flight; including the applicant's knowledge and performance of the following tasks—

(*a*) straight-and-level flight;

(*b*) level turns;

(*c*) straight climbs and climbing turns; and

(*d*) straight descents and descending turns.

(9) Performance manoeuvres; including the applicant's knowledge and performance of the following tasks—

(*a*) steep turns;

(*b*) steep spirals (SE);

(*c*) chandelles (SE);

(*d*) lazy eights (SE).

(10) Ground reference manoeuvres; including the applicant's knowledge and performance of the following tasks—

(*a*) rectangular course;

(*b*) S-turns across a road;

(*c*) turns around a point; and

(*d*) eights on pylons (SE).

(11) Slow flight, stalls and spins; including the applicant's knowledge and performance of the following tasks—

(*a*) manoeuvring during slow flight;

(*b*) power-on stalls (proficiency);

(*c*) power-off stalls (proficiency);

(*d*) crossed-control stalls (demonstration) (SE);

(*e*) elevator trim stalls (demonstration) (SE);

(*f*) secondary stalls (demonstration) (SE); and

(*g*) spins (SEL).

(12) Basic instrument manoeuvres; including the applicant's knowledge and performance of the following tasks—

(*a*) straight-and-level flight;

(*b*) constant airspeed climbs;

(*c*) constant airspeed descents;

(*d*) turns to headings; and

(*e*) recovery from unusual flight attitudes.

(13) emergency operations (SE); including the applicant's knowledge and performance of the following tasks—

(*a*) emergency approach and landing (simulated);

(*b*) systems and equipment malfunctions; and

(*c*) emergency equipment and survival gear.

(14) emergency operations (ME); including the applicant's knowledge and performance of the following tasks—

(*a*) systems and equipment malfunctions;

(*b*) engine failure during take-off before VMC;

(*c*) engine failure after lift-off;

(*d*) approach and landing with an inoperative engine;

(*e*) emergency descent; and

(*f*) emergency equipment and survival gear.

(15) Multi-engine operations (ME); including the applicant's knowledge and performance of the following tasks—

(*a*) operation of systems;

(*b*) performance and limitations;

(*c*) flight principles – engine inoperative;

(*d*) manoeuvring with one engine inoperative;

(*e*) VMC demonstration; and

(*f*) demonstrating the effects of various airspeeds and configurations during engine inoperative performance.

(16) Post-flight procedures; including the applicant's knowledge and performance of the following tasks—

(*a*) post-flight procedures;

(*b*) anchoring (S);

(*c*) docking and mooring (S);

(*d*) beaching (S); and

(*e*) ramping (S).

2. Helicopter Category. The skill test and proficiency check for the flight instructor rating - helicopter shall include at least the following areas of operation with CRM competencies applied and evident in all tasks appropriate to the category, and if applicable, class or type, of aircraft:

(1) Fundamentals of instruction; including the applicant's knowledge and performance of the following tasks—

(*a*) the learning process;

(*b*) the teaching process;

(*c*) teaching methods;

(*d*) evaluation;

(*e*) flight instructor characteristics and responsibilities;

(*f*) human factors; and

(*g*) planning instructional activity.

(2) Technical subject areas; including the applicant's knowledge and performance of the following tasks—

(*a*) aeromedical factors;

(*b*) visual Scanning and collision avoidance;

(*c*) use of distractions during flight training;

(*d*) principles of flight;

(*e*) helicopter flight controls;

(*f*) helicopter weight and balance;

(*g*) navigation and flight planning;

(*h*) night operations;

(*i*) regulations and publications;

(*j*) use of minimum equipment list;

(*k*) national airspace system; and

(*l*) logbook entries and licence endorsements.

(3) Preflight preparation including the applicant's knowledge and performance of the following tasks—

(*a*) licences and documents;

(*b*) weather information;

(*c*) operation of systems;

(*d*) performance and limitations; and

(*e*) airworthiness requirements.

(4) Preflight lesson on a manoeuvre to be performed in flight. including the applicant's knowledge and performance of the task of manoeuvre lesson.

(5) Preflight procedures, including the applicant's knowledge and performance of the following tasks—

(*a*) preflight inspection;

(*b*) cockpit management;

(*c*) engine starting and rotor engagement; and

(*d*) before takeoff check.

(6) Aerodrome operations and Heliport operations; including the applicant's knowledge and performance of the following tasks—

(*a*) radio communications and ATC light signals;

(*b*) traffic patterns;

(*c*) aerodrome and Heliport Markings and lighting.

(7) Hovering Manoeuvres; including the applicant's knowledge and performance of the following tasks—

(*a*) vertical takeoff and landing;

(*b*) surface taxi;

(*c*) hover taxi;

(*d*) air taxi; and

(*e*) slope operation.

(8) Take-offs, landings and go-arounds, including the applicant's knowledge and performance of the following tasks—

(*a*) normal and crosswind take-off and climb;

(*b*) maximum performance take-off and climb;

(*c*) rolling take-off;

(*d*) normal and crosswind approach;

(*e*) steep approach;

(*f*) shallow approach and running/roll-on landing; and

(*g*) go-around.

(9) Fundamentals of flight; including the applicant's knowledge and performance of the following tasks—

(*a*) straight-and-level flight;

(*b*) level turns;

(*c*) straight climbs and climbing turns; and

(*d*) straight descents and descending turns.

(10) Performance manoeuvres; including the applicant's knowledge and performance of the following tasks—

(*a*) rapid deceleration;

(*b*) straight-in autorotation; and

(*c*) 180 degrees autorotation.

