

## **EIGHTH “A” SCHEDULE (Regulations 40 - 48)**

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## SUBPART A: GENERAL

### 8.001 APPLICABILITY

This Schedule prescribes, for Jamaica citizens, other persons authorized to work commercially in Jamaica on behalf of Jamaica entities, and persons operating aircraft registered in Jamaica —

- (1) the requirements for issuing airman licences and ratings and authorizations to those licences, as applicable;
- (2) the conditions under which those licences, ratings and authorizations are necessary; and
- (3) the limitations for issuance to holders of those licences, ratings and authorizations.

*(Note: All licences require a current aviation medical certificate in order to exercise the privileges of licences. The requirements for the aviation medical certificate are provided in the Eighth Schedule - B.)*

### 8.005 DEFINITIONS

For the purpose of this Schedule, the following definitions shall apply —

- (1) **"Aircraft certified for single pilot operation"**. A type of aircraft that the State of Registry has determined, during the certification process, can be operated safely with a minimum crew of one pilot;
- (2) **"Advanced flight training device"**. A flight training device that has a cockpit that accurately replicates a specific make, model, and type aircraft cockpit, and handling characteristics that accurately model the aircraft handling characteristics;
- (3) **"Complex airplane"**. An airplane having retractable landing gear (except in seaplanes), flaps and a controllable propeller.
- (4) **"Core curriculum"**. A set of courses approved by the Authority, for use by an FTU and its satellite FTUs. The core curriculum consists of training that is required for licensing or aircraft ratings. It does not include training for tasks and circumstances unique to a particular user;
- (5) **"Dual instruction time"**. Flight time during which a person is receiving flight instruction from a properly authorized pilot on board the aircraft;
- (6) **"Human performance"**. Human capabilities and limitations that have an impact on the safety and efficiency of aeronautical operations;
- (7) **"Medical assessment"**. The evidence issued by the Authority that the licence holder meets specific requirements of medical fitness. It is issued following an evaluation by the Authority of the report submitted by the designated medical examiner that conducted the examination of the applicant for the licence;

- (8) **"Pilot" (to)**. To manipulate the flight controls of an aircraft during flight time;
- (9) **"Problematic use of substances"**. The use of one or more psychoactive substances by aviation personnel in a way that constitutes a direct hazard to the user or endangers the lives, health or welfare of others, and/or causes or worsens an occupational, social, mental or physical problem or disorder;
- (10) **"Psychoactive substances"**. (Refer to 8.705)
- (11) **"Rated air traffic controller"**. An air traffic controller holding a licence and valid ratings appropriate to the privileges to be exercised.
- (12) **"Synthetic flight trainer"**. Any one of the following three types of apparatus in which flight conditions are simulated on the ground:
  - (i) a "flight simulator", which 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 crew members, and the performance and flight characteristics of that type of aircraft are realistically simulated. A flight simulator can be either a level A, B, C or D.  
*(See the Fourteenth Schedule, Appendix 4 to 14.090, Note 2, (1) – (3) for a description of the flight simulator levels.)*
  - (ii) a "flight procedures trainer", which provides a realistic flight deck environment, and which simulates instrument responses, simple control functions of mechanical, electrical, electronic, etc. aircraft systems and the performance and flight characteristics of aircraft of a particular class.
  - (iii) a "basic instrument flight trainer", which is equipped with appropriate instruments, and which simulates the flight deck environment of an aircraft in flight in instrument flight conditions.
- (13) **"Training flight"**. A dual instruction flight or a solo practice flight that is conducted under the direction and supervision of a flight instructor.

#### **8.010 ACRONYMS**

The following acronyms are used in this Schedule --

- (1) AIP – Aeronautical Information Publication;
- (2) AMO – Approved Maintenance Organization;
- (3) AME - Aircraft Maintenance Engineer;
- (4) AOC – Air Operator Certificate;
- (5) ATC – Air Traffic Control;
- (6) ATO - Approved Training Organization;
- (7) FTU – Flight Training Unit;
- (8) IFR - Instrument Flight Rules;
- (9) ICAO - International Civil Aviation Organization;
- (10) MTU – Maintenance Training Unit;
- (11) NOTAM – Notice To Airmen;
- (12) PIC - Pilot In Command;
- (13) SIC - Second In Command;
- (14) VFR - Visual Flight Rules.

## **SUBPART B: LICENCES, RATINGS AND AUTHORIZATIONS**

#### **8.015 APPLICABILITY**

This Subpart describes the personnel licences, ratings and authorizations that are issued by the Authority, and prescribes the requirements for testing such licences, ratings and authorizations.

## **8.016 GENERAL**

- (a) No person may be issued any authorization, licence or rating unless they meet the requirements of this Schedule or another applicable Schedule of the Civil Aviation Safety Regulations in respect of age, knowledge, experience, flight instruction, skill and medical fitness that are specified for that authorization, licence or rating.
- (b) No person may be issued any authorization, licence or rating unless they have satisfactorily demonstrated, in a manner determined by the Authority, their ability to meet the requirements for knowledge and skill as are specified for that authorization, licence or rating.
- (c) No person may be issued an aircraft category, class or type rating on a pilot licence unless that rating reflects the appropriate category, class, or type of aircraft used to demonstrate skill and knowledge for its issuance.

## **8.017 ISSUANCE AND ENDORSEMENT OF LICENCES, RATINGS OR AUTHORIZATIONS**

The Authority may require any or all of the following items of proof before issuing a licence, rating, or authorization:

- (1) Proof of Citizenship – One of the following documents is required to establish proof of citizenship -
  - (i) a Citizenship Certificate;
  - (ii) a Certificate of Registration of Birth Abroad issued by the Police Department Immigration and Passport Division;
  - (iii) a Birth Certificate or Baptismal Certificate issued in Jamaica or in a state whose citizens do not require a passport to travel in Jamaica. A copy certified by the issuing state or duly notarized is acceptable;
  - (iv) a Passport. If no expiry date is indicated on the passport, an attestation that the passport is valid is required from the applicant's state of citizenship;
  - (v) an aviation personnel licence showing the citizenship of the holder and issued by the state of which the applicant is a citizen; or
  - (vi) a Jamaica Immigration Record and Visa, issued to a landed immigrant by the Police Department Immigration and Passport Division.
- (2) Proof of Age – One of the following documents is acceptable proof of age -
  - (i) a Citizen Certificate;
  - (ii) a Certificate of Registration of Birth Abroad issued by the Police Department, Immigration and Passport Division;
  - (iii) a Birth Certificate or Baptismal Certificate, or a duly notarized copy;
  - (iv) a Passport;
  - (v) a personnel aviation certificate, either a permit or licence, showing the date of birth, issued by the state of which the applicant is a citizen; or
  - (vi) a Jamaica Immigration Record and Visa issued to a landed immigrant by the Police Department Immigration and Passport Division.
- (3) Proof of Identity – An applicant for the initial issue of a Jamaica pilot licence shall submit photographic identification, issued by a governmental body, as proof of identity; for example, a passport, driver's licence or voter identification card. In the absence of governmental photographic identification, the applicant shall submit a passport-sized photograph, certified by a Justice of the Peace to be a true photograph of the applicant.
- (4) Proof of Experience – Pilot logbook entries are required to be certified in order to validate the times claimed in the logbooks for the issuance of a pilot licence or the addition of ratings to a licence. The accuracy of entries shall be certified in the pilot logbook by -
  - (i) a qualified flight instructor for student pilots;
  - (ii) the Chief Pilot or Operations Manager of an AOC holder for pilots employed by that holder;
  - (iii) a flight simulator instructor at a recognized flight simulator training facility for crediting instrument ground time; or
  - (iv) the registered owner of the aircraft in all other cases.

### **8.018 LICENCES AUTHORIZED TO BE ISSUED**

- (a) The Authority may issue the following licences under this Schedule —
- (1) Pilot licences —
    - (i) student pilot;
    - (ii) private pilot;
    - (iii) commercial pilot; and
    - (iv) airline transport pilot;
    - (v) flight engineer licence;
    - (vi) AME licence;
    - (vii) Flight Dispatcher Licence;
    - (viii) Air Traffic Controller Licence.

*(Note: The privileges associated with these licences are contained in Subsection 8.020).*

- (b) The Authority shall issue the licenses on first quality paper or equivalent, or on hard plastic cards.

*(Note: The licence shall contain the detail shown in Appendix 1 to Subsection 8.018 and the colours shown in Appendix 2 to Subsection 8.018.)*

### **8.019 CREDITING OF FLIGHT TIME**

- (a) A student pilot or the holder of a pilot licence shall be entitled to be credited in full with all solo, dual instruction and pilot-in-command flight time towards the total flight time required for the initial issue of a pilot licence or the issue of a higher grade of pilot licence.
- (b) The holder of a pilot licence, when acting as SIC of an aircraft required to be operated with an SIC, shall be entitled to be credited with not more than 50 per cent of the SIC flight time towards the total flight time required for a higher grade of pilot licence.
- (c) The holder of a pilot licence, when acting as SIC performing under the supervision of the PIC the functions and duties of a PIC, 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.
- (d) Flight time logged in a pilot's logbook shall be certified correct by the persons as follows:
- (1) for student pilots, by the Chief Flight Instructor of the ATO at which the training was received or by the flight instructor approved to give training if not part of an ATO;
  - (2) for pilots in General Aviation, by the aircraft owner; and
  - (3) for pilots involved in commercial flying, by the company Director of Operations or Chief Pilot.

*(See the Tenth Schedule, Subsection 10.102 for crediting of flight time guidance.)*

### **8.020 PRIVILEGES OF THESE LICENCES, RATINGS AND AUTHORIZATIONS**

- (a) General. No person may exercise privileges in aviation for which a licence, rating or authorization is required under the Civil Aviation Safety Regulations unless that licence, rating or authorization was issued in accordance with the specifications of the Eighth Schedule and/or, where applicable, the Standards of ICAO Annex 1.
- (b) Pilot Licences and Flight Instructor Ratings. The privileges of these licences and ratings are contained in Subpart C to the Tenth Schedule.
- (c) Aircraft Maintenance Engineer Licences. The privileges of these licences are contained in Subpart G to the Eighth Schedule.
- (d) Flight Dispatcher Licence. The privileges of this licence may be exercised as authorized in the Sixteenth Schedule.
- (e) Aeronautical Station Operator Authorization. The privileges of the holder of an aeronautical station operator authorization shall be to act as an operator in an aeronautical station. Before exercising the

privileges of the authorization, the holder shall be familiar with all pertinent and current information regarding the types of equipment and operating procedures used at that aeronautical station.

- (f) Air Traffic Controller Licence. The privileges of the holder of an Air Traffic Controller licence are contained in Subpart G to the Eighth Schedule.

#### **8.022 ISSUANCE OF AIRCRAFT CATEGORY RATINGS**

- (a) The Authority may issue the following aircraft category ratings for pilots -
- (1) aeroplane;
  - (2) rotorcraft;
  - (3) glider; or
  - (4) lighter-than-air.
- (b) The holder of a pilot licence on one aircraft category who wishes to add another aircraft category shall be issued a separate licence by the Authority upon the applicant meeting the requirements specified in this Schedule for the additional aircraft category.

#### **8.024 ISSUANCE OF AIRCRAFT CLASS RATINGS**

- (a) The Authority may issue aircraft class ratings in the following aeroplanes -
- (1) single-engine, land;
  - (2) single-engine, sea;
  - (3) multi-engine, land; and
  - (4) multi-engine, sea.
- (b) The Authority may issue aircraft class ratings in the following rotorcraft -
- (1) helicopter; and
  - (2) gyroplane.
- (c) The Authority may issue aircraft class ratings in the following lighter-than-air aircraft -
- (1) airship; and
  - (2) free balloon.

#### **8.026 ISSUANCE OF AIRCRAFT TYPE RATINGS**

- (a) The following type ratings may be issued to a person to exercise the privileges of PIC of the following aircraft -
- (1) large aircraft, other than lighter-than-air;
  - (2) high performance aeroplanes;
  - (3) small helicopters for operations requiring an airline transport licence;
  - (4) aircraft certified for at least two pilots; and
  - (5) any aircraft considered necessary by the Authority.
- (b) All limitations applicable to the exercise of the type rating shall be entered on the licence.
- (c) Special endorsements for aircraft type ratings may be issued to persons to exercise the privileges of PIC or SIC during commercial air transport operations in aircraft of less than 5,760 kilograms (12,500 pounds).

#### **8.028 ISSUANCE OF AIRCRAFT INSTRUMENT RATINGS**

The Authority may issue Instrument Ratings for the following aircraft categories -

- (1) instrument – aeroplane, and
- (2) instrument – helicopter.

#### **8.030 ISSUANCE OF FLIGHT INSTRUCTOR RATINGS**

The Authority may issue the following ratings for Flight Instructor —

- (1) aeroplane;
- (2) rotorcraft - helicopter;



- (3) balloon; and
- (4) glider.

#### **8.032 ISSUANCE OF FLIGHT ENGINEER CATEGORY RATINGS**

The Authority may issue the following ratings for Flight Engineers -

- (1) reciprocating engine powered;
- (2) turbo-propeller powered; and
- (3) turbojet powered.

#### **8.036 ISSUANCE OF AIRCRAFT MAINTENANCE ENGINEER CATEGORY RATINGS**

The Authority may issue the following ratings for Aircraft Maintenance Engineers –

- (1) “M” Aeroplanes and their included power plants;
- (2) “R” Rotorcraft and their included power plants; and
- (3) “E” Avionics systems.

#### **8.038 ISSUANCE OF AIRCRAFT MAINTENANCE ENGINEER TYPE RATINGS**

The Authority may issue the following class and type ratings for Aircraft Maintenance Engineers –

- (1) aircraft (including installed power plants) type ratings for aeroplanes with a maximum take-off weight of more than 5700 kg, for turbine-powered aeroplanes, for multi-engine aeroplanes, for pressurized aeroplanes, and for rotorcraft;
- (2) aircraft class ratings for piston-engine, unpressurized, aeroplanes (including installed power plants) with a maximum take-off weight of 5700 kg or less;
- (3) aircraft class ratings for single piston-engine, unpressurized, aeroplanes (including installed power plants) with a maximum take-off weight of 2730 kg or less;
- (4) avionics systems (excluding inertial reference, flight management and auto-flight systems) for all aircraft;
- (5) avionics systems (including inertial reference, flight management and auto-flight systems) for all aircraft;
- (6) compass compensation (for Direct Reading Compasses); or
- (7) any other specialized ratings as may be determined by the Authority.