(11) Emergency operations; including the applicant's knowledge and performance of the following tasks—

(*a*) power failure at a hover;

(*b*) power failure at altitude;

(*c*) settling-with-power;

(*d*) low rotor RPM recovery;

(*e*) antitorque system failure;

(*f*) dynamic rollover;

(*g*) ground resonance;

(*h*) low "G" conditions;

(*i*) systems and equipment malfunctions; and

(*j*) emergency equipment and survival gear.

(12) special operations; including the applicant's knowledge and performance of the following tasks—

(*a*) confined area operation; and

(*b*) pinnacle/platform operation.

(13) post-flight procedures; including the applicant's knowledge and performance of the tasks of after-landing and securing.

3. Powered-lift Category—

Reserved.

4. Airship Category. The skill test and proficiency check for the flight instructor rating - airship shall include at least the following areas of operation with CRM competencies applied and evident in all tasks appropriate to the category of aircraft—

(1) Fundamentals of instruction; including the applicant's knowledge and performance of the following tasks—

(*a*) the learning process;

(*b*) the teaching process;

(*c*) teaching methods;

(*d*) evaluation;

(*e*) flight instructor characteristics and responsibilities;

(*f*) human factors; and

(*g*) planning instructional activity.

(2) Technical subject areas; including the applicant's knowledge and performance of the following tasks—

(*a*) aeromedical factors;

(*b*) visual Scanning and collision avoidance;

(*c*) use of distractions during flight training;

(*d*) principles of flight;

(*e*) airship weight-off, ballast, and trim;

(*f*) night operations;

(*g*) regulations and publications;

(*h*) national airspace system; and

(*i*) logbook entries and licence endorsement.

(3) Preflight preparation, including the applicant's knowledge and performance of the following tasks—

(*a*) licences and documents;

(*b*) weather information;

(*c*) cross-country flight planning;

(*d*) performance and limitations; and

(*e*) operations of systems.

(4) Preflight lesson on a manoeuvre to be performed in flight, including the applicant's and performance of the following tasks of manoeuvre lesson.

(5) Preflight procedures, including the applicant's knowledge and performance of the following tasks—

(*a*) preflight inspection;

(*b*) cockpit management;

(*c*) engine starting;

(*d*) unmasting and positioning for take-off;

(*e*) ground handling; and

(*f*) before takeoff check.

(6) Aerodrome operations, including the applicant's knowledge and performance of the following tasks—

(*a*) radio communications;

(*b*) traffic pattern operations; and

(*c*) aerodrome, runway and taxiway markings and lighting.

(7) Performance manoeuvres, including the applicant's knowledge and performance of the following tasks—

(*a*) flight to, from, and at pressure height;

(*b*) in-flight weigh-off;

(*c*) manual pressure control; and

(*d*) static and dynamic trim.

(8) Navigation, including the applicant's knowledge and performance of the following tasks—

(*a*) pilotage and dead reckoning;

(*b*) diversion;

(*c*) lost procedures; and

(*d*) navigation systems and air traffic control radar services.

(9) Basic instrument manoeuvres, including the applicant's knowledge and performance of the following tasks—

(*a*) straight-and level flight;

(*b*) constant airspeed climbs;

(*c*) constant airspeed descents;

(*d*) turns to headings; and

(*e*) recovery from unusual flight attitudes.

(10) Emergency operations, including the applicant's knowledge and performance of the following tasks—

(*a*) aborted take-off;

(*b*) engine failure during take-off;

(*c*) engine failure during flight;

(*d*) engine fire during flight;

(*e*) envelope emergencies;

(*f*) free ballooning;

(*g*) ditching and emergency landing;

(*h*) systems and equipment malfunctions.

(11) post-flight procedures, including the applicant's knowledge and performance of the following tasks—

(*a*) masting; and

(*b*) post-masting.

5. Balloon Category. The skill test and proficiency check for the flight instructor licence with balloon instructor rating shall include at least the following areas of operation with CRM competencies applied and evident in all tasks appropriate to the category and class of aircraft—

NOTE: When (BH) is indicated, the item is for hot air balloons only. When (BG) is indicated, the item is for gas balloons.

(1) Fundamentals of instruction; including the applicant's knowledge and performance of the following tasks—

(*a*) the learning process;

(*b*) the teaching process;

(*c*) teaching methods;

(*d*) evaluation;

(*e*) flight instructor characteristics and responsibilities;

(*f*) human factors; and

(*g*) planning instructional activity.

(2) Technical subject areas; including the applicant's knowledge and performance of the following tasks—

(*a*) aeromedical factors;

(*b*) visual Scanning and collision avoidance;

(*c*) use of distractions during flight training;

(*d*) principles of flight;

(*e*) regulations and publications;

(*f*) national airspace system; and

(*g*) logbook entries and licence endorsement.

(3) Preflight preparation, including the applicant's knowledge and performance of the following tasks—

(*a*) licences and documents;

(*b*) weather information;

(*c*) cross-country flight planning;

(*d*) performance and limitations; and

(*e*) operations of systems.

(4) Preflight lesson on a manoeuvre to be performed in flight, including the applicant's and performance of the task of Manoeuvre lesson.

(5) Preflight procedures, including the applicant's knowledge and performance of the following tasks—

(*a*) launch site selection;

(*b*) crew briefing and preparation;

(*c*) layout and assembly;

(*d*) preflight inspection;

(*e*) inflation;

(*f*) basket/gondola management;

(*g*) pre-launch check.

(6) Aerodrome operations, including the applicant's knowledge and performance of the following tasks—Radio communications.

(7) Launches and landings, including the applicant's knowledge and performance of the following tasks—

(*a*) normal launch;

(*b*) launch over obstacle;

(*c*) approach to landing;

(*d*) steep approach to landing;

(*e*) normal landing; and

(*f*) high-wind landing.

(8) Performance manoeuvres, including the applicant's knowledge and performance of the following tasks—

(*a*) ascents;

(*b*) altitude control (level flight);

(*c*) descents;

(*d*) rapid ascent and descent;

(*e*) contour flying (BH);

(*f*) high altitude flight (BG);

(*g*) obstacle avoidance (BH);

(*h*) tethering (BH);

(*i*) winter flying;

(*j*) mountain flying; and

(*k*) navigation, including the applicant's knowledge and performance of the task of navigation.

(9) Emergency operations, including the applicant's knowledge and performance of the following tasks—

(*a*) systems and equipment malfunctions;

(*b*) emergency equipment and survival gear;

(*c*) water landing;

(*d*) thermal flight.

(10) Post-flight procedures, including the applicant's knowledge and performance of the following tasks—Recovery.

(11) Deflation and pack-up—refueling (BH).

6. Glider Category: The skill test and proficiency check for the flight instructor rating - glider shall include at least the following areas of operation with CRM competencies applied and evident in all tasks appropriate to the category of aircraft:

(1) Fundamentals of instruction; including the applicant's knowledge and performance of the following tasks—

(*a*) the learning process;

(*b*) the teaching process;

(*c*) teaching methods;

(*d*) evaluation;

(*e*) flight instructor characteristics and responsibilities;

(*f*) human factors; and

(*g*) planning instructional activity.

(2) Technical subject areas; including the applicant's knowledge and performance of the following tasks—

(*a*) aeromedical factors;

(*b*) visual Scanning and collision avoidance;

(*c*) use of distractions during flight training;

(*d*) principles of flight;

(*e*) elevators, ailerons, and rudder;

(*f*) trim, lift and drag devices;

(*g*) glider weight and balance;

(*h*) navigation and flight planning;

(*i*) regulations and publications;

(*j*) national airspace system; and

(*k*) logbook entries and licence endorsements.

(3) Preflight preparation; including the applicant's knowledge and performance of the following tasks—

(*a*) licences and documents;

(*b*) weather information;

(*c*) operation of systems; and

(*d*) performance and limitations.

(4) Preflight lesson on a manoeuvre to be performed in flight; including the applicant's knowledge and performance of the task of manoeuvre lesson.

(5) Preflight procedures; including the applicant's knowledge and performance of the following tasks—

(*a*) assembly;

(*b*) ground handling;

(*c*) preflight inspection;

(*d*) cockpit management; and

(*e*) visual signals.

(6) Aerodrome operations and gliderport operations; including the applicant's knowledge and performance of the following tasks—

(*a*) radio communications;

(*b*) traffic patterns; and

(*c*) aerodrome, runway, and taxiway signs, markings and lighting.

(7) Launches–aero tow, including the applicant's knowledge and performance of the following tasks—

(*a*) before take-off checks;

(*b*) normal and crosswind takeoff;

(*c*) maintaining tow positions;

(*d*) slack line;

(*e*) boxing the wake;

(*f*) tow release; and

(*g*) abnormal occurrences.

(8) Launches– ground tow (auto or winch), including the applicant's knowledge and performance of the following tasks—

(*a*) before takeoff check;

(*b*) normal and crosswind take-off; and

(*c*) abnormal occurrences;

(9) Launches–self-launch, including the applicant's knowledge and performance of the following tasks—

(*a*) engine starting;

(*b*) taxiing;

(*c*) before take-off check;

(*d*) normal and crosswind takeoff and climb;

(*e*) engine shutdown in flight; and

(*f*) abnormal occurrences.

(10) Landings, including the applicant's knowledge and performance of the following tasks—

(*a*) normal and cross wind landing;

(*b*) slips to landing; and

(*c*) downwind landing.

(11) Fundamentals of flight, including the applicant's knowledge and performance of the following tasks—

(*a*) straight glides; and

(*b*) turns to headings.

(12) Performance airspeeds, including the applicant's knowledge and performance of the following tasks—

(*a*) minimum sink airspeed; and

(*b*) speed-to-fly.

(13) Soaring techniques, including the applicant's knowledge and performance of the following tasks—

(*a*) thermal soaring;

(*b*) ridge and slope soaring; and

(*c*) wave soaring.

(14) Performance manoeuvres, including the applicant's knowledge and performance of the following tasks—

(*a*) steep turns; and

(*b*) recovery from a spiral dive.

(15) Slow flight and stalls, including the applicant's knowledge and performance of the following tasks—

(*a*) manoeuvring at minimum control airspeed;

(*b*) stall recognition and recovery; and

(*c*) spins.

(16) Emergency operations, including the applicant's knowledge and performance of the following tasks—

(*a*) simulated off-aerodrome landing; and

(*b*) emergency equipment and survival gear.

(17) Post-flight procedures, including the applicant's knowledge and performance of the task of after-landing and securing.

7. Flight Instructor for Instrument Ratings (A, H, and PL). The skill test and proficiency for the flight instructor for instrument ratings– aeroplane, helicopter and powered-lift shall include at least the following areas of operation with CRM competencies applied and evident in all tasks appropriate to the category, and if applicable class, of aircraft—

NOTE 1: When (SE) is indicated, the item or paragraph is only for single-engine, when (ME) is indicated the item or paragraphs is only for multi-engine. When nothing is indicated, the item and paragraph are for single-engine and multi-engine.

NOTE 2: When (A) is indicated, the item or paragraph is only for Aeroplane. When (H) is indicated, the item or paragraph is only for Helicopter. When nothing is indicated, the item and the paragraph are for all

categories.