#### **8.040 ISSUANCE OF AIR TRAFFIC CONTROLLER LICENCES**

(a) The Authority may issue the following ratings for Air Traffic Control licences –

- (1) Aerodrome Control;
- (2) Approach Control;
- (3) Area Control;
- (4) Approach Radar Control;
- (5) Area Radar Control; and
- (6) Precision Approach Radar Control.

(b) The Authority may issue any of the above ratings, for one or more aerodromes or control areas as applicable, subject to the holder having satisfied the specific training and examination requirements.

(c) No person shall exercise the privileges of an ATC licence unless that person holds at least a current Class 3 medical certificate.

#### **8.044 AUTHORIZATIONS ISSUED BY SPECIAL ENDORSEMENT**

The Authority may issue the following authorizations and ratings under this Schedule -

- (1) Category II pilot authorization;
- (2) Category III pilot authorization;
- (3) flight crew radiotelephone operator authorization (radio licence);
- (4) multi-engine flight instruction authorization;
- (5) instrument flight instruction authorization;
- (6) night flight instruction authorization;

- (7) aerobatic flight instruction rating;
- (8) Flight Instructor flight instruction authorization;
- (9) Aeronautical Station Operator authorization; and
- (10) other specialized authorizations or ratings as may be determined by the Authority.

**8.046 VALIDITY PERIODS OF LICENCES, RATINGS, AUTHORIZATIONS AND EXAMS**

- (a) Except as shown in the following paragraphs, the Authority issues all licences, ratings, authorizations and exams without a specific expiration date.
- (b) The Authority may, upon request, extend by a maximum of 30 days, the validity period of any licence, rating or certificate.
- (c) Student Pilot Licence. A student pilot licence expires 24 calendar months from the month in which it is issued.
- (d) Class 2 Flight Instructor Rating. A Class 2 Flight Instructor Rating expires 12 calendar months from the month in which it is issued and is effective only while the holder has a valid pilot licence.
- (e) Class 1 Flight Instructor Rating. A Class 1 Flight Instructor Rating expires 24 calendar months from the month in which it is issued and is effective only while the holder has a valid pilot licence.
- (f) Category II and III Pilot Authorization. A Category II or III pilot authorization expires at the end of the sixth calendar month after the month in which it was issued or renewed.
- (g) A licence granted under these Regulations shall not be valid unless it bears thereon the ordinary signature of the holder in ink, or by electronic imprint.
- (h) Examinations. All tests, skill letters and examinations, including all sections of a sectionalized examination that are required for the issuance of a licence or for the endorsement of a licence with a rating, shall be completed during the 24 month period immediately preceding the date of application for the licence or rating. This does not apply in respect of the written examinations that are required for the issuance of a student pilot permit.
- (i) Rewriting of examinations.
  - (1) subject to subparagraph (2), a person who fails an examination or a section of a sectionalized examination required for the issuance of a licence, rating or foreign licence validation certificate shall be ineligible to rewrite the examination or the failed section for a period of –
    - (i) in the case of a first failure, 14 days;
    - (ii) in the case of a second failure, 30 days; and
    - (iii) in the case of a third or subsequent failure, 30 days plus an additional 30 days for each failure in excess of two failures, up to a maximum of 180 days.
  - (2) a person who fails the student pilot examination is eligible to rewrite the examination at any time after notice of the failure has been received and the weak knowledge areas have been reviewed.
  - (3) a person who passes a sectionalized examination but fails one or more sections of that examination shall rewrite the failed section or sections in one sitting.
  - (4) where a person requests to rewrite an examination, the Authority shall inform the person in writing of the date on which the person may rewrite the examination and whether the person is required to provide evidence of further study or instruction before rewriting the examination.
- (j) Instrument Rating. An Instrument Rating is valid until the 1<sup>st</sup> day of the 25<sup>th</sup> month following the flight test.
- (k) Aircraft Maintenance Engineer Licence. An AME Licence shall be valid for 24 calendar months after it is issued or renewed.

*(Note: Refer to Section 8.536 for renewal requirements for AME licences)*
- (l) Air Traffic Controller Licence. An Air Traffic Controller's licence shall be valid for 24 calendar months after the date of issue or renewal.

#### **8.048 SPECIAL LIMITATIONS TO LICENCES, RATINGS AND AUTHORIZATIONS**

- (a) The Authority may issue to an applicant who cannot comply with certain eligibility requirements or areas of operations required for the issue of a licence because of physical limitations, or for other reasons, a licence, rating, or authorization with an appropriate limitation provided the —
  - (1) applicant is able to meet all other certification requirements for the licence, rating, or authorization sought;
  - (2) physical limitation, if any, has been recorded with the Authority on the applicant's medical records; and
  - (3) Authority determines that the applicant's inability to perform the particular area of operation will not adversely affect safety.
- (b) The Authority may remove a limitation placed on a person's licence provided that person demonstrates to an examiner or inspector satisfactory proficiency in the area of operation to which the limitation applies, or otherwise shows compliance with conditions to remove the limitation, as applicable.

### **SUBPART C: CONVERSION AND VALIDATION OF FOREIGN AIRMAN LICENCES AND RATINGS**

#### **8.050 CONVERSION – GENERAL**

- (a) A person who is the holder of a current airman licence issued by another ICAO Contracting State is eligible for consideration for issuance of a Jamaican licence based on the validation of the other State's licence subject to the provisions of this Subpart and Subpart C of the First Schedule.
- (b) An applicant for a licence under this Subpart shall provide proof of identity as required by (a)(3) of Subsection 8.017, a foreign pilot licence printed in the English language or accompanied by an English language transcription that has been signed by an official or representative of the foreign aviation authority that issued that licence and a valid Jamaican medical certificate and shall have obtained not less than 70% in the appropriate written Aviation Law, Flight Rules and Procedures examination.
- (c) That person may apply for and be issued a Jamaican airman licence with the appropriate ratings from that foreign licence added to his Jamaican airman licence, if the applicant -
  - (1) is not under an order of revocation or suspension by the country that issued the licence;
  - (2) holds a licence that does not contain an endorsement stating that the applicant has not met all of the standards of ICAO for that licence; and
  - (3) is able to read, speak, write and understand the English language.
- (d) The Authority shall decide, after a review of the applicant's licence, supporting documents, interview and contact with the civil aviation authority of the issuing State, what further showing of knowledge or proficiency will be required.
- (e) Operating privileges and limitations. A person who receives a licence under the provisions of this Subpart and Subsections 8.060 or 8.065 -
  - (1) shall be limited to the privileges placed on the licence by the Authority;
  - (2) shall be subject to the limitations and restrictions on the person's licence issued by the Authority and foreign licence when exercising the privileges of that licence within Jamaica and with respect to aircraft registered in Jamaica; and
  - (3) shall not exercise the privileges of the licence issued by the Authority when the person's foreign licence has been revoked, suspended or otherwise becomes invalid, except when the foreign licence becomes invalid for failure to renew the medical fitness certification of the Contracting State.

#### **8.055 CONVERSION OF AIRMAN LICENCES AND RATINGS FOR JAMAICAN CITIZENS**

- (a) General. A person who is a citizen of Jamaica and is the holder of a current airman licence issued by another Contracting State is eligible to apply for and be issued a Jamaican airman licence with the appropriate ratings, or have ratings from that foreign licence added to his Jamaican airman licence. For

aircraft type ratings to be transferred from a foreign airman licence to a Jamaican airman licence, that aircraft type must be operated within Jamaica.

- (b) Foreign pilot licence no longer applicable. Upon issuance of a Jamaican airman licence or added ratings those airman licences and/or ratings are —
  - (1) effective for operation of aircraft registered in Jamaica regardless of the status of the foreign pilot licence; and are
  - (2) subject to the re-examination for fitness as provided in the Jamaican Civil Aviation Safety Regulations.
- (c) Same privileges and limitations. A citizen of Jamaica who receives an airman licence or added ratings under the provisions of this Subsection has the same privileges as if those airman licences and ratings were issued on the basis of a showing of knowledge, competency and proficiency to the Authority.

#### **8.060 CONVERSION OF NON-CITIZEN AIRMAN LICENCES FOR WORK IN JAMAICA**

- (a) General. A person who is not a citizen of Jamaica and is the holder of a current airman licence issued by another Contracting State is eligible to apply for and be issued an airman licence with the appropriate ratings for the purpose of working in aviation for a Jamaican operator.
- (b) The applicant must be sponsored by a Jamaican business or government entity and, if required for the specific tasks or period of time, hold a work visa issued by Immigration.
- (c) Ratings issued. The Authority may place upon the airman licence that it issues only the ratings listed on that person's foreign licence that are appropriate to the tasks to be performed.

#### **8.065 CONVERSION OF NON-CITIZEN AIRMAN LICENCES FOR PRIVATE PILOT PRIVILEGES**

- (a) General. A person who is not a citizen of Jamaica and is the holder of a current pilot licence issued by another Contracting State is eligible to apply for and be issued a Jamaican private pilot licence with the appropriate ratings, without any further showing of proficiency.
- (b) Aircraft ratings issued. The Authority may place upon a private pilot licence that it issues, the aircraft ratings listed on that pilot's foreign pilot licence.
- (c) Instrument ratings issued. The Authority may issue an Instrument Rating on a private pilot licence to a person who holds an Instrument Rating on a licence issued by another Contracting State provided —
  - (1) within 24 months preceding the month in which the person applies for the Instrument Rating, the applicant passed the appropriate practical test; and
  - (2) the applicant is able to read, speak, write, and understand the English language.
- (d) Operating privileges and limitations. A person who receives a private pilot licence under the provisions of this Subsection may act as a pilot of a civil aircraft of Jamaican registry in accordance with the private pilot privileges authorized by the Tenth Schedule of the Civil Aviation Safety Regulations.

#### **8.070 VALIDATION OF FOREIGN LICENCES**

- (a) A Foreign Licence Validation Certificate may be issued to an applicant who provides the following —
  - (1) a foreign licence valid under the laws of a Contracting State and valid for the requested privileges;
  - (2) a valid medical certificate;
  - (3) photographic proof of identity issued by a governmental body;
  - (4) a letter requesting issue of the Foreign Licence Validation Certificate and specifying the purpose for which the foreign licence is to be validated; and
  - (5) a letter from the Jamaican owner/operator of the aircraft to be flown that the applicant has been fully briefed on Jamaican Air Law, procedures, airspace restrictions or local practices of which the applicant should be aware that may differ from the ICAO Annexes.
  - (6) The Foreign Licence Validation Certificate shall be issued for a period of up to 90 days, unless the applicant specifically requests a longer period due to operational requirements, in which case the validity period shall not extend beyond one year, or the validity period of the foreign licence, whichever comes first.
- (b) Purposes for which Foreign Licence Validation Certificates may be issued are as follows —

- (1) a flight test;
  - (2) private recreational flying;
  - (3) ferry of a Jamaican aircraft to or from a foreign country;
  - (4) authorization of a foreign licensed holder to give flight training to a Jamaican flight crew on a Jamaican aircraft;
  - (5) authorization of a foreign licensed holder to act as a flight crew member of a foreign registered aircraft operated by a Jamaican air operator;
  - (6) authorization to fly as a crew member while under training in a Jamaica aircraft; or
  - (7) operation of Jamaican aircraft in urgent circumstances such as fire suppression operations, emergency agricultural and forestry aerial application, airlift in relief of domestic natural disasters and search and rescue operations. Such validations require the approval of the Director General Civil Aviation.
- (c) The Authority shall specify in a foreign licence validation certificate the privileges that may be exercised by the holder of the certificate.

## **SUBPART D: GENERAL TRAINING REQUIREMENTS**

### **8.080 RECORDS OF TRAINING TIME**

Each person shall document and record the following time in a manner acceptable to the Authority:

- (1) Training and aeronautical experience used to meet the requirements of these Schedules for a licence, rating, qualification, authorization or flight review.
- (2) The aeronautical experience gained in order to meet the recent flight experience requirements of these Schedules.

*(See the Tenth Schedule, Subsection 10.101 for flight time to be recorded.)*

*(See the Eighth Schedule, Subsection 8.019 for the log book entry certification requirements.)*

### **8.085 FLIGHT TRAINING RECEIVED FROM FLIGHT INSTRUCTORS NOT LICENSED BY THE AUTHORITY**

- (a) A person may credit flight training toward the requirements of a pilot licence or rating if that person received the training from -
  - (1) a flight instructor of an Armed Force in a programme for training military pilots of either;
    - (i) Jamaica; or
    - (ii) another Contracting State; or
  - (2) a flight instructor authorized to give such training by the licensing authority of a Contracting State, provided that the flight training is given outside Jamaica
- (b) A flight instructor described in paragraph (a) of this Subsection is authorized to give only the endorsements to show training given.

### **8.090 GRADUATES OF A TRAINING PROGRAM APPROVED UNDER OTHER SCHEDULES: SPECIAL RULES**

The Authority will consider that a person who presents a graduation certificate from a certificate holder under the Ninth Schedule of the Civil Aviation Safety Regulations within 60 days after the date of graduation, is considered to have met the applicable aeronautical experience and aeronautical knowledge and areas of operational training requirements of this Schedule appropriate to the rating sought.

## **SUBPART E: GENERAL TESTING REQUIREMENTS**

### **8.100 TESTS: GENERAL PROCEDURE**

- (a) Tests prescribed by or under this Schedule are given at times and places, and by persons designated by the Authority.
- (b) A written test for a licence or rating shall have been completed within the preceding 24 month period prior to the practical test.

**8.105 KNOWLEDGE TEST: PREREQUISITES AND PASSING GRADES**

- (a) An applicant for a knowledge test shall have -
  - (1) accomplished a ground-training or a home-study course covering the topics required by this Schedule for the licence or rating sought;
  - (2) met the medical standards for the issue of the licence, rating or authorization sought and shall produce proof of medical fitness in one of the following forms:
    - (i) A medical certificate in the appropriate medical class;
    - (ii) A medical assessment Letter in the appropriate medical class;
    - (iii) A temporary medical certificate in the appropriate medical class; or
    - (iv) A medical examination report assessed to the appropriate medical class by the Civil Aviation Medical Examiner;
  - (3) completed all ground school training requirements; and
  - (4) proper identification at the time of application that contains the applicant's -
    - (i) proof of Citizenship as stated in paragraph (a)(1) of Subsection 8.017;
    - (ii) proof of Age as stated in paragraph (a)(2) of Subsection 8.017;
    - (iii) proof of Identity as stated in paragraph (a)(3) of Subsection 8.017;
    - (iv) proof of Experience as stated in paragraph (a)(4) of Subsection 8.017; and
    - (v) actual residential address, if different from the applicant's mailing address.
- (b) The Authority will specify the minimum passing grade for the knowledge test.

**8.110 PRACTICAL TEST: PREREQUISITES**

- (a) To be eligible for a practical test, an applicant shall meet all applicable requirements for the licence or rating sought.  
*(See Appendix 1 to 8.110 for the eligibility requirements of a practical test.)*
- (b) If an applicant does not complete all increments of a practical test for a licence or rating on one date, the applicant shall complete all remaining increments of the test not more than 60 calendar days after that date provided the initial test and the subsequent test is completed with the same Flight Test Examiner. Otherwise, a complete re-test shall be completed.
- (c) If an applicant does not satisfactorily complete all increments of the practical test for a licence or a rating within 60 calendar days after beginning the test, the applicant shall retake the entire practical test, including those increments satisfactorily completed.

**8.115 PRACTICAL TESTS: GENERAL PROCEDURES**

- (a) Except as provided in paragraph (b) of this Subsection, the Authority will determine an applicant's ability to hold a licence or rating issued under this Subpart based upon the applicant's ability to safely perform the following during a practical test -
  - (1) perform the tasks specified in the areas of operation for the licence or rating sought within the prescribed standards;
  - (2) operate the airplane within its limitations;
  - (3) complete all manoeuvres with smoothness and accuracy;
  - (4) exercise good judgement and airmanship;
  - (5) apply aeronautical knowledge;
  - (6) maintain control of the airplane at all times in a manner such that the successful outcome of each task is:
    - (i) never seriously in doubt for the private pilot and commercial pilot tests; and
    - (ii) never in doubt for the Airline Transport Pilot Licence and aircraft type rating tests;
  - (7) demonstrate single-pilot competence if the aircraft is type certified for single-pilot operations; and
  - (8) for commercial pilots and airline transport pilots in aircraft requiring more than one crewmember:
    - (i) communicate effectively with the other flight crew members;
    - (ii) understand and apply crew coordination procedures; and

- (iii) understand and apply crew incapacitation procedures.
- (b) If an applicant fails any area of operation, that applicant fails the practical test.
- (c) An applicant is not eligible for a licence or rating sought until all the areas of operation are passed.
- (d) The examiner or the applicant may discontinue a practical test at any time -
  - (1) when the applicant fails one or more of the areas of operation; or
  - (2) due to inclement weather conditions, aircraft airworthiness or any other safety-of-flight concern.

#### **8.120 PRACTICAL TESTS: REQUIRED AIRCRAFT AND EQUIPMENT**

Except when permitted to accomplish the entire flight increment of the practical test in an approved flight simulator or an approved flight training device, an applicant for a licence or rating issued under this Schedule shall furnish an aircraft with the necessary equipment and controls.

*(See Appendix 1 to 8.0120 for required equipment and controls for practical tests.)*

#### **8.125 LIMITATIONS ON THE USE OF FLIGHT SIMULATORS AND FLIGHT TRAINING DEVICES**

- (a) Except as specified in paragraphs (b) or (c) of this Subsection, no airman may receive credit for use of any flight simulator or flight training device for satisfying any training, testing or checking requirement of this Schedule unless that flight simulator or flight training device is approved by the Authority for -
  - (1) the training, testing and checking for which it is used;
  - (2) each particular manoeuvre, procedure or crewmember function performed; and
  - (3) 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.
- (b) The Authority will consider as a flight training device any device used for flight training, testing or checking that the Authority has accepted or approved prior to April 17, 2001, which any user can show to function as originally designed, provided it is used for the same purposes for which it was originally accepted or approved and only to the extent of such acceptance or approval.
- (c) The Authority may approve a device other than a flight training simulator or flight training device for specific purposes.

*(See Appendix 1 to 8.125 for requirements on the use of approved simulators and flight training devices.)*

#### **8.130 RETESTING AFTER FAILURE**

- (a) An applicant for a knowledge or practical test who fails that test may reapply for the test only after the applicant has received -
  - (1) the necessary training from an authorized instructor who has determined that the applicant is proficient to pass the test; and
  - (2) an endorsement from an authorized instructor who gave the applicant the additional training

*(Note: The ineligibility periods for the rewriting of failed knowledge tests are set out in paragraph (i) of Subsection 8.046.)*

- (b) An applicant for a Flight Instructor Rating with an airplane category rating, a Flight Instructor Rating with a glider category rating or a Flight Instructor Rating with a helicopter category rating, who has failed the practical test due to deficiencies in instructional proficiency in any safety manoeuvre, emergency procedure or recovery to safe flight technique, shall -
  - (1) comply with the requirements of paragraph (a) of this Subsection before being retested; and
  - (2) bring an aircraft to the retest that is of the appropriate aircraft category for the rating sought and is certified for practical demonstration of the failed items.

## SUBPART F: CERTIFICATION: FLIGHT CREWMEMBERS

### Section I: Aircraft Ratings and Pilot Authorizations

#### 8.140 GENERAL REQUIREMENT

To be eligible for an aircraft rating or authorization to a pilot licence, an applicant shall meet the appropriate requirements of this Section for the aircraft rating or authorization sought.

#### 8.145 INSTRUMENT RATING REQUIREMENTS

- (a) An applicant for an Instrument Rating shall -
- (1) hold a pilot licence with an aircraft category and class rating for the Instrument Rating sought;
  - (2) hold a Class 1 or 2 medical certificate;
  - (3) present a logbook or training record endorsement from an authorized instructor certifying that the person is prepared to take the required practical test;
  - (4) pass the required knowledge test on the aeronautical knowledge areas, unless the applicant already holds an Instrument Rating in another category; and
  - (5) pass the required practical test as specified in the *Flight Test Guide – Instrument Rating* in -
    - (i) the aircraft category, class, and type if applicable, appropriate to the rating sought; or
    - (ii) a flight simulator or a flight training device appropriate to the rating sought and approved for the specific manoeuvre or procedure performed.

**(Note:** *For pilots of multi-engine aircraft, the required practical test shall include at least one instrument approach and landing with an engine failed or simulated failed.*)

- (b) Aeronautical knowledge. An applicant for an Instrument Rating shall have received and logged ground training, as prescribed by the Authority, from an authorized instructor on the areas of aeronautical knowledge that apply to the instrument rating.

*(See Appendix 1 to 8.145 for the aeronautical knowledge requirements.)*

- (c) Flight proficiency. An applicant for an Instrument Rating shall receive and log, as prescribed by the Authority, training from an authorized instructor in an aircraft, or in an approved flight simulator or approved flight training device, in accordance with paragraph (e) of this Subsection.

*(See Appendix 2 to 8.145 for the flight proficiency requirements.)*

- (d) Aeronautical experience. An applicant for an Instrument Rating shall have logged a minimum of 40 hours of instrument flight time and other required aeronautical experience prescribed by the Authority.

*(See Appendix 3 to 8.145 for the aeronautical experience requirements.)*

- (e) Use of approved flight simulators or approved flight training devices. If the instrument training was provided by an authorized instructor in an approved flight simulator or an approved flight training device, an applicant may log a maximum of -

- (1) 20 hours; or
- (2) 30 hours, if the training was accomplished in accordance with a training program approved under the Ninth Schedule.

#### 8.150 CATEGORY RATINGS

A pilot seeking a category rating -

- (1) shall have received the required training and possess the aeronautical experience prescribed by this Schedule for the aircraft category and, if applicable, class and type rating sought;
- (2) shall have an endorsement in his or her logbook or training record from an authorized instructor that the applicant has been found competent in the following areas, as appropriate to the pilot licence for the aircraft category and, if applicable, class and type rating sought:
  - (i) aeronautical knowledge areas; and



- (ii) areas of operation.
- (3) shall pass the practical test applicable to the pilot licence for the aircraft category and, if applicable, class and type rating sought; and
- (4) need not take an additional knowledge test, provided the applicant holds an airplane, rotorcraft, powered-lift, or airship rating at that pilot licence level.

#### **8.155 CLASS RATINGS**

A pilot seeking an additional class rating -

- (1) shall have an endorsement in his or her logbook or training record from an authorized instructor that the applicant has been found competent in the following areas, as appropriate to the pilot licence and for the aircraft class rating sought -
  - (i) aeronautical knowledge areas; and
  - (ii) areas of operation;
- (2) shall pass the practical test applicable to the pilot licence for the aircraft class rating sought;
- (3) need not meet the training time requirements prescribed by this Schedule for the aircraft class rating sought; and
- (4) need not take an additional knowledge test, provided the applicant holds an airplane, rotorcraft, powered-lift, or airship rating at that pilot licence level.

#### **8.160 TYPE RATINGS**

- (a) Except as specified in this paragraph, a pilot seeking an aircraft type rating to be added on a pilot licence, or the addition of an aircraft type rating that is accomplished concurrently with an additional aircraft category or class rating -
  - (1) shall have acquired at least 200 hours in the category of aircraft for which the type rating is sought;
  - (2) shall have an endorsement in his or her logbook or training record from an authorized instructor that the applicant has been found competent in the following areas, as appropriate to the pilot licence for the aircraft category, class and type rating sought:
    - (i) normal flight procedures and manoeuvres during all phases of flight;
    - (ii) abnormal and emergency procedures and manoeuvres in the event of failures and malfunctions of equipment, such as powerplant, systems and airframe;
    - (iii) where applicable, instrument procedures, including instrument approach, missed approach and landing procedures under normal, abnormal and emergency conditions, including simulated engine failure; and
    - (iv) procedures for crew incapacitation and crew coordination including allocation of pilot tasks, crew cooperation and use of checklists.
  - (3) shall demonstrate to the Authority or a check airman -
    - (i) for pilots of large aircraft or aircraft certificated for two pilots, knowledge of the aircraft type and general aviation knowledge equivalent to that required for an Airline Transport Pilot Licence; and
    - (ii) for pilots of helicopters and high performance aircraft certificated for one pilot, knowledge of the aircraft type;
  - (4) shall pass the practical test applicable to the pilot licence for the aircraft category, class and type rating sought.
- (b) An applicant for a type rating who provides an aircraft not capable of the instrument manoeuvres and procedures required by the appropriate requirements for the practical test may -
  - (1) obtain a type rating limited to "VFR only"; and
  - (2) remove the "VFR only" limitation for each aircraft type in which the applicant demonstrates compliance with the appropriate instrument requirements of these Schedules.

*(Note: The experience required in (2) will be gained under appropriate supervision in the applicable type of aircraft and/or flight simulator.)*

- (c) The Authority may issue to an applicant for a type rating a licence with the limitation "VFR only" for each aircraft type not equipped for the applicant to show instrument proficiency.
- (d) An applicant for a type rating in a multiengine, single-pilot station airplane may meet the requirements of paragraph (b) in a multi-seat version of that multiengine airplane.
- (e) An applicant for a type rating in a single-engine, single-pilot station airplane may meet the requirements of paragraph (b) in a multi-seat version of that single-engine airplane.
- (f) Unless the Authority requires certain or all tasks to be performed, the examiner who conducts the practical test may waive any of the tasks for which the Authority approves waiver authority.

**8.163 CATEGORY II AND III PILOT AUTHORIZATION REQUIREMENTS**

- (a) General. An applicant for a Category II or Category III pilot authorization shall -
  - (1) Hold a pilot licence with an Instrument Rating or an Airline Transport Pilot Licence;
  - (2) Hold a category and class rating, and type rating, if applicable, for the aircraft for which the authorization is sought; and
  - (3) Complete the practical test requirements.
- (b) Experience requirements. An applicant for a Category II or Category III pilot authorization shall have at least -
  - (1) 50 hours of night flight time as PIC;
  - (2) 75 hours of instrument time under actual or simulated instrument conditions that may include not more than -
    - (i) a combination of 25 hours of simulated instrument flight time in an approved flight simulator or an approved flight training device; or
    - (ii) 40 hours of simulated instrument flight time if accomplished in an approved course conducted by an appropriately rated FTU; and
    - (iii) 250 hours of cross-country flight time as PI.C;
- (c) Upon passing a practical test for a Category II or III pilot authorization, a pilot may renew that authorization for each type of aircraft for which the pilot holds authorization.
- (d) The Authority may not renew a Category II or Category III pilot authorization for a specific aircraft type for which an authorization is held beyond 12 calendar months from the month the applicant satisfactorily passed a practical test in that aircraft type.
- (e) If the holder of a Category II or Category III pilot authorization passes the practical test for a renewal in the month before the authorization expires, the Authority will consider that the holder passed it during the month the authorization expired.

*(See Appendix 1 to 8.163 for additional requirements concerning Category II and III pilot authorizations.)*

*(See Appendix 2 to 8.163 for the practical test requirements for Category II pilot authorizations.)*

*(See Appendix 3 to 8.163 for the practical test requirements for Category III pilot authorizations.)*

**8.165 FLIGHT CREW RADIOTELEPHONE OPERATOR ENDORSEMENT**

- (a) General. Flight crew members are eligible for a radiotelephone endorsement on their pilot or flight engineer licence.
- (b) Eligibility. The flight crewmember shall -
  - (1) be at least 16 years of age;
  - (2) be able to read, write and speak the English language;
  - (3) complete ground instruction from a licensed flight instructor on the phonetic alphabet, radio telephony procedures and phraseology as applied to VFR operations;
  - (4) demonstrate the skill required by (3) and English language proficiency meeting the level 6 requirements of Appendix 1 to ICAO Annex 1 under the observation of a licensed flight instructor;
  - (5) have that flight instructor endorse a record of the satisfactory observation; and

- (6) present that endorsed record to the Authority for issuance of the flight crew licence endorsed for in-flight radiotelephone privileges.

#### **8.166 NIGHT RATING**

- (a) General. An applicant for a night rating shall acquire dual night and instrument flight time for this rating from the holder of a Flight Instructor Rating endorsed for night flying instruction.
- (b) Experience. Except as provided in paragraph (d), the applicant shall have acquired in the same category of aircraft, not less than 20 hours of pilot flight time which shall include not less than -
- (1) 5 hours of night flight time including not less than -
    - (i) 2.5 hours dual flight time, including 1 hour of cross-country flight time;
    - (ii) 2.5 hours solo flight time, including 5 takeoffs, circuits and landings, and
  - (2) 10 hours dual instrument time of which not more than 5 hours may be instrument ground time. Instrument time shall be in addition to the 5 hours night flight time in paragraph (b)(1) of this Subsection and where the instrument time includes instrument ground time, the 5 hours night flight time shall be increased by an amount equivalent to the instrument ground time.
- (c) Skill. An applicant for a night rating shall be recommended by a qualified Flight Instructor.
- (d) Credits. An applicant for a night rating who holds a licence endorsed with a night rating in one of the other aircraft categories shall have the total 20 hour pilot flight time reduced to a minimum of 5 hours in aeroplanes including a minimum of -
- (1) 2 hours dual flight time;
  - (2) 1 hour solo night flight time; and
  - (3) 1 hour dual instrument flight time, which shall be in addition to the flight time required by (1) and (2) of this paragraph.