(1) Fundamentals of instructing; including the applicant's knowledge and performance of the following tasks—

(*a*) the learning process;

(*b*) human behaviour and effective communication;

(*c*) the teaching process;

(*d*) teaching methods;

(*e*) critique and evaluation;

(*f*) flight instructor characteristics and responsibilities; and

(*g*) planning instructional activity.

(2) Technical subject areas; including the applicant's knowledge and performance of the following tasks—

(*a*) aircraft flight instruments and navigation equipment;

(*b*) aeromedical factors;

(*c*) regulations and publications related to IFR operations; and

(*d*) logbook entries related to instrument instruction.

(3) Preflight preparation; including the applicant's knowledge and performance of the following tasks—

(*a*) weather information;

(*b*) cross-country flight planning; and

(*c*) instrument cockpit check.

(4) Preflight lesson on a manoeuvre to be performed in flight; including the applicant's knowledge and performance of the task of Manoeuvre lesson.

(5) Air traffic control clearances and procedures; including the applicant's knowledge and performance of the following tasks—

(*a*) air traffic control clearances; and

(*b*) compliance with departure, en-route and arrival procedures and clearances.

(6) Flight by reference to instruments; including the applicant's knowledge and performance of the following tasks—

(*a*) straight-and-level flight;

(*b*) turns;

(*c*) change of airspeed in straight-and-level and turning flight;

(*d*) constant airspeed climbs and descents;

(*e*) constant rate climbs and descents;

(*f*) timed turns to magnetic compass headings;

(*g*) steep turns; and

(*h*) recovery from unusual flight altitudes.

(7) Navigation systems; including the applicant's knowledge and performance of the following tasks—

(*a*) intercepting and tracking navigational systems and DME Arcs;

(*b*) holding procedures.

(8) instrument approach procedures; including the applicant's knowledge and performance of the following tasks—

(*a*) non-precision instrument approach;

(*b*) precision instrument approach;

(*c*) missed approach;

(*d*) circling approach (A); and

(*e*) landing from a straight-in approach.

(9) Emergency operations; including the applicant's knowledge and performance of the following tasks—

(*a*) loss of communications;

(*b*) loss of gyro attitude and heading indicators;

(*c*) engine failure during straight-and-level flight and turns; and

(*d*) instrument approach – one engine inoperative.

(10) Post-flight procedures; including the applicant's knowledge and performance of the task of checking instruments and equipment.

8. Flight Instructor for Additional Type Ratings. The skill test and proficiency checks for instructors for additional type ratings - aeroplane and helicopter shall include at least the following areas of operation:

Technical subject areas—

(1) The content of the technical subject areas shall cover the areas as applicable to the aircraft class or type.

(2) Flight simulator; including the applicant's knowledge and performance of the following tasks—

(*a*) use of checklist, setting of radios/navigation aids;

(*b*) starting engines;

(*c*) take-off checks;

(*d*) instrument takeoff, transition to instruments after lift off;

(*e*) engine failure during take-off between V1 and V2 (Aeroplane);

(*f*) aborted takeoff prior to reaching V1 (A);

(*g*) high mach buffeting, specific flight characteristics (if necessary) (A);

(*h*) take-off with engine failure prior to TDP or DPATO or shortly after TDP or DPATO (Helicopter);

(*i*) steep turns;

(*j*) recovery from approach to stall/takeoff, clean landing configuration (Aeroplane);

(*k*) instrument approach to required minimum decision height or minimum descent height/altitude, manual one engine simulated inoperative during approach and landing or go-around (Aeroplane);

(*l*) instrument approach to required minimum decision height or minimum descent height/altitude, autopilot one engine simulated inoperative during approach and landing or go-around (Helicopter);

(*m*) rejected landing and go-around, and

(*n*) crosswind landing.

NOTE: When (A) is indicated, the item or paragraph is only for Aeroplane. When (H) is indicated, the item or paragraph is only for Helicopter. When nothing is indicated, the item and the paragraph are for A and H.

(3) Category II and II operations, if applicable; including the applicant's knowledge and performance of the following tasks—

(*a*) precision approaches, automatic with auto-throttle and flight director go-around caused by aircraft or ground equipment deficiencies;

(*b*) go-around caused by weather conditions;

(*c*) go-around at DH caused by offset position from centreline;

(*d*) one of the CAT II/CAT III approaches must lead to a landing.

(4) Aircraft; including the applicant's knowledge and performance of the following tasks—

(*a*) familiarisation with controls during outside checks;

(*b*) use of checklist, setting of radios and navigation aids, starting engines;

(*c*) taxiing;

(*d*) take-off;

(*e*) engine failure during takeoff short after V2, after reaching climb out attitude (Aeroplane);

(*f*) engine failure during takeoff short after TDP or DPATO after reaching climb out attitude (Helicopter);

(*g*) other emergency procedures (if necessary);

(*h*) Instrument approaches to required minimum decision height, manual one engine out during approach and landing or go-around;

(*i*) one engine simulated inoperative go-around from required minimum decision height; and

(*j*) one engine (critical) simulated inoperative landing.

IS 2: 86 SKILL TEST FOR DESIGNATED PILOT EXAMINERS

1. The skill test for initial designation of a pilot examiner, issuance of additional designations, and renewal of examiner designations shall contain both the appropriate oral questioning and aircraft or flight simulation training device performance in accordance with the applicable skill test for the aircraft category, and or class/type ratings as applicable;

2. Methods of skill testing. The Authority inspector will choose one of the following methods to test an examiner pilot applicant. The methods are listed in order of preference but scheduling difficulties may preclude use of the preferred method of testing.

   Authority inspector evaluates the pilot examiner applicant testing an actual pilot applicant for a licence or rating—

   (1) The Authority will arrange for the pilot examiner applicant to conduct a skill test for an actual pilot applicant for a licence or rating appropriate to the examiner designation sought, and the Authority inspector will observe the test from within the aircraft;

   (2) The Authority inspector will evaluate the pilot examiner applicant's performance while the pilot examiner applicant evaluates the pilot applicant;

   (3) Any discussion between the pilot examiner applicant and the Authority inspector concerning the pilot examiner applicant's performance with the pilot applicant will be held in private;

   (4) At the conclusion of the skill test for the actual pilot licence or rating—

      (*a*) if the applicant has passed the skill test, the pilot examiner applicant will fill out the appropriate documentation for the pilot applicant while the Authority inspector observes. The Authority inspector will sign any documentation needed.

      (*b*) if the pilot applicant does not pass the skill test, the Authority inspector will complete and sign the appropriate document needed.

3. Authority inspector playing the role of pilot applicant for a skill test—

   (1) The Authority inspector will play the role of a pilot applicant for a skill test appropriate to the type of designation the pilot examiner applicant is seeking.

(2) If the Authority inspector answers a question incorrectly to test whether the pilot examiner applicant recognises an incorrect answer, the incorrect response must be obviously wrong.

4. Authority inspector gives a flight skill test to the pilot examiner applicant—

(1) The Authority inspector will test the pilot examiner applicant on selected manoeuvres in order to assess the pilot examiner applicant's flight proficiency and ability to evaluate a pilot applicant in accordance with the appropriate skill test.

(2) The Authority inspector will evaluate the pilot examiner applicant's plan of action for completeness and efficiency.

IS 2: 98 Flight Engineer: Skill Test and Proficiency Check

The skill test and proficiency check for the flight engineer licence shall include at least the following areas of operation with CRM competencies applied and evident in all tasks appropriate to the category of aircraft—

(1) Preflight preparation; including the applicant's knowledge and performance of the following tasks—

(*a*) equipment examination-systems knowledge;

(*b*) aircraft handbooks, manuals, minimum equipment list (MEL), configuration deviation list (CDL) and operations specifications; and

(*c*) performance and limitations.

(2) Preflight procedures; including the applicant's knowledge and performance of the following tasks—

(*a*) preflight inspection and cockpit setup; and

(*b*) preflight inspection-exterior.

(3) Ground operations; including the applicant's knowledge and performance of the following tasks—

(*a*) powerplant start; and

(*b*) taxi and pre-takeoff checks.

(4) Normal procedures; including the applicant's knowledge and performance of the following tasks—

(*a*) take-off;

(*b*) in-flight;

(*c*) during approach and landing; and

(*d*) engine systems monitoring.

(5) Abnormal and emergency procedures; including the applicant's knowledge and performance of the following tasks—

(*a*) take-off;

(*b*) in-flight;

(*c*) during approach and landing;

(*d*) engine systems monitoring;

(*e*) postflight procedures;

(*f*) after landing; and

(*g*) parking and securing.

IS 2: 102 Skill Test for Designated Flight Engineer Examiners

1. The skill test for initial designation of a flight engineer examiner, issuance of additional class rating designations, and renewal of examiner designations shall contain both the appropriate oral questioning and aircraft or flight simulation training device performance in accordance with the applicable skill test for the aircraft and class ratings.

2. Methods of skill testing: The Authority inspector will choose one of the following methods to test a flight engineer examiner applicant. The methods are listed in order of preference but scheduling difficulties may preclude use of the preferred method of testing—

(1) Authority inspector evaluates the flight engineer examiner applicant testing an actual flight engineer applicant for a licence and class rating or proficiency check—

(*a*) the Authority will arrange for the flight engineer examiner applicant to conduct a skill test for an actual flight engineer applicant for a licence or added rating or proficiency check appropriate to the examiner designation sought, and the Authority inspector will observe the test from within the aircraft or flight simulation training device as applicable.

(*b*) the Authority inspector will evaluate the flight engineer examiner applicant's performance while the flight engineer examiner applicant evaluates the flight engineer applicant.

(*c*) any discussion between the flight engineer examiner applicant and the Authority inspector concerning the flight engineer examiner applicant's performance with the flight engineer applicant will be held in private—

(i) at the conclusion of the skill test for the actual flight engineer licence or added class rating or proficiency check;

(ii) if the applicant has passed the skill test or proficiency check, the pilot examiner applicant will fill out the appropriate documentation for the flight engineer applicant while the Authority inspector observes. The Authority inspector will sign any documentation needed.

(2) If the flight engineer applicant does not pass the skill test or proficiency check, the Authority inspector will complete and sign the appropriate document needed.

(*a*) authority inspector playing the role of flight engineer applicant for a skill test;

(*b*) the Authority inspector will play the role of a flight engineer applicant for a skill test appropriate to the class of designation the flight engineer examiner applicant is seeking;

(*c*) if the Authority inspector answers a question incorrectly to test whether the flight engineer examiner applicant recognises an incorrect answer, the incorrect response must be obviously wrong.

(3) Authority inspector gives a flight skill test to the flight engineer examiner applicant—

(*a*) the Authority inspector will test the flight engineer examiner applicant on selected manoeuvres in order to assess the flight engineer examiner applicant's flight proficiency and ability to evaluate a flight engineer applicant in accordance with the appropriate skill test;

(*b*) the Authority inspector will evaluate the flight engineer examiner applicant's plan of action for completeness and efficiency.