*(Note: This training shall include a minimum of 5 takeoffs, circuits and landings.)*

#### **8.167 MULTI-ENGINE RATING**

- (a) General. An applicant for the addition of a multi-engine rating to a pilot licence shall apply to the Authority in the form and manner prescribed.
- (b) Experience. An applicant shall have completed not less than 10 hours of dual instruction from the holder of a Flight Instructor Rating endorsed for multi-engine instruction. This instruction shall be conducted in accordance with the JCAA *Flight Instructor Guide, Multi-engine Class Rating*.
- (c) Skill. Except as noted in paragraphs (d) and (e), applicants for a multi-engine rating shall demonstrate skill through successful completion of a flight test conducted in accordance with the JCAA *Flight Test Guide – Multi-engine Class Rating*.
- (d) Credits for Active and Retired Personnel of the Jamaica Defence Force. Applicants who are qualified to the “pilot-aeroplane-wings” standard shall be deemed to have satisfied the skill requirements as set forth in paragraph (c) provided that -
- (1) the applicant has acquired not less than 50 hours flight time as pilot-in-command in multi-engine aeroplanes during the 24 months preceding the date of application for the endorsement; or
  - (2) the applicant has met the prescribed standards of the Jamaica Defence Force to act as Pilot-in-command of multi-engine aeroplanes during the 24 months preceding the date of application for the endorsement.

*(Note: Military aeroplanes, for which no Jamaican Civil type approval has been issued, are acceptable for the application of these requirements.)*

- (e) Credits for Foreign Applicants. The holder of a valid pilot licence aeroplane category endorsed for multi-engine or multi-engine centre thrust aeroplanes, issued by another Contracting State shall be deemed to have satisfied the requirements as set forth in paragraph (c), provided that -
- (1) The applicant has acquired not less than 50 hours flight time as pilot-in-command in multi-engine or multi-engine centre thrust aeroplanes during the 12 months preceding the date of application for the endorsement to the Jamaican licence; or

- (2) The applicant has met the prescribed standards, of the State concerned, for issue of a multi-engine or multi-engine centre thrust class rating during the 12 months preceding the date of application for the endorsement to the Jamaican licence.

#### **8.168 SEAPLANE RATING**

- (a) General. An applicant for a seaplane rating shall apply to the Authority in the form and manner prescribed.
- (b) Experience. An applicant for a seaplane rating shall complete a minimum of 10 hours of seaplane flight training from the holder of a Flight Instructor Rating endorsed for seaplane instruction. This training shall include -
  - (1) A minimum of 7 hours of dual instruction from the holder of a Flight Instructor Rating endorsed for seaplane instruction;
  - (2) A minimum of 3 hours of solo flight to include a minimum of 5 takeoffs from water, circuits and water landings as sole occupant of the aeroplane, except for two crew aeroplanes, in which case the takeoffs and landings shall be done as pilot-in-command; and
  - (3) The instruction shall be conducted in accordance with the JCAA *Flight Instructor Guide – Seaplane Rating*.
- (c) Skill. Applicants for a seaplane rating shall demonstrate skill through successful completion of a flight test conducted in accordance with the JCAA *Flight Instructor Guide – Seaplane Rating*.

### **Section II: Student Pilots**

#### **8.170 APPLICABILITY**

This Section prescribes the requirements for the issuance of student pilot licences, the conditions under which those licences are necessary and the general operating rules and limitations for the holders of those licences.

#### **8.173 STUDENT PILOT ELIGIBILITY REQUIREMENTS – GENERAL**

To be eligible for a student pilot licence, an applicant shall -

- (1) be at least 16 years of age for other than the operation of a glider or balloon;
- (2) be at least 15 years of age for the operation of a glider or balloon;
- (3) be able to read, speak, write and understand the English language; and
- (4) when required by the Tenth Schedule, Subsection 10.070, hold at least a Class 1 or 2 medical certificate.

#### **8.175 STUDENT PILOT LICENCE APPLICATION**

An applicant for a Student Pilot Licence shall apply to the Authority in the form and manner prescribed prior to undertaking any flight training.

#### **8.177 STUDENT PILOT SOLO REQUIREMENTS**

- (a) Aeronautical knowledge.
  - (1) A student pilot shall satisfactorily pass an aeronautical knowledge test on the following subjects:
    - (i) Applicable sections of this Schedule and the Tenth Schedule;
    - (ii) Airspace rules and procedures for the airport where the student will perform solo flight;
    - (iii) Flight characteristics and operational limitations for the make and model of aircraft to be flown; and
    - (iv) The Jamaican Civil Aviation Regulations.
  - (2) The student's authorized instructor shall -
    - (i) administer the test; and
    - (ii) at the conclusion of the test, review all incorrect answers with the student before authorising that student to conduct a solo flight.
- (b) Pre-solo flight training. Prior to conducting a solo flight, a student pilot shall have -

- (1) received and logged flight training for the manoeuvres and procedures of this Subsection that are appropriate to the make and model of aircraft to be flown; and
- (2) demonstrated satisfactory proficiency and safety, as judged by an authorized instructor, on the manoeuvres and procedures required by this Subsection in the make and model of aircraft or similar make and model of aircraft to be flown.

*(See Appendix 1 to 8.177 for required manoeuvres and procedures for a student pilot.)*

#### **8.179 STUDENT PILOT SOLO CROSS-COUNTRY FLIGHT REQUIREMENTS**

(a) General.

- (1) Except as provided in paragraph (b) of this Subsection, a student pilot shall meet the requirements of this Subsection before:
  - (i) conducting a solo cross-country flight or any flight greater than 25 nautical miles from the airport from where the flight originated; and
  - (ii) making a solo flight and landing at any location other than the airport of origin.
- (2) except as provided in paragraph (b) of this Subsection, a student pilot who seeks solo cross-country flight privileges shall -
  - (i) have received flight training from an authorized instructor on the manoeuvres and procedures of this Subsection that are appropriate to the make and model of aircraft for which solo cross-country privileges are sought;
  - (ii) have demonstrated cross-country proficiency on the appropriate manoeuvres and procedures of this Subsection to an authorized instructor;
  - (iii) have satisfactorily accomplished the required pre-solo flight manoeuvres and procedures in the make and model of aircraft or similar make and model of aircraft for which solo cross-country privileges are sought; and
  - (iv) comply with any limitations included in the instructor's endorsement that are required by paragraph (c) of this Subsection.
- (3) a student pilot who seeks solo cross-country flight privileges shall have received ground and flight training from an authorized instructor on the cross-country manoeuvres and procedures listed in this Subsection that are appropriate to the aircraft to be flown.

(b) Authorization to perform certain solo flights and cross-country flights. A student pilot shall obtain an endorsement from an authorized instructor to make solo flights, subject to the following conditions -

- (1) a student pilot may make solo flights to another airport that is within 25 nautical miles from the airport where the student pilot normally receives training, provided -
  - (i) the authorized instructor who makes the endorsement gave the student pilot flight training at the other airport, and that training included flight in both directions over the route, entering and exiting the traffic pattern and takeoffs and landings at the other airport;
  - (ii) the student pilot has a current solo flight endorsement.
  - (iii) the instructor has determined that the student pilot is proficient to make the flight; and
  - (iv) the purpose of the flight is to practice takeoffs and landings at that other airport.
- (2) a student pilot may make repeated specific solo cross-country flights to another airport that is within 50 nautical miles of the airport from which the flight originated, provided -
  - (i) the authorized instructor who gave the endorsement gave the student flight training in both directions over the route, including entering and exiting the traffic patterns, takeoffs and landings at the airport to be used;
  - (ii) the student has current solo flight endorsements; and
  - (iii) the student has a current solo cross-country flight endorsement in accordance with paragraph (c) of this Subsection, except that separate endorsements are not required for each flight made under this paragraph.

- (c) Endorsements for solo cross-country flights. Except as specified in paragraph (b)(2), a student pilot shall have the endorsements prescribed in this paragraph for each make and model aircraft the student will fly on each cross-country flight.
  - (1) student pilot's training records endorsement:
    - (i) a student pilot shall have a solo cross-country endorsement placed on the student's training records by the authorized instructor who conducted the training.
  - (2) logbook endorsement:
    - (i) a student pilot shall have a solo cross-country endorsement placed in the student pilot's logbook by the authorized instructor who conducted the training; and
    - (ii) a licensed pilot who is receiving training for an additional aircraft category and class rating shall have an endorsement placed in the pilot's logbook by the authorized instructor who conducted the training.
- (d) Manoeuvres and procedures for cross-country flight training. A student pilot who is receiving training for cross-country flight shall receive and log flight training in the required manoeuvres and procedures.

*(See Appendix 1 to 8.179 for list of required manoeuvres and procedures.)*

### **Section III: Private Pilots**

#### **8.180 APPLICABILITY**

This Section prescribes the requirements for the issuance of private pilot licences and ratings, and the conditions under which those licences and ratings are necessary.

#### **8.185 PRIVATE PILOT ELIGIBILITY REQUIREMENTS - GENERAL**

To be eligible for a Private Pilot Licence, a person shall -

- (1) be at least 17 years of age for a rating in other than a glider or balloon; or.
- (2) be at least 16 years of age for a rating in a glider or balloon; and.
- (3) be able to read, speak, write and understand the English language;
- (4) when required by the Tenth Schedule, Subsection 10.070, hold at least a Class 2 medical certificate;
- (5) receive a logbook endorsement for the knowledge test from an instructor who:
  - (i) conducted the training or reviewed the person's home study on the prescribed aeronautical knowledge areas that apply to the aircraft rating sought; and
  - (ii) certified that the person is prepared for the required knowledge test.
- (6) pass the required knowledge test on the prescribed aeronautical knowledge areas.
- (7) receive flight training and a logbook endorsement from an authorized instructor who:
  - (i) conducted the flight training in the areas of operation that apply to the aircraft rating sought; and
  - (ii) certified that the person is prepared for the required practical test.
- (8) meet the aeronautical experience requirements of this Subpart that apply to the aircraft rating sought before applying for the practical test.
- (9) pass a practical test as specified in the *Flight Test Guide – Private Pilot* in an aircraft of the category, class and type applicable to the aircraft rating sought.
- (10) comply with the appropriate sections of this Subpart that apply to the aircraft category and class rating sought.

#### **8.190 PRIVATE PILOT AERONAUTICAL KNOWLEDGE REQUIREMENTS**

- (a) General. The Authority will administer a knowledge test for a Private Pilot Licence based on the aeronautical knowledge areas prescribed by the Authority appropriate to the aircraft category and class rating sought.

- (b) An applicant for a Private Pilot Licence shall receive and log a minimum of 40 hours ground training from an instructor on the aeronautical knowledge areas prescribed by the Authority that apply to the aircraft category and class rating sought.

*(See Appendix 1 to 8.190 for the prescribed private pilot aeronautical knowledge requirements.)*

#### **8.195 PRIVATE PILOT FLIGHT INSTRUCTION REQUIREMENTS**

An applicant for a Private Pilot Licence shall receive and log flight training from an authorized instructor on the areas of operation prescribed by the Authority.

*(See Appendix 1 to 8.195 for the private pilot flight instruction requirements.)*

#### **8.200 PRIVATE PILOT AERONAUTICAL EXPERIENCE REQUIREMENTS**

- (a) An applicant for a Private Pilot Licence with an airplane or rotorcraft category rating shall receive and log the minimum dual instruction, solo, cross-country and night time prescribed by the Authority.

*(See Appendix 1 to 8.200 for the minimum requirements for specific categories and classes.)*

- (b) The minimum total hours of flight shall not be less than -
- (1) at least 45 hours of flight time that includes at least 20 hours of flight training from an authorized instructor, and
  - (2) 12 hours of solo flight training in the areas of operation prescribed by the Authority,
- (c) An applicant who has satisfactorily completed a private pilot course conducted by an FTU need have only a total of 40 hours of aeronautical experience.
- (d) An applicant for a Private Pilot Licence may credit one of the following in an approved flight simulator or an approved flight training device representing the category, class and type, if applicable, of aircraft appropriate to the rating sought -
- (1) a maximum of 2.5 hours of training, if received from an authorized instructor other than an FTU; or
  - (2) a maximum of 5 hours of training if the training is accomplished in a course conducted by an FTU.
- (e) Credits for holders of a pilot licence in another category (airplane or helicopter category only).
- (1) Knowledge.
    - (i) an applicant who holds a Private or higher type pilot licence for either aeroplanes or helicopters may, when applying for the issue of a Private Pilot Licence for the other category, have the 40 hour ground school instruction requirement reduced to 20 hours.
    - (ii) an applicant who holds a Private or higher type pilot licence for either aeroplanes or helicopters shall in lieu of completing the written examination subjects for the Private Pilot Licence for the aircraft category being sought, obtain a minimum of 70% in the written examination Private Pilot Licence airmanship section for the aircraft category sought.
  - (2) Experience.

*(See Appendix 1 to 8.200 for experience credits.)*

- (f) Credits for Jamaica Defence Force Applicants. Active or retired Jamaica Defence Force personnel who have qualified to pilot wings standard shall be deemed to have met the ground school instruction requirement, the written examination requirement, the course requirement and the skill requirement provided that:
- (1) the applicant meets the experience requirements of which a minimum of 10 hours flight time in the category of aircraft for which the licence is sought shall have been acquired in the 12 months preceding the date of application, and
  - (2) the applicant obtains a minimum of 70% in the appropriate written Air Law examination.
- (g) Credits for Foreign Applicants. The holder of a licence issued by a Contracting State shall be deemed to have met the ground school instruction requirement, the written examination requirement and the skill requirement provided that the applicant meets the experience requirements and obtains a minimum of 70% in the written Air Law examination.

## **8.205 PRIVATE PILOT LICENCE ISSUANCE LIMITATIONS**

The Authority may prescribe limitations that are to be included on the licence based on limited experience of the applicant.

*(See Appendix 1 to 8.205 for limitations regarding pilots based on small islands.)*

*(See Appendix 2 to 8.205 for limitations regarding the pilots of balloons.)*

## **Section IV: Commercial Pilots**

### **8.220 APPLICABILITY**

This Section prescribes the requirements for the issuance of a Commercial Pilot Licence and ratings and the conditions under which those licences and ratings are necessary.