IS 2: 107 Flight Navigator Licence: Skill Test and Proficiency Check

1. The skill test and proficiency check for the flight navigator licence shall include at least the following areas of operation with CRM competencies applied and evident in all tasks appropriate to the category of aircraft—

(1) Star identification (pointer system).

(2) Use of star finder.

(3) Shots against pre-computed curve.

(4) 3-star fix or LOP of sun.

(5) Compensation and swinging of compass.

(6) Alignment of drift meter.

(7) Alignment of astro-compass or periscopic sextant.

(8) Interpretation of weather data.

(9) Preparation of flight plan.

(10) Computation of fuel load.

(11) Determination of PNR and equitime point.

(12) Preparation of cruise control chart.

(13) Use and interpretation of cruise control chart.

(14) Equipment check.

(15) Location of emergency equipment.
(16) Knowledge of emergency equipment.
(17) Use of flux-gate and gyrosyn compasses.
(18) Setting and altering course.
(19) Chart knowledge – sectional or WAC chart.
(20) Pilotage.
(21) Computer computation ability.
(22) Determine of track, ground speed, and wind by double drift.
(23) Determine of ground speed and wind by drift meter timing.
(24) Air plots.
(25) ETA's.
(26) Knowledge and use of radio facilities.
(27) Care in turning.
(28) Station identification.
(29) Use of manual loop;
(30) Evaluation of radio bearings.
(31) Correction and plotting of radio bearings.
(32) Diversion to alternate– computer compass heading, ETA, fuel remaining.
(33) Basic adjustments of Loran Receiver.
(34) Knowledge and use of Loran.
(35) Knowledge and use of consol method.
(36) Use of absolute altimeter.
(37) Determination of ":D" factor.
(38) Determination of drift by altimetry.
(39) Interpretation and application of altimeter data.
(40) Single LOP interpretation (radio, press).
(41) Single LOP approach.
(42) Use of astro-compass.
(43) Determination of compass deviation.
(44) Accuracy of celestial fixes.
(45) Selection of bodies for observation.
(46) Handling of routine reports.
(47) Log entries.
(48) Weather observations and interpretation in flight.
(49) Determination of wind from fixes.
(50) Estimates for letdown.

(51) Over-all speed.

(52) Over-all accuracy.

(53) Alertness.

(54) Co-ordination of navigation methods.

(55) Co-ordination of duties with time.

2. The areas of operation may be accomplished as follows—

(1) Items 1 through 7 above may be accomplished on the ground;

(2) Items 8 through 54 may be accomplished in flight; and

(3) Items 17, 22, 23, 33, 34, 35, 36, 37, 38, 39 may be completed by oral questioning when a lack of ground facilities or navigation equipment makes such procedures necessary.

IS 2: 110 Skill Test for Designated Flight Navigator Examiner

1. The skill test for initial designation and renewal of a flight navigator examiner shall contain both the appropriate oral questioning and aircraft or flight simulation training device performance in accordance with the applicable skill test for the aircraft and class ratings.

2. Methods of skill testing: The Authority inspector will choose one of the following methods to test a flight navigator examiner applicant. The methods are listed in order of preference but scheduling difficulties may preclude use of the preferred method of testing—

(1) Authority inspector evaluates the flight navigator examiner applicant testing an actual flight navigator applicant for a licence or proficiency check—

(*a*) the Authority will arrange for the flight navigator examiner applicant to conduct a skill test for an actual flight navigator applicant for a licence or proficiency check, and the Authority inspector will observe the test from within the aircraft or flight simulation training device as applicable;

(*b*) the Authority inspector will evaluate the flight navigator examiner applicant's performance while the flight navigator examiner applicant evaluates the flight navigator licence or proficiency check applicant;

(*c*) any discussion between the flight navigation examiner applicant and the Authority inspector concerning the flight navigator examiner applicant's performance with the flight navigator applicant will be held in private; and

(*d*) at the conclusion of the skill test for the actual flight navigator

licence or proficiency check—

(i) if the applicant has passed the skill test or proficiency check, the pilot examiner applicant will fill out the appropriate documentation for the pilot applicant while the Authority inspector observes. The Authority inspector will sign any documentation needed; and

(ii) if the pilot applicant does not pass the skill test or proficiency check, the Authority inspector will complete and sign the appropriate document needed.

(2) Authority inspector playing the role of flight navigator applicant for a skill test—

(*a*) the Authority inspector will play the role of a flight navigator applicant for a skill test appropriate to the designation the flight navigator examiner applicant is seeking; and

(*b*) if the Authority inspector answers a question incorrectly to test whether the flight navigator examiner applicant recognises an incorrect answer, the incorrect response must be obviously wrong;

(3) Authority inspector gives a flight skill test to the flight navigator examiner applicant—

(*a*) the Authority inspector will test the flight navigator examiner applicant on selected manoeuvres in order to assess the flight navigator examiner applicant's flight proficiency and ability to evaluate a flight navigator applicant in accordance with the appropriate skill test or proficiency check;

(*b*) the Authority inspector will evaluate the flight navigator examiner applicant's plan of action for completeness and efficiency.

IS 2: 119 Aircraft Maintenace Engineer Skill Requirements

1. Each applicant for an Aircraft Maintenance Engineer (AME) licence or rating shall pass a skill test containing both oral questioning and practical application of skill appropriate to the rating(s) sought. The tests cover the applicant's skill in performing the practical projects on the subjects covered by the written test for that rating. The applicant will be provided with appropriate facilities, tools, materials and airworthiness data.

2. AME General. The skill test for the AME Licence shall test the applicant's knowledge and performance in at least the following areas of operation—

(1) Basic electricity.

(2) Aircraft drawings.