### **8.225 COMMERCIAL PILOT ELIGIBILITY REQUIREMENTS - GENERAL**

To be eligible for a Commercial Pilot Licence, a person shall -

- (1) be at least 18 years of age;
- (2) be able to read, speak, write, and understand the English language.
- (3) if required by the Tenth Schedule, Subsection 10.070 for the category, class and type rating sought, hold a Class 1 medical certificate.
- (4) receive a logbook endorsement from an instructor who:
  - (i) conducted the required ground training or reviewed the person's home study on the aeronautical knowledge areas prescribed by the Authority that apply to the aircraft category and class rating sought; and
  - (ii) certified that the person is prepared for the required knowledge test that applies to the aircraft category and class rating sought.
- (5) pass the required knowledge test on the aeronautical knowledge areas prescribed by the Authority;
- (6) receive the required flight training and a logbook endorsement from an authorized instructor who—
  - (i) conducted the flight training prescribed by the Authority that apply to the aircraft category and class rating sought; and
  - (ii) certified that the person is prepared for the required practical test.
- (7) meet the aeronautical experience requirements of this Subpart that apply to the aircraft category and class rating sought before applying for the practical test;
- (8) pass the required practical test as specified in the *Flight Test Guide – Commercial Pilot (Aeroplane or Helicopter)* on the prescribed areas of operation that apply to the aircraft category and class rating sought;
- (9) hold a Private Pilot Licence issued under this Subpart or meet the requirements pertaining to military licences; and
- (10) comply with all sections of this Subpart that apply to the aircraft category and class rating sought.

### **8.230 COMMERCIAL PILOT AERONAUTICAL KNOWLEDGE REQUIREMENTS**

- (a) General. The Authority will administer a knowledge test for a Commercial Pilot Licence based on the class rating sought.
- (b) An applicant for a Commercial Pilot Licence shall receive and log a minimum of 40 hours of ground training from an instructor, or complete a home-study course on the required aeronautical knowledge areas prescribed by the Authority.

*(See Appendix 1 to 8.230 for specific aeronautical knowledge area requirements.)*

### **8.235 COMMERCIAL PILOT FLIGHT INSTRUCTION REQUIREMENTS**

An applicant for a Commercial Pilot Licence shall receive and log ground and flight training from an instructor as prescribed by the Authority to the aircraft category and class rating sought.



*(See Appendix 1 to 8.235 for detailed requirements concerning training for aircraft category and class ratings sought.)*

#### **8.240 COMMERCIAL PILOT AERONAUTICAL EXPERIENCE REQUIREMENTS**

- (a) An applicant for a Commercial Pilot Licence shall obtain the required flight hours of aeronautical experience prescribed by the Authority.
- (See Appendix 1 to 8.240 for specific required aeronautical experience.)*
- (b) ATO exception. Except when fewer hours are approved by the Authority, an applicant who has satisfactorily completed a commercial pilot course conducted by an ATO must have the following total aeronautical experience to meet the requirements of this Subsection -
- (1) 200 hours for an aeroplane rating; and
  - (2) 150 hours for a helicopter rating.
- (c) Flight Simulator exception. An applicant for a Commercial Pilot Licence may credit one of the maximum times for training in an approved flight simulator or approved flight training device representing the applicable category, class, and type of aircraft appropriate to the rating sought -
- (1) 10 hours for an aeroplane rating; and
  - (2) 10 hours for a helicopter rating.
- (d) Credits for holders of a Commercial Pilot Licence in another category (aeroplane or helicopter only).
- (1) Knowledge:
    - (i) an applicant who holds a Commercial Pilot Licence either aeroplane or helicopter may, when applying for the issue of a Commercial Pilot Licence for the other category have the 40 hour ground school instruction requirement reduced to 20 hours; and
    - (ii) an applicant who holds a Commercial Pilot Licence for either aeroplane or helicopter shall, in lieu of completing the written examination Commercial Pilot Licence for the category sought, obtain a minimum of 70% in the written examination segment Commercial Pilot Licence, Aircraft Operations, Airmanship and principles of Flight section for the category sought.
  - (2) Experience.
- (See Appendix 1 to 8.240 for experience credits.)*
- (e) Credits for Jamaica Defence Force Applicants. Active or retired Jamaica Defence Force personnel who have qualified to pilot wings standard shall be deemed to have met the ground school instruction requirement, the written examination requirement, the skill requirement and the requirement to hold a Private Pilot Licence, provided that the applicant -
- (1) meets the experience requirements of which a minimum of 10 hours flight time was acquired in the category of aircraft for which the licence is sought in the 12 months preceding the date of application, and
  - (2) obtains a minimum of 70% in the written Air Law examination.
- (f) Credits for Foreign Applicants. Provided that the applicant can provide proof of having met the applicable experience requirements, the holder of a Commercial or higher type pilot licence in any category issued by a Contracting State shall be deemed to have met the ground school instruction requirement and with the exception of the written Air Law examination, the knowledge requirement.

#### **8.245 COMMERCIAL PILOT LICENCE ISSUANCE LIMITATIONS**

- (a) The Authority shall issue to an applicant for a Commercial Pilot Licence with an aeroplane or rotorcraft category rating who does not hold an Instrument Rating in the same category and class a Commercial Pilot Licence that contains the limitation: "*The carriage of passengers for hire in (aeroplanes) (powered-lifts) on cross-country flights in excess of 50 nautical miles or at night is prohibited.*"

*(Note: A pilot may remove this limitation by satisfactorily accomplishing the requirements prescribed by the Authority for an Instrument Rating in the same category and class of aircraft that has the limitation.)*

- (b) If an applicant for a Commercial Pilot Licence with a balloon rating takes a practical test in a balloon with an airborne heater, the Authority shall place upon the pilot licence a limitation restricting the exercise of the privileges of that licence to a balloon with an airborne heater.

*(Note: The pilot may remove this limitation by obtaining the required aeronautical experience in a gas balloon and receiving a logbook endorsement from an authorized instructor who attests to the pilot's accomplishment of the required aeronautical experience and ability to satisfactorily operate a gas balloon.)*

- (c) If an applicant for a Commercial Pilot Licence with a balloon rating takes a practical test in a gas balloon, the Authority shall place upon the pilot licence a limitation restricting the exercise of the privileges of that licence to a gas balloon.

*(Note: The pilot may remove this limitation by obtaining the required aeronautical experience in a balloon with an airborne heater and receiving a logbook endorsement from an authorized instructor who attests to the person's accomplishment of the required aeronautical experience and ability to satisfactorily operate a balloon with an airborne heater.)*

## **Section V: Airline Transport Pilots**

### **8.255 APPLICABILITY**

This Section prescribes the requirements for the issuance of an Airline Transport Pilot Licence and ratings, and the conditions under which those licences and ratings are necessary.

### **8.260 AIRLINE TRANSPORT PILOT ELIGIBILITY REQUIREMENTS – GENERAL**

To be eligible for an Airline Transport Pilot Licence, a person shall -

- (1) be at least 21 years of age;
- (2) be able to read, speak, write, and understand the English language;
- (3) hold a Class 1 medical certificate or its equivalent;
- (4) meet at least one of the following requirements:
  - (i) hold a valid and current Commercial Pilot Licence and an Instrument Rating;
  - (ii) meet the military experience requirements to qualify for a Commercial Pilot Licence, and an Instrument Rating if the person is an active or retired pilot of Jamaica Defence Force; or
  - (iii) hold either a foreign Airline Transport Pilot or foreign Commercial Pilot Licence and an Instrument Rating issued by another Contracting State;
- (5) meet the aeronautical applicable experience requirements of this Subpart before applying for the practical test;
- (6) pass a knowledge test on the applicable aeronautical knowledge areas prescribed by the Authority that apply to the aircraft category and class rating sought; and
- (7) pass the practical test as specified in the *Flight Test Guide – Airline Transport Pilot (Aeroplane or Helicopter)* that apply to the aircraft category and class rating sought.

### **8.265 AIRLINE TRANSPORT PILOT AERONAUTICAL KNOWLEDGE**

- (a) General. The Authority will administer a knowledge test for an Airline Transport Pilot Licence based on the aeronautical knowledge areas prescribed by the Authority appropriate to the aircraft category and class rating sought.

*(See Appendix 1 to 8.265 for the aeronautical knowledge requirements for airline transport pilot.)*

- (b) An applicant for an Airline Transport Pilot Licence shall receive and log ground training from an instructor, or complete a home-study course on the required aeronautical knowledge areas prescribed by the Authority.

### **8.270 AIRLINE TRANSPORT PILOT FLIGHT PROFICIENCY REQUIREMENTS**

An applicant for an Airline Transport Pilot Licence shall have received and logged flight training from an authorized instructor as required to attain a Commercial Pilot Licence and Instrument Rating and that applies to the aircraft category and class rating sought.

*(See Appendix 1 to 8.270 for the flight proficiency requirements for airline transport pilot.)*

### **8.275 AIRLINE TRANSPORT PILOT AERONAUTICAL EXPERIENCE REQUIREMENTS**

- (a) An applicant for an Airline Transport Pilot Licence with:
- (1) an aeroplane category rating shall obtain the minimum aeronautical experience of 1,500 hours total flight time of which a minimum of 900 hours shall have been completed in aeroplanes. The 1500 hours may include a maximum of 100 hours of training in a flight training device or flight simulator of which not more than 25 hours may have been obtained in a flight training device. The 1500 hours shall also include the additional minimum experience prescribed by the Authority.
  - (2) a rotorcraft-helicopter category rating shall obtain the minimum aeronautical experience of 1,000 hours total flight time of which a minimum of 600 hours shall have been completed in helicopters. The 1000 hours may include a maximum of 100 hours of training in a flight training device or flight simulator of which not more than 25 hours may have been obtained in a flight training device. The 1000 hours shall also include the minimum experience prescribed by the Authority.

*(See Appendix 1 to 8.275 for the breakout of the aeronautical experience prescribed for an airline transport rating.)*

- (b) Credits for Jamaica Defence Force Applicants. Active or retired Jamaica Defence Force personnel who hold a Jamaica Defence Force unrestricted Instrument Rating for either a multi-engine aeroplane or a helicopter required to be operated with a co-pilot, shall be deemed to have met the skill requirement.
- (c) Credits for Foreign Applicants. Provided that the applicant can provide proof of having met the applicable experience requirements, the holder of an Airline Transport Pilot Licence in either the aeroplane or helicopter category issued by a Contracting State shall be deemed to have met the ground school instruction requirement and with the exception of the written Air Law examination, the knowledge requirement.

### **8.290 ADDITIONAL AIRCRAFT CATEGORY, CLASS AND TYPE RATINGS**

- (a) An applicant for an Airline Transport Pilot Licence with a category rating who holds an Airline Transport Pilot Licence with another aircraft category rating shall -
- (1) meet the applicable eligibility requirements;
  - (2) pass a knowledge test on the applicable aeronautical knowledge areas;
  - (3) meet the applicable aeronautical experience requirements; and
  - (4) pass the practical test on the areas of operation.
- (b) An applicant for an aircraft type rating to an Airline Transport Pilot Licence is not required to pass a knowledge test if that pilot's Airline Transport Pilot Licence lists the aircraft category and class rating that is appropriate to the type rating sought.

*(See Appendix 1 to 8.275 for experience credits toward an additional Airline Transport Licence aircraft category.)*

## **Section VI: Class 1 and Class 2 Flight Instructors**

### **8.300 APPLICABILITY**

This Section prescribes the requirements for the issuance of the Class 1 and Class 2 Flight Instructor Rating and the conditions under which those ratings are necessary, and the limitations on those ratings.

### **8.305 FLIGHT INSTRUCTOR RATING ELIGIBILITY REQUIREMENTS**

- (a) To be eligible for a Class 2 Flight Instructor Rating a person shall -

- (1) be at least 18 years of age;
  - (2) be able to read, speak, write and understand the English language;
  - (3) hold either a Commercial Pilot Licence or Airline Transport Pilot Licence with an aircraft category and class rating that is appropriate to the Flight Instructor Rating sought;
  - (4) receive a logbook endorsement from an authorized Class 1 Flight Instructor that the applicant has received a minimum of 40 hours of instruction on the fundamentals of instructing prescribed by the Authority appropriate to the required knowledge test;
  - (5) pass with a minimum mark of 70% a knowledge test on the areas prescribed by the Authority;
  - (6) receive a logbook endorsement from an authorized Class 1 Flight Instructor that the applicant has received a minimum of 25 hours of dual instruction on the areas of operation prescribed by the Authority appropriate to the Flight Instructor Rating sought, and receive a logbook endorsement from an authorized Class 1 Flight Instructor indicating that the applicant is competent and possesses instructional proficiency in all the required manoeuvres;
  - (7) pass the required practical test as specified in the *Flight Test Guide – Flight Instructor Rating* that is appropriate to the Flight Instructor Rating sought in an aircraft that is representative of the category and class of aircraft for the aircraft rating sought and that is certified and capable of performing all of the required manoeuvres as set out in the flight test guide;
  - (8) an examiner may accept the endorsement specified in paragraph (a)(6) of this Subsection as satisfactory evidence of instructional proficiency in all of the required manoeuvres for the practical test, provided that the practical test is not a retest as a result of the applicant failing the previous test for deficiencies in those knowledge or skill areas;
  - (9) if a retest is the result of deficiencies in the ability of an applicant to demonstrate the requisite knowledge or skill, the applicant shall demonstrate the knowledge and skill to an examiner in an aircraft that is certified and capable of performing the manoeuvres that are being re-tested; and
  - (10) log at least 15 hours as PIC in the category and class of aircraft that is appropriate to the Flight Instructor Rating sought.
- (b) To be eligible for a Class 1 Flight Instructor Rating an applicant shall -
- (1) hold a Class 2 Flight Instructor Rating in the aircraft category sought;
  - (2) pass with a minimum mark of 80% a knowledge test on the areas prescribed by the Authority;
  - (3) have conducted a minimum of 400 hours of dual flight instruction toward the granting of private licences in the appropriate aircraft category;
  - (4) have recommended a minimum of 10 students for their private licence flight test and have had a minimum of 8 students successfully pass this flight test on their first attempt; and
  - (5) pass the required practical test that is appropriate to the Flight Instructor rating sought in an aircraft that is representative of the category and class of aircraft for the aircraft rating sought and is certified and capable of performing all of the required manoeuvres as set out in the appropriate flight test guide.

### **8.310 FLIGHT INSTRUCTOR AERONAUTICAL KNOWLEDGE**

An applicant for a Class 1 or 2 Flight Instructor Rating shall demonstrate a level of knowledge in subjects prescribed by the Authority appropriate to the privileges requested to be granted.

*(See Appendix 1 to 8.310 for prescribed Class 1 or 2 Flight Instructor knowledge requirements.)*

### **8.315 FLIGHT INSTRUCTOR FLIGHT PROFICIENCY REQUIREMENTS**

- (a) An applicant for a Class 1 or 2 Flight Instructor Rating shall -
- (1) receive and log flight time as prescribed by the Authority, and
- (See Appendix 1 to 8.315 for the flight instruction requirements.)*
- (2) have an endorsement from an authorized Class 1 Flight Instructor that the person is proficient to pass a practical test for the Flight Instructor rating sought.
- (b) An applicant must accomplish the flight training required by this Subsection in an aircraft that is representative of the category and class of aircraft for the rating sought.

### **8.320 FLIGHT INSTRUCTOR RECORDS**

A Flight Instructor shall -

- (1) sign the logbook of each student to whom he/she has given flight training or ground training;
- (2) maintain a record in a logbook or a separate document that contains the following:
  - (i) the name of each student whose logbook or student pilot licence that he/she has endorsed for solo flight privileges, and the date of the endorsement; and
  - (ii) the name of each student that he/she has endorsed for a knowledge test or practical test, and a record of the kind of test, the date, and the results; and
- (3) retain the records required by this Subsection for at least 3 years.

### **8.325 ADDITIONAL FLIGHT INSTRUCTOR RATINGS**

- (a) An applicant for an additional Flight Instructor Rating shall meet the eligibility requirements prescribed by the Authority that apply to the Flight Instructor Rating sought.
- (b) An applicant for an additional rating on a Flight Instructor Rating is not required to pass the knowledge test on the areas prescribed by the Authority.

### **8.330 FLIGHT INSTRUCTOR LIMITATIONS AND QUALIFICATIONS AND ADDITIONAL PRIVILEGES**

- (a) The holder of a Flight Instructor Rating shall observe the limitations and qualifications applicable to flight instructors that are prescribed by the Authority.
- (b) Additional privileges may be added to a Flight Instructor Rating.

*(See Appendix 1 to 8.330 for the limitations and qualifications that are applicable to exercising additional flight instructor privileges.)*

### **8.335 RENEWAL OF FLIGHT INSTRUCTOR RATINGS**

- (a) A Class 2 Flight Instructor Rating that has not expired may be renewed for an additional 12 calendar months or a Class 1 Flight Instructor Rating that has not expired may be renewed for an additional 24 calendar months if the holder -
  - (1) Passes a practical test for -
    - (i) renewal of the Flight Instructor Rating; or
    - (ii) an additional Flight Instructor Rating; or
  - (2) Presents to the Authority a graduation certificate showing that the pilot has successfully completed an approved flight instructor refresher course consisting of ground training or flight training, or both, within the 90 days preceding the expiration month of his or her Flight Instructor rating.
- (b) If the holder of either Flight Instructor Rating accomplishes the renewal requirements within the 30 days preceding the expiration month of his or her Flight Instructor Rating the Authority shall consider that the person accomplished the renewal requirement in the month due.
- (c) A holder of either Flight Instructor rating may accomplish the practical test required by paragraph (a)(1) of this Subsection in an approved course conducted by an FTU.

### **8.340 EXPIRED FLIGHT INSTRUCTOR RATINGS**

The holder of an expired Flight Instructor Rating may renew that rating by passing the prescribed practical test.

### **8.345 CREDITS FOR APPLICANTS WHO HOLD OR HAVE HELD A FLIGHT INSTRUCTOR RATING**

- (a) Knowledge.
  - (1) an applicant who holds or has held within the preceding 24 calendar months, a Flight Instructor Rating on a different aircraft category than the one sought, shall be deemed to have met 15 hours of the 40 hours ground school instruction requirement.

- (2) an applicant who holds or has held within the preceding 24 calendar months, a Flight Instructor Rating and wishes to renew on the same category of aircraft, shall be deemed to have met the written examination requirement.
- (b) Experience. An applicant who holds or has held within the preceding 24 calendar months, a Flight Instructor Rating, shall have the 25 hours of dual flight instruction reduced to 15 hours. If the Flight Instructor Rating was endorsed for extra privileges, the experience requirements for those extra privileges shall be deemed to have been met.

#### **8.350 CREDITS FOR JAMAICA DEFENCE FORCE APPLICANTS**

- (a) Knowledge.
  - (1) active or retired Jamaica Defence Force personnel who hold or have held within the preceding 24 calendar months, a Jamaica Defence Force Instructor Category on the same aircraft category as the one sought, shall be deemed to have met the written examination requirement.
  - (2) active or retired Jamaica Defence Force personnel who hold or have held within the preceding 24 calendar months, a Jamaica Defence Force Instructor Category on a different aircraft category than the one sought, shall be deemed to have met 20 hours of the 40 hour ground school instruction requirement.
- (b) Experience. Active or retired Jamaica Defence Force personnel who hold or have held within the preceding 24 calendar months, a Jamaica Defence Force Instructor Category for initial flight training, shall be deemed to have met the required 25 hours of dual flight instruction. If the flight instructor category was endorsed for extra privileges, the experience requirements for those extra privileges shall be deemed to have been met.

#### **8.355 CREDITS FOR FOREIGN APPLICANTS**

- (a) Knowledge.
  - (1) an applicant who holds or has held within the preceding 24 calendar months, a Flight Instructor Rating on a different aircraft category than the one sought, shall be deemed to have met 15 hours of the 40 hours ground school instruction requirement.
  - (2) an applicant who holds or has held within the preceding 24 calendar months, a Flight Instructor Rating and is seeking a Flight Instructor rating on the same category of aircraft, shall be deemed to have met the 40 hours ground school instruction requirement.
- (b) Experience. An applicant who holds or has held within the preceding 24 calendar months, a Flight Instructor Rating, shall have the 25 hours of dual flight instruction reduced to 15 hours. If the Flight Instructor Rating was endorsed for extra privileges, the experience requirements for those extra privileges shall be deemed to have been met.

#### **8.360 AEROBATIC AEROPLANE INSTRUCTOR RATING**

- (a) Prerequisites. Before commencing training for an Aerobatic Airplane Instructor Rating, an applicant shall hold a Commercial or higher Pilot Licence - Aeroplane.
- (b) Knowledge.
  - (1) An applicant shall have completed a minimum of 15 hours of Aerobatic Instructor Rating ground school instruction which shall include -
    - (i) the practical application of the basic techniques of instruction and principles of learning as outlined in Section 1 of the Flight Instructor Guide;
    - (ii) lesson planning;
    - (iii) theory of flight applicable to aerobatics;
    - (iv) preparatory ground instruction procedures;
    - (v) pre and post flight briefing procedures;
    - (vi) teaching aerobatic flight manoeuvres;
    - (vii) aircraft structural limitations;
    - (viii) medical factors and human tolerances;
    - (ix) aerobatic pre-flight inspection;

- (x) considerations for recovery from unplanned manoeuvres;
  - (xi) flight safety considerations;
  - (xii) regulations and airspace restrictions relating to aerobatic flight; and
  - (xiii) presentation of pilot decision making concepts.
- (2) An applicant shall have obtained 70% in the Air Law written examination, unless previously completed.
- (c) Experience.
- (1) An applicant shall provide evidence of having completed a minimum of 10 hours of dual flight instruction on the teaching of aerobatic manoeuvres including -
- (i) aerobatic spin entry and recovery (minimum 1 turn);
  - (ii) loop;
  - (iii) barrel roll;
  - (iv) slow roll;
  - (v) snap roll;
  - (vi) hammerhead turn;
  - (vii) combination manoeuvres including -
    - (A)  $\frac{1}{2}$  loop followed by  $\frac{1}{2}$  roll (Immelmann Turn);
    - (B)  $\frac{1}{2}$  roll followed by  $\frac{1}{2}$  loop (Split S);
    - (C)  $\frac{5}{8}$  loop followed by 45 degree descending  $\frac{1}{2}$  roll (1/2 Cuban 8); and
    - (D) 45 degree climbing  $\frac{1}{2}$  roll followed by  $\frac{5}{8}$  loop (1/2 Reverse Cuban 8); and
  - (viii) recovery techniques from unplanned aerobatic manoeuvres.
- (d) Skill. The applicant shall complete a flight test to the standard outlined in the JCAA *Flight Test Standard-Flight Instructor Rating - Aeroplane*.
- (e) Credits.
- (1) Knowledge. An applicant who holds, or has held within the preceding 24 months, a Flight Instructor Rating – Glider - Aerobatic or a Flight Instructor Rating for aeroplanes or helicopters shall be deemed to have met 10 hours of the 15 hours ground school instruction requirement.
- (2) Experience. An applicant who holds, or has held a Flight Instructor Rating – Gliders – Aerobatic or Flight Instructor Rating for aeroplanes or helicopters, shall be deemed to have met the experience requirement.
- (f) Credits for Jamaica Defence Force Applicants.
- (1) Knowledge. An applicant who holds, or has held within the preceding 24 months, a Jamaica Defence Force Instructor Category - Aeroplanes, shall be deemed to have met 10 hours of the 15 hours ground school instruction requirement.
- (2) Experience. An applicant who holds or has held within the preceding 24 months, a Jamaica Defence Force Qualified Flight Instructor category valid for training on single engine aeroplanes shall be deemed to have met the experience requirement.
- (g) Credits for Foreign Applicants.
- (1) Knowledge. An applicant who holds, or has held within the preceding 24 months, a Flight Instructor Rating – Aeroplane issued by a Contracting State shall be deemed to have met 10 hours of the required 15 hours of ground school instruction.
- (2) Experience.
- (i) an applicant who holds or has held a Flight Instructor Rating issued by a Contracting State shall be deemed to have met the experience requirement.
  - (ii) an applicant who holds or has held an International Council of Airshows (ICAS) Aerobatic Competency Recommendation from the FAA shall be deemed to have met the experience requirement

### **8.365 FLIGHT INSTRUCTOR RATING – BALLOON**

To be eligible for a Flight Instructor Rating – Balloon, a person shall -

- (1) be at least 18 years of age and hold a Class 1 or 2 medical certificate;
- (2) be able to read, speak, write and understand the English language;
- (3) hold a Commercial or higher Pilot Licence;
- (4) receive a logbook endorsement from an authorized Class 1 Flight Instructor that the applicant has received at least 10 hours of ground training on the fundamentals of instructing to include:
  - (i) the principles of learning and techniques of instruction;
  - (ii) preparation and use of lesson plans;
  - (iii) flight preparatory instruction;
  - (iv) pre and post flight briefing procedures relative to air exercises and weather conditions; and
  - (v) normal and emergency procedures.
- (5) pass with a minimum of 80% a written examination on Flight Instructor Rating instructional techniques;
- (6) Experience.
  - (i) an applicant shall have completed a minimum of 50 hours of flight time in balloons and within 12 months preceding the date of application, shall have completed flight training of a minimum of 5 hours including -
    - (A) 3 dual flights on instructional techniques of a minimum of 30 minutes each between takeoff and landing;
    - (B) 2 dual tethered flights on instructional techniques of a minimum of 30 minutes each;
    - (C) 4 flights as PIC of a minimum of 30 minutes each between takeoff and landing; and
    - (D) 1 tethered flight as PIC of a minimum of 30 minutes.
  - (ii) the 50 hours of flight time referred to above shall include not more than 10 hours of tethered flight time.
- (7) Skill. An applicant shall submit a letter of recommendation from the holder of a Class 1 Flight Instructor Rating – Balloon certifying that the applicant has reached a standard of skill to instruct in balloons.
- (8) Credit. The ground school and written examination specified above shall be deemed to have been met if the applicant holds or has held within the preceding 24 months, a valid Commercial or higher pilot licence with a Class 1 or Class 2 Flight Instructor Rating.
- (9) Validity. A Flight Instructor Rating – Balloon shall be valid to the first day of the 37<sup>th</sup> month following the month in which the letter of recommendation was dated.
- (10) Renewal. An applicant for renewal of a Flight Instructor Rating – Balloon shall:
  - (i) have completed a minimum of 3 hours of balloon flight instructor experience during the preceding 12 months; or
  - (ii) provide a recommendation from the holder of a Flight Instructor Rating – Balloon, certifying that the applicant is familiar with current instructional techniques and is competent to act as a balloon flight instructor.

### **8.370 FLIGHT INSTRUCTOR RATING – GLIDER**

To be eligible for a Flight Instructor Rating – Glider a person shall -

- (1) be at least 18 years of age and hold a Class 1 or 2 Medical Certificate;
- (2) be able to read, speak, write and understand the English language;
- (3) hold a Commercial or higher Pilot Licence;
- (4) receive a logbook endorsement from an authorized Class 1 Flight Instructor that the applicant has received at least 10 hours of ground training on the fundamentals of instructing to include -
  - (i) the principles of learning and the techniques of instruction;
  - (ii) preparation and use of Lesson Plans;
  - (iii) flight preparatory instruction;



- (iv) pre and post flight briefing procedures relative to air exercises and weather conditions; and
  - (v) normal and emergency procedures.
- (5) pass with a minimum of 80% a written examination on Flight Instructor Rating instructional techniques.
  - (6) Experience.
    - (i) An applicant shall have completed in gliders a minimum of -
      - (A) 20 hours flight time including a minimum of 125 flights of which no fewer than 10 flight have been completed in a two-seat glider, or
      - (B) 10 hours flight time including a minimum of 200 flights of which no fewer than 10 flights have been completed in a two-seat glider.
  - (7) Skill. An applicant shall submit a letter of recommendation from the holder of a Flight Instructor Rating - Glider certifying that the applicant has reached a standard of skill to instruct in gliders.
  - (8) Credits. The following credits shall be given to an applicant who has -
    - (i) a Private or higher Pilot Licence – Aeroplane shall have the total flight time and the total number of flights specified in the experience requirement above reduced by 25%;
    - (ii) aeroplane pilot experience in excess of 100 hours who holds a Private or higher Pilot Licence – Aeroplane shall be issued a Flight Instructor Rating – Glider after completing a minimum of 10 hours flight time in gliders and at least 50 flights with no fewer than 10 of these flights in two-seat gliders;
    - (iii) a Commercial or higher Pilot Licence – Aeroplane who holds a valid Class 1 or 2 Flight Instructor Rating – Aeroplane shall be issued a Flight Instructor Rating – Glider after completing a minimum of at least 25 flight in gliders with no fewer than 10 of these flights in two-seat gliders.
  - (9) Validity. A Flight Instructor Rating – Glider shall be valid to the first day of the 37<sup>th</sup> month following the month in which the letter of recommendation was dated.
  - (10) Renewal. An applicant for renewal of a Flight Instructor Rating – Glider shall -
    - (i) have completed a minimum of 3 hours of flight time as a glider flight instructor during the preceding 12 months; or
    - (ii) provide a recommendation from the holder of a flight instructor Rating – Glider, certifying that the applicant is familiar with current instructional techniques and is competent to act as a glider flight instructor.