(3) Weight and balance.
(4) Fluid line and fittings.
(5) Materials and processes.
(6) Ground operation and servicing.
(7) Cleaning and corrosion control.
(8) Mathematics.
(9) Maintenance forms and records.
(10) Basic physics.
(11) Maintenance publications.
(12) Aircraft mechanic technician privileges and limitations.

3. AME Airframe Rating. The skill test for the airfraoperation—
(1) Wood structures.
(2) Aircraft covering.
(3) Aircraft finishes.
(4) Sheet metal and non-metallic structures.
(5) Welding.
(6) Assembly and rigging.
(7) Airframe inspection.
(8) Fuel systems.
(9) Aircraft landing gear systems.
(10) Hydraulic and pneumatic power systems.
(11) Cabin atmosphere control systems.
(12) Aircraft instrument systems.
(13) Communication and navigation systems.
(14) Aircraft fuel systems.
(15) Aircraft electrical systems.
(16) Position and warning systems.
(17) Ice and rain control systems.
(18) Fire protection systems.

(4) AME Powerplant Rating. The skill test for the powerplant rating shall test the applicant's knowledge and performance in at least the following areas of operation—
(1) Reciprocating systems.
(2) Turbine engines.
(3) Engine inspection.
(4) Engine instrument systems.
(5) Engine fire protection systems.

(6) Engine electrical systems.
(7) Lubrication systems.
(8) Ignition and starting systems.
(9) Fuel metering.
(10) Engine fuel systems.
(11) Induction and engine airflow systems.
(12) Engine cooling systems.
(13) Engine exhaust and reverser systems.
(14) Propellers.
(15) Auxiliary power units.

(5) AME Avionics Rating— The skill test for the avionics rating shall test the applicant's knowledge and performance in the basic workshop and maintenance practices in at least the following areas of operation—
(1) Avionics – electrical.
(2) Avionics – instrument.
(3) Avionics – autoflight.
(4) Avionics – radio.
(5) Avionics – navigation systems.
(6) Repair, maintenance and function testing of aircraft systems/components – avionics.
(7) Job/task documentation and control practices.

IS 2: 151 Skill Test for the Flight Operations Officer Licence

The skill test for the flight operations officer licence shall test the applicant's knowledge and performance in at least the following areas of operation—

(1) Flight planning/dispatch release, including the applicants' knowledge and performance of the following tasks—
(*a*) regulatory requirements;
(*b*) meteorology;
(*c*) weather observations, analysis, and forecasts;
(*d*) weather related hazards;
(*e*) aircraft systems, performance, and limitations;
(*f*) navigation and aircraft navigation systems;
(*g*) practical dispatch applications; and
(*h*) manuals, handbooks and other written guidance.

(2) Preflight, takeoff, and departure, including the applicants' knowledge and performance of the following tasks—
(*a*) air traffic control procedures; and

(*b*) aerodrome, crew, and company procedures.

(3) In-flight procedures, including the applicants' knowledge and performance of the following tasks—

(*a*) routing, re-routing, and flight plan filing; and

(*b*) en route communication procedures and requirements.

(4) Arrival, approach, and landing procedures, including the applicants' knowledge and performance of the task of air traffic control and air navigation procedures.

(5) Post flight procedures, including the applicants' knowledge and performance of the following tasks—

(*a*) communication procedures and requirements; and

(*b*) trip records.

(6) Abnormal and emergency procedures, including the applicants' knowledge and performance of the task of abnormal and emergency procedures.

IS 2: 166 Senior Parachute Rigger Licence Skill Test

The skill test for the senior parachute rigger licence shall test the applicant's knowledge and performance in at least the following areas of operation—

(1) certification, including the applicants' knowledge and performance of the following tasks—

(*a*) senior parachute rigger experience requirements;

(*b*) senior parachute rigger test requirements.

(2) privileges, limitations and operating rules, including the applicants' knowledge and performance of the following tasks—

(*a*) senior parachute rigger privileges;

(*b*) required facilities and equipment;

(*c*) performance standards;

(*d*) recordation;

(*e*) manufacturer's packing instructions;

(*f*) repair classifications;

(*g*) alterations;

(*h*) equipment requirements for intentional parachute jumping; and

(*i*) TSO 23c requirements.

(3) Packing parachutes, including the applicants' knowledge and performance of the following tasks—

(*a*) packing round parachute;

(*b*) packing ram-air parachute; and

(*c*) packing piggy-back container parachute.

(4) Parachute operation and care, including the applicants' knowledge and performance of the following tasks—

(*a*) parachute storage;
(*b*) parachute drying and airing;
(*c*) parachute assembly inspection;
(*d*) cleaning parachute canopies;
(*e*) parachute harness adjustment;
(*f*) pin-type static line requirements;
(*g*) break cord static line requirements; and
(*h*) cleaning parachute harness/container.

(5) Parachute construction details, including the applicants' knowledge and performance of the following tasks—

(*a*) seam construction defects;
(*b*) webbing joint construction;
(*c*) parachute construction knots;
(*d*) fabric construction;
(*e*) french fell seam construction;
(*f*) technical standard order TSO-C23c;
(*g*) technical standard order TSO-C23d;
(*h*) fastener tapes;
(*i*) finger loop construction; and
(*j*) radial seam construction.

(6) Parachute repair, including the applicants' knowledge and performance of the following tasks—

(*a*) single canopy repair;
(*b*) replacement of lower control line (ram-air canopy);
(*c*) application of non-destructive test method TS-108;
(*d*) line attachment loop replacement;
(*e*) removal and installation of grommets;
(*g*) sewing machine operation;
(*h*) cascade line replacement;
(*i*) nicopress sleeve installation;
(*j*) replacement of V-tab (butterfly tab);
(*k*) replacement of continuous suspension line;
(*l*) suspension line replacement in ram-air canopy;
(*m*) container patching;
(*n*) ram-air canopy repair limitations; and
(*o*) ram-air canopy repair adjacent to a seam.