## **Section VII: Flight Engineers**

### **8.415      APPLICABILITY**

This Section prescribes the requirements for issuing a Flight Engineer Licence.

### **8.417      FLIGHT ENGINEER ELIGIBILITY REQUIREMENTS**

To be eligible for a Flight Engineer Licence, a person shall -

- (1) be at least 18 years of age for a rating in other than a glider or balloon;
- (2) be able to read, speak, write and understand the English language;
- (3) pass the required knowledge test on the prescribed aeronautical knowledge areas;
- (4) meet the aeronautical experience requirements of this Subpart that apply to the aircraft rating sought before applying for the practical test;
- (5) pass a practical test on the areas of operation that apply to the aircraft rating sought; and
- (6) comply with the appropriate sections of this Subpart that apply to the aircraft category and class rating sought.

### **8.420      FLIGHT ENGINEER AERONAUTICAL KNOWLEDGE REQUIREMENTS**

- (a) An applicant for a Flight Engineer Licence shall demonstrate a level of knowledge appropriate to the privileges granted to the holder of a Flight Engineer Licence in subjects prescribed by the Authority.

*(See Appendix 1 to 8.420 for the aeronautical knowledge requirements prescribed for flight engineers.)*

- (b) Before taking the knowledge tests prescribed in paragraph (a) of this Subsection, an applicant for a Flight Engineer Licence shall present satisfactory evidence of having completed one of the experience requirements.
- (c) An applicant may take the knowledge tests before acquiring the flight training prescribed by the Authority.
- (d) Except as provided in paragraph (f) of this Subsection, an applicant for a Flight Engineer Licence or rating shall have passed the knowledge tests required by paragraph (a) of this Subsection since the beginning of the 24th calendar month before the month in which the practical test is taken.
- (e) An applicant who within the period ending 24 calendar months after passing the knowledge test, is employed as a flight crewmember or mechanic by a Jamaica AOC holder need not comply with the time limit set in paragraph (d) of this Subsection if the applicant -
  - (1) is employed by such a certificate holder at the time of the practical test; and
  - (2) if employed as a flight crewmember, has completed initial training, and if appropriate, transition, upgrade, recurrent training; or
  - (3) if employed as an AME, meets the recency of experience requirements.
- (f) An AOC holder may, when authorized by the Authority, provide as part of an approved training programme a knowledge test that it may administer to satisfy the test required for an additional rating under paragraph (a)(1) of Subsection 8.435.

#### **8.425 FLIGHT ENGINEER AERONAUTICAL EXPERIENCE REQUIREMENTS**

- (a) The applicant for a Flight Engineer Licence shall present satisfactory evidence showing completion of the practical experience prescribed by the Authority.

*(See Appendix 1 to 8.425 for the aeronautical experience requirements prescribed for flight engineers.)*

- (b) Except as otherwise prescribed or approved by the Authority, an applicant for a Flight Engineer Licence shall obtain and log the flight time used to satisfy the aeronautical experience requirements of paragraph (a) of this Subsection on an aeroplane on which a flight engineer is required by the Civil Aviation Regulations.

#### **8.427 FLIGHT ENGINEER OPERATIONAL EXPERIENCE REQUIREMENTS**

The applicant for a Flight Engineer Licence shall present satisfactory evidence showing completion of the operational experience prescribed by the Authority in the aircraft to be used for the rating sought.

*(See Appendix 1 to 8.427 for the operational experience requirements prescribed for flight engineers.)*

#### **8.430 FLIGHT ENGINEER AERONAUTICAL SKILL REQUIREMENTS**

An applicant for a Flight Engineer Licence with a class rating shall pass a practical test prescribed by the Authority on the duties of a flight engineer -

- (1) in the class of aeroplane for which a rating is sought; and
- (2) only on an aeroplane or an approved flight simulator replicating such an aeroplane.

*(See Appendix 1 to 8.430 for the aeronautical skill requirements prescribed for flight engineers.)*

#### **8.435 ADDITIONAL FLIGHT ENGINEER AIRCRAFT RATINGS**

To add another aircraft class rating to a flight engineer licence, an applicant shall -

- (1) pass the knowledge test and practical test that is appropriate to the class of aeroplane for which an additional rating is sought, or
- (2) satisfactorily complete an approved flight engineer training program that is appropriate to the additional class rating sought.

## **SUBPART G: LICENSING: AIRMEN OTHER THAN FLIGHT CREWMEMBERS**

### **Section I: General**

#### **8.445      APPLICABILITY**

This Subpart prescribes the requirements for issuing the following licences, ratings and authorizations for:

- (1) Flight Dispatcher;
- (2) Aircraft Maintenance Engineer;
- (3) Air Traffic Controller; or
- (4) Aeronautical Radio Station Operator.

### **Section II: Flight Dispatchers**

#### **8.485      APPLICABILITY**

This Section prescribes the requirements for issuance of a Flight Dispatcher Licence.

#### **8.487      FLIGHT DISPATCHER ELIGIBILITY REQUIREMENTS: GENERAL**

- (a) An applicant for a Flight Dispatcher Licence shall -
  - (1) be at least 21 years of age;
  - (2) be able to read, speak, write and understand the English language at a proficiency level meeting the level 6 requirements of Appendix 1 to ICAO Annex 1;
  - (3) have the documented prerequisite experience or training required;
  - (4) pass the required knowledge test on the prescribed aeronautical knowledge areas;
  - (5) pass the required practical examination on the areas of operations that apply to the aircraft dispatcher licence; and
  - (6) be in possession of a radio operator licence or endorsement.
- (b) The knowledge and skill requirements of paragraph (a) of this Subsection shall be demonstrated to a person authorized by the Authority.

#### **8.490      FLIGHT DISPATCHER KNOWLEDGE REQUIREMENTS**

- (a) An applicant for a Flight Dispatcher Licence shall demonstrate a level of knowledge appropriate to the privileges granted to the holder of an aircraft dispatcher licence in subjects prescribed by the Authority.  
*(See Appendix 1 to 8.490 for the aeronautical knowledge requirements for flight dispatchers.)*
- (b) The Authority will accept evidence of satisfactory completion of a knowledge test for 24 months after the date the test for eligibility to take the practical test.

#### **8.495      FLIGHT DISPATCHER EXPERIENCE OR TRAINING REQUIREMENTS**

- (a) An applicant for a Flight Dispatcher Licence shall present satisfactory documentary evidence that the applicant has the experience or training prescribed by the Authority.  
*(See Appendix 1 to 8.495 for the minimum prerequisite experience prescribed for flight dispatcher applicants.)*
- (b) An applicant using the completion of an approved course as the basis for the experience must complete the practical exam within 90 days after successful completion of the knowledge exam.

#### **8.500      FLIGHT DISPATCHER SKILL REQUIREMENTS**

An applicant for a Flight Dispatcher Licence shall be able to demonstrate the skill requirements prescribed by the Authority.

*(See Appendix 1 to 8.500 for the prescribed skill requirements for flight dispatcher applicants.)*

#### **8.505 FLIGHT DISPATCHER LICENCE ISSUANCE LIMITATIONS**

Unless the applicant has served under the supervision of an authorized flight dispatcher for at least 90 working days within the six months immediately preceding the application, the licence will be issued with the limitation “*Not valid for unsupervised dispatch of large aircraft in commercial air transport.*” This limitation will be removed upon presentation to the Authority of completion of this requirement.

### **Section III: Aircraft Maintenance Engineer**

#### **8.515 APPLICABILITY**

This Section prescribes the requirements for issuance of an Aircraft Maintenance Engineer (AME) Licence and associated ratings.

#### **8.517 AIRCRAFT MAINTENANCE ENGINEER ELIGIBILITY REQUIREMENTS**

An applicant for an AME Licence shall –

- (1) be at least 18 years of age;
- (2) provide proof of citizenship;
- (3) be able to speak, read, understand and write the English language;
- (4) have completed a course of study, approved by the Authority;
- (5) have accumulated not less than four (4) years of aircraft maintenance experience;
- (6) pass the required written and/or multi-choice knowledge tests; and
- (7) pass the required practical and/or oral tests.

#### **8.520 AIRCRAFT MAINTENANCE ENGINEER KNOWLEDGE REQUIREMENTS**

- (a) An applicant for an AME Licence shall demonstrate a level of knowledge satisfactory to the Authority, in the areas in which the privileges of the licence will be exercised.
- (b) The Authority will accept evidence of satisfactory completion of a knowledge test for 24 months after the applicant has been approved to take the test.

*(See Appendix 1 to 8.520 for the knowledge requirements for an AME.)*

#### **8.525 AIRCRAFT MAINTENANCE ENGINEER EXPERIENCE & TRAINING REQUIREMENTS**

- (a) An applicant for an AME Licence shall present satisfactory documentary evidence to the Authority that the applicant has completed an approved course of study, including both theoretical and practical components, under the supervision of a licensed AME, or a qualified instructor, who has been approved by the Authority to carry out the function.
- (b) Where an applicant has completed an approved course at a Maintenance Training Organization, the applicant shall present his certificate or diploma to the Authority for verification.
- (c) An applicant for an AME Licence shall present satisfactory documentary proof that he has obtained at least four years of experience in the field of aircraft maintenance, covering a sufficiently wide range of tasks that will enable a level of competency suitable to the privileges of the licence being granted.

*(See Appendix 1 to 8.525 for the experience and training requirements for an AME.)*

#### **8.530 AIRCRAFT MAINTENANCE ENGINEER SKILL REQUIREMENTS**

- (a) An applicant for an AME Licence shall be required to demonstrate the skill requirements prescribed by the Authority, in the manner prescribed.
- (b) A demonstration of skill, appropriate to the privileges to be granted to the licence holder, may be made in an oral examination, a practical examination or a combination of both, as specified by the Authority.

#### **8.535 AIRCRAFT MAINTENANCE ENGINEER TYPE RATING**

- (a) An applicant for a Type Rating endorsement on an AME Licence will be required to demonstrate to the Authority that he/she has obtained sufficient training and experience to allow the applicant to make a

determination that the aircraft meets the specifications of its type certificate and that it is serviceable and fit for flight.

- (b) The Authority shall, once the training and experience requirements are met, convene a panel of not less than two persons to conduct an oral examination of the applicant. The applicant will be expected to demonstrate familiarity with the aircraft, its systems, and its power plant(s), commensurate with the ATA 104 Level III training standards.

*(See Appendix 1 to 8.535 for the training and experience requirements for aircraft type rating endorsements.)*

#### **8.536 RENEWAL OF AN AME LICENCE**

- (a) Unless suspended or revoked by the Authority, or surrendered by the holder, an AME Licence shall be valid for twenty-four calendar months following the issue or renewal of the licence.
- (b) The holder of an AME Licence may apply to the Authority for renewal of the licence at any time during the sixty-day period prior to the expiry of the licence.
- (c) Application for renewal shall be made using the prescribed form issued by the Authority.
- (d) The following information shall be supplied on the application form -
  - (i) name of applicant;
  - (ii) licence number, with details of the category and ratings currently held;
  - (iii) permanent place of residence and telephone contact number;
  - (iv) nature of employment since last application;
  - (v) certification from another licence holder that the information provided is correct; and
  - (vi) applicant's signature.
- (e) The applicable fee for the renewal of the licence, as specified in the Twenty-Second Schedule, shall be submitted along with the application.
- (f) Where deemed necessary, the Authority may request a current picture of the applicant for the licence.

#### **8.540 REST AND DUTY LIMITATIONS FOR AIRCRAFT MAINTENANCE ENGINEERS**

- (a) No person may assign, nor shall any person perform any certification functions for aircraft, unless that person has had a minimum rest period of 8 hours prior to the beginning of duty.
- (b) No person may schedule a person performing certification functions for aircraft for more than twelve and a half (12½) consecutive hours of duty.
- (c) In situations involving unscheduled duty due to aircraft unavailability, persons performing certification functions for aircraft may be continued on duty for -
  - (1) a maximum of fifteen (15) consecutive hours; or
  - (2) a maximum of seventy-two (72) hours in any seven-day (7) period.
- (d) Following any duty period of more than 12 hours, the person performing maintenance functions for aircraft shall have a minimum mandatory rest period of 10 hours.
- (e) An AMO or AOC holder shall relieve the person performing maintenance functions from all duties for at least one twenty-four (24) consecutive hour period during any seven (7) consecutive days.