IS 2: 167 Master Parachute Rigger Licence Skill Test

The skill test for the master parachute rigger licence shall test the applicant's knowledge and performance in at least the following areas of operation—

(1) Certification, including the applicants' knowledge and performance of the following tasks—

(*a*) master parachute rigger experience requirements; and

(*b*) master parachute rigger test requirements.

(2) Privileges, limitations and operating rules, including the applicants' knowledge and performance of the following tasks—

(*a*) master parachute rigger privileges;

(*b*) required facilities and equipment;

(*c*) performance standards;

(*d*) recordation;

(*e*) manufacturer's packing instructions;

(*f*) repair classifications;

(*g*) alterations;

(*h*) equipment requirements for intentional parachute jumping; and

(*i*) TSO 23c requirements.

(3) Packing parachutes, including the applicants' knowledge and performance of the following tasks—

(*a*) packing round parachute;

(*b*) packing ram-air parachute; and

(*c*) packing piggy-back container parachute.

(4) Parachute operation and care, including the applicants' knowledge and performance of the following tasks—

(*a*) parachute storage;

(*b*) parachute drying and airing;

(*c*) parachute assembly inspection;

(*d*) cleaning parachute canopies;

(*e*) parachute harness adjustment;

(*f*) pin-type static line requirements;

(*g*) break cord static line requirements; and

(*h*) cleaning parachute harness/container.

(5) Parachute construction details, including the applicants' knowledge and performance of the following tasks—

(*a*) seam construction defects;
(*b*) webbing joint construction;
(*c*) parachute construction knots;
(*d*) fabric construction;
(*e*) french fell seam construction;
(*f*) technical standard order TSO-C23c;
(*g*) technical standard order TSO-C23d;
(*h*) fastener tapes;
(*i*) finger loop construction; and
(*j*) radial seam construction.

(6) Parachute repair, including the applicants' knowledge and performance of the following tasks—
(*a*) single canopy repair;
(*b*) replacement of lower control line (ram-air canopy);
(*c*) application of non-destructive test method TS-108;
(*d*) line attachment loop replacement;
(*e*) removal and installation of grommets;
(*f*) sewing machine operation;
(*g*) cascade line replacement;
(*h*) nicopress sleeve installation;
(*i*) replacement of V-tab (butterfly tab);
(*j*) replacement of continuous suspension line;
(*k*) suspension line replacement in ram-air canopy;
(*l*) container patching;
(*m*) ram-air canopy repair limitations; and
(*n*) ram-air canopy repair adjacent to a seam.

(7) Parachute alterations, including the applicants' knowledge and performance of the following tasks—
(*a*) alteration data approval;
(*b*) install an automatic activation device;
(*c*) fabrication binding corners;
(*d*) altering riser connections;
(*e*) bridle cord alteration;
(*f*) threading friction adapter;
(*g*) D- or V-ring alteration;
(*h*) conversion of ripcord deployment to hand deployed pilot chute;

(*i*) fabricate a canopy deployment bag; and

(*j*) convert throw-out pilot chute from rear of leg position to the bottom of container position.

IS 2: 168 Type Rating—Parachute Rigger Licence Skill Test

The skill test for ratings or added ratings to a parachute rigger licence shall test the applicant's knowledge and performance in at least the following areas of operation applicable to the rating sought, including the applicant's knowledge and performance of the following—

(1) Additional rating requirements.

(2) Packing seat-type parachute.

(3) Packing back-type parachute (excluding piggy-back).

(4) Packing chest-type parachute.

(5) Packing lap-type parachute.

IS 2: 188 Aviation Medical Examiners

1. Basic training in aviation medicine for AMEs shall include at least the following—

   (1) Basic training in aviation medicine.

   (2) Physics of atmosphere and space.

   (3) Basic aeronautical knowledge.

   (4) Aviation Physiology.

   (5) Opthalmology.

   (6) Otorinolaryngology.

   (7) Cardiology and general medicine.

   (8) Neurology.

   (9) Psychiatry in aviation medicine.

   (10) Psychology.

   (11) Dentistry.

   (12) Accidents, escape and survival.

   (13) Legislation, rules and regulations.

   (14) Air evacuation.

   (15) Medicine and flying.

2. Advanced training in aviation medicine for AMEs shall include the following—

   (1) Pilot working environment.

   (2) Aerospace physiology.

   (3) Opthalmology.

   (4) Otorinolaryngology.

   (5) Cardiology and general medicine.

   (6) Neurology/psychiatry.

(7) Human factors in aviation.
(8) Tropical medicine.
(9) Hygiene.
(10) Space medicine.

IS 2: 193 Medical Certificate

The following details shall appear on the medical certificate in the Roman alphabet—
(1) Name of state.
(2) Licence no.
(3) Name of holder in full.
(4) Date of birth.
(5) Address of holder.
(6) Nationality of holder.
(7) Signature of holder.
(8) Medical certificate class 1, 2, or 3.
(9) Issuing Authority.
(10) Validity.
(11) Limitations.
(12) Date of issue and signature of issuing officer.

Initial Medical Examination

Date State	Last	Next
Date (YDM) of:		
Extended Medical Examination		
Medical (General) Examination		
Electrocardiogram		
Audiogram		

Made this 26th day of June, 2013.

Mohammed Sidik Mia
Minister of Transport and Public Works

(File No. 5/3/2)