#### **8.545 AME PRIVILEGES AND LIMITATIONS**

- (a) Except as provided for in paragraph (d), an AME may perform, supervise, and certify for, any maintenance, preventive maintenance, component replacement, repair, modification, and inspection completed on, and approve for return to service, any aircraft, airframe, power plant, propeller, appliance, component, or part thereof, for which he or she is type-rated, provided that the AME -
  - (1) has received formal training acceptable to the Authority on the tasks to be performed;
  - (2) has either satisfactorily performed the work at an earlier date while working under the direct supervision and instruction of an AME; or
  - (3) has demonstrated the ability to perform the work to the satisfaction of the Authority; and
  - (4) holds valid and current Licence, appropriate to the task being performed

- (b) A Type-rated AME may -
  - (1) perform an annual inspection, or perform or supervise a progressive inspection, according to this Schedule on any aircraft for which his licence is endorsed, except those aircraft on a continuous maintenance program, and approve the aircraft for return to service.
  - (2) perform a Duplicate Inspection on any system of any aircraft for which his Licence is endorsed.
  - (3) carry out and certify a Certificate of Maintenance Review on an aircraft for which his Licence is endorsed, provided that he/she has been so authorised by the owner/operator and approved for that function by the Authority in the operator's approved MCM.
- (c) When exercising the privileges of his Licence, the holder of a Type-rated AME Licence shall keep it available for inspection by the aircraft owner/operator and shall present it at the request of the Authority or any authorised representative of the Director General, or at the request of any law enforcement officer.
- (d) An AME may not —
  - (1) perform, supervise, or certify (unless under the direct supervision and control of an AOC holder or AMO that is authorised for such maintenance, preventative maintenance, repairs, replacements, or modifications):
    - (i) A major repair to, or major modification of, a propeller;
    - (ii) any repair or alteration of instruments, radios, or other electrical or electronic equipment;
    - (iii) the return to service of a piston engine, where the crankcase has been separated and reassembled;
    - (iv) the return to service of a turbine engine, where any module has been separated and reinstalled.
  - (2) approve for return to service any aircraft, airframe, aircraft engine, propeller, appliance, component, or part thereof after completion of a major modification, or major repair, unless acting under the authority of an AMO.
  - (3) approve for return to service any aircraft where a weld repair has been carried out, unless acting under the authority of an AMO.
  - (4) approve for return to service any aircraft where a compass compensation adjustment has been carried out, unless his/her Licence is endorsed for that function, or he/she is acting under the authority of an AMO.
  - (5) exercise the privileges of the licence unless the AME understands the current instructions for continued airworthiness and the maintenance instructions for the specific operation concerned.
  - (6) exercise the privileges of his/her Licence while employed to the Civil Aviation Authority as an Inspector, except when those privileges are being exercised on an aircraft operated in the Private Category and owned by the Inspector.
  - (7) certify for any repairs, adjustments, or replacements carried out on Direct-Reading Compasses, unless the Licence has been endorsed for "Compass Compensation & Adjustment" by the Authority.
- (e) An "E" Licence encompasses all avionics systems on all aircraft of 5700kgs MCTOW or less unless otherwise limited or restricted. An "E" licensed AME is therefore a "Type Rated" AME. As such, an "E" Licensed AME may exercise all the privileges specified in paragraphs (a) and (b) above with respect to avionics systems on all aircraft of 5700kgs or less MCTOW, and on any aircraft of more than 5700kgs MCTOW on which the holder has received ATA 104 Level III endorsement training and has achieved an 80% or better examination grade.

#### **8.550 AME RECENT EXPERIENCE REQUIREMENTS**

A type-rated AME may not exercise the privileges of his/her license or rating unless, within the preceding 24 months —

- (1) the Authority has found that he/she is able to do that work; or
- (2) for at least 6 months within the preceding 24 months, he/she has—
  - (i) served as an AME under his/her license and rating;
  - (ii) technically supervised other AME's;

- (iii) provided aviation maintenance instruction or served as the direct supervisor of persons providing aviation maintenance instruction for an AME course or program acceptable to the Authority;
- (iv) supervised 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 sub-paragraphs (2) (i) through (2) (iv) of this Subsection; or
- (vi) undergone a refresher program approved by or acceptable to the Authority.

## **Section IV: Aeronautical Station Operator**

### **8.625 APPLICABILITY**

This Section prescribes the requirements for issuance of an authorization to operate radio equipment in an aeronautical station and the conditions under which this authorization is necessary.

### **8.627 AERONAUTICAL STATION OPERATOR ELIGIBILITY REQUIREMENTS: GENERAL**

To be eligible for an Aeronautical Station Operator authorization, a person shall -

- (1) be at least 18 years of age; and
- (2) be able to read, speak, write and understand the English language meeting the proficiency level 6 requirements of Appendix 1 to ICAO Annex 1; and
- (3) comply with the sections of this Subpart that apply to the authorization that they seek.

### **8.630 AERONAUTICAL STATION OPERATOR KNOWLEDGE REQUIREMENTS**

An applicant for an Aeronautical Station Operator Authorization shall demonstrate a level of knowledge appropriate to the privileges granted to the holder of an aeronautical station operator authorization in subjects prescribed by the Authority.

*(See Appendix 1 to 630 for prescribed aeronautical station operator knowledge requirements.)*

### **8.635 AERONAUTICAL STATION OPERATOR EXPERIENCE REQUIREMENTS**

An applicant for an Aeronautical Station Operator Authorization shall provide records demonstrating that they meet the minimum experience requirements for an aeronautical station operator prescribed by the Authority.

*(See Appendix 1 to 635 for prescribed aeronautical station operator experience requirements.)*

### **8.640 AERONAUTICAL STATION OPERATOR SKILL REQUIREMENTS**

An applicant for an Aeronautical Station Operator Authorization shall demonstrate the level skill prescribed by the Authority for an aeronautical station operator.

*(See Appendix 1 to 640 for prescribed aeronautical station operator skill requirements.)*

## **Section V: Air Traffic Controller**

### **8.660 APPLICABILITY**

This Section prescribes the requirements for issuance of an Air Traffic Controller Licence and the conditions under which the licence and any ratings are necessary.

### **8.662 AIR TRAFFIC CONTROLLER ELIGIBILITY REQUIREMENTS: GENERAL**

An applicant for an Air Traffic Controller Licence shall -

- (1) be not less than 21 years of age;
- (2) be able to read, write, understand, and speak the English language by meeting the level 6 proficiency requirements of Appendix 1 to ICAO Annex 1; and
- (3) hold at least a class 3 medical certificate.

#### **8.665 AIR TRAFFIC CONTROLLER KNOWLEDGE REQUIREMENTS**

- (a) An applicant for an Air Traffic Controller Licence shall have demonstrated, to the satisfaction of the Authority, a level of knowledge in the following areas -
- (1) principles of flight; principles of operation and functioning of aircraft, powerplants and systems; aircraft performance relevant to air traffic control operations;
  - (2) human performance and limitations relevant to air traffic control;
  - (3) aeronautical meteorology; use and appreciation of meteorological documentation and information; origin and characteristics of weather phenomena affecting flight operations and safety; altimetry;
  - (4) principles of air navigation, limitation and accuracy of navigation systems and visual aids; and
  - (5) air traffic control, communication, radiotelephony and phraseology procedures (routine, non routine and emergency); use of the relevant aeronautical documentation; and safety practices associated with flight.
- (b) An applicant for an Air Traffic Controller Licence shall have demonstrated, to the satisfaction of the Authority, a level of knowledge in the following areas appropriate to the rating that will be endorsed –
- (1) airspace structure;
  - (2) applicable rules, procedures and information sources;
  - (3) Jamaica Civil Aviation Regulations and the Manual of Operations;
  - (4) air navigation facilities;
  - (5) air traffic control equipment and its use;
  - (6) terrain and prominent landmarks;
  - (7) characteristics of air traffic and traffic flow;
  - (8) meteorology and weather phenomena;
  - (9) emergency and search and rescue plans;
  - (10) principles, use and limitations of radar and other surveillance systems and associated equipment; and
  - (11) procedures for the provision of approach or area radar control services, as appropriate, including procedures to ensure appropriate terrain clearance.

#### **8.670 AIR TRAFFIC CONTROLLER EXPERIENCE REQUIREMENTS**

- (a) An applicant for an Air Traffic Controller Licence shall have completed an approved training course.
- (b) An applicant shall have met the experience requirements detailed in Chapter 4 of ICAO Annex 1 for each rating that is to be endorsed on the licence.

#### **8.675 AIR TRAFFIC CONTROLLER SKILL REQUIREMENTS**

An applicant shall have demonstrated, at a level appropriate to the privileges being granted, the skill, judgement and performance required to provide a safe, orderly and expeditious air traffic control service.

#### **8.676 AIR TRAFFIC CONTROLLER RATING PRIVILEGES AND REQUIREMENTS**

- (a) Provided he or she has met the requirements for a rating, the holder of a current Air Traffic Controller Licence and a valid medical may exercise the privileges of that rating as follows -
- (1) Aerodrome Control Rating: to provide or to supervise the provision of aerodrome control service for the aerodrome for which the licence holder is rated;
  - (2) Approach Control Rating: to provide or to supervise the provision of approach control service for the aerodrome or aerodromes for which the licence holder is rated, within the airspace or portion thereof, under the jurisdiction of the unit providing approach control service;
  - (3) Approach Radar Control Rating: to provide and/or supervise the provision of approach control service with the use of radar or other surveillance systems for the aerodrome or aerodromes for which the licence holder is rated, within the airspace or portion thereof, under the jurisdiction of the unit providing approach control service and subject to meeting the experience requirements specified in Subsection 8.670(b);
  - (4) 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;



- (5) Area Control Rating: to provide and/or supervise the provision of area control service within the control area or portion thereof, for which the licence holder is rated; and
  - (6) Area Radar Control Rating: to provide and/or supervise the provision of area control service with the use of radar, within the control area or portion thereof, for which the licence holder is rated.
- (b) When two air traffic controller ratings are sought concurrently, the knowledge, skill and experience requirements for both shall be met.
  - (c) Before exercising the privileges of a rating, the licence holder shall be familiar with all pertinent and current information.
  - (d) The holder of an Air Traffic Controller Licence shall not carry out instruction in an operational environment unless such holder has received authorization from the Authority.
  - (e) A rating shall become invalid when an air traffic controller has ceased to exercise the privileges of the rating for a period exceeding 90 days or more. A rating shall remain invalid until the controller's ability to exercise the privileges of the rating has been re-established.
  - (f) A person may exercise the privileges of a rating without having an Air Traffic Controller Licence provided that person:
    - (1) is undergoing training under the supervision of a qualified air traffic controller; and
    - (2) has met the requirements specified in Subsections 8.662 and 8.665.

## APPENDICES

### APPENDIX 1 TO 8.018: DETAILED INFORMATION TO BE INCLUDED ON A LICENCE

The following details shall appear on the licence using the roman numerals shown -

- (1) name of State (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 (in Roman alphabet; also if script of national language is other than Roman);
- (5) address of holder;
- (6) nationality of holder;
- (7) signature of holder;
- (8) authority and, where necessary, conditions under which the licence is issued;
- (9) certification concerning validity and authorization for holder to exercise privileges appropriate to licence;
- (10) signature of officer issuing the licence and the date of such issue;
- (11) seal or stamp of authority issuing the licence;
- (12) ratings, e.g. category, class, type of aircraft, airframe, aerodrome control, etc.;
- (13) remarks, i.e. special endorsements relating to limitations and endorsements for privileges, including from March 5, 2008, an endorsement of language proficiency;
- (14) any other details desired by the State issuing the licence.

### APPENDIX 2 TO 8.018: COLOURS TO BE INCLUDED ON A LICENCE

The following colours shall appear on the licence -

- (1) Private pilot aeroplane -----light brown.
- (2) Commercial pilot aeroplane-----light blue.
- (3) Airline transport pilot aeroplane-----dark green.
- (4) Private pilot helicopter-----light grey
- (5) Commercial pilot helicopter-----dark grey
- (6) Airline transport pilot helicopter-----two or more dark grey stripes on white background
- (7) Glider pilot-----pink
- (8) Free balloon pilot -----violet
- (9) Flight engineer-----brown

- (10) Aircraft maintenance engineer-----maroon
- (11) Air traffic controller -----yellow
- (12) Flight operations officer-----light green
- (13) Aeronautical station operator-----two or more orange stripes on white background

**APPENDIX 1 TO 8.110: PREREQUISITES FOR PRACTICAL TESTS**

- (a) Except as provided in paragraph (b), to be eligible for a practical test for a licence or rating issued under this Schedule, an applicant shall -
  - (1) pass the required knowledge test within the 24-calendar-month period preceding the month the applicant completes the practical test, if a knowledge test is required;
  - (2) present the knowledge test report at the time of application for the practical test, if a knowledge test is required;
  - (3) have satisfactorily accomplished the required flight training and obtained a minimum of 75% of the aeronautical experience prescribed by this Schedule for the licence or rating sought, with the exception of first time applicants for an Instrument Rating or a Class 2 Flight Instructor Rating who shall have completed all of the required flight training and aeronautical experience;
  - (4) meet the prescribed age requirement of this Subpart for the issuance of the licence or rating sought; and
  - (5) have an endorsement in his or her logbook or training record that has been signed by an authorized Class 2 Flight Instructor who certifies that the applicant -
    - (i) has received and logged training time within 60 days preceding the date of application in preparation for the practical test;
    - (ii) is prepared for the required practical test; and
    - (iii) has demonstrated satisfactory knowledge of the subject areas in which the applicant was deficient on the airman knowledge test.
- (b) An applicant for an Airline Transport Pilot Licence or an additional rating to an Airline Transport Pilot Licence may take the practical test for that licence or rating with an expired knowledge test report, provided that the applicant -
  - (1) is employed as a flight crewmember by a certificate holder under the Twelfth Schedule at the time of the practical test and has satisfactorily accomplished that operator's approved:
    - (i) PIC aircraft qualification training program that is appropriate to the licence and rating sought; and
    - (ii) Qualification training requirements appropriate to the licence and rating sought; or
  - (2) is employed as a flight crewmember in scheduled military air transport operations of Jamaica at the time of the practical test, and has accomplished the PIC aircraft qualification training program that is appropriate to the licence and rating sought.

**APPENDIX 1 TO 8.120: PRACTICAL TESTS: REQUIRED AIRCRAFT, SIMULATION AND EQUIPMENT**

- (a) General. Except as provided in paragraph (a)(2), or when permitted to accomplish the entire flight increment of the practical test in an approved flight simulator or an approved flight training device, an applicant for a licence or rating issued under this Schedule shall furnish -
  - (1) an aircraft of Jamaica registry for each required test that -
    - (i) is of the category, class and type (if applicable) applicable to the licence or rating sought; and
    - (ii) has a current standard, limited or primary airworthiness certificate; and
  - (2) at the discretion of the examiner who administers the practical test:
    - (i) an aircraft that has a current airworthiness certificate other than standard, limited or primary but that otherwise meets the requirement of paragraph (a)(1);
    - (ii) an aircraft of the same category, class and type, if applicable, of foreign registry that is properly certified by the country of registry; or
    - (iii) a military aircraft of the same category, class and type, if applicable, for which the applicant is applying for a licence or rating.

- (b) Required equipment (other than controls). Each applicant for a practical test shall use an aircraft that has -
  - (1) the equipment for each area of operation required for the practical test;
  - (2) no prescribed operating limitations that prohibit its use in any of the areas of operation required for the practical test;
  - (3) except as provided in paragraph (e), at least two pilot stations with adequate visibility for each person to operate the aircraft safely; and
  - (4) cockpit and outside visibility adequate to evaluate the performance of the applicant when an additional jump seat is provided for the examiner.
- (c) Required controls. Each applicant for a practical test shall use an aircraft (other than a lighter-than-air aircraft) that has engine power controls and flight controls that are easily reached and operable in a conventional manner by both pilots, unless the examiner determines that the practical test can be conducted safely in the aircraft without the controls being easily reached.
- (d) Simulated instrument flight equipment. An applicant for a practical test that involves manoeuvring an aircraft solely by reference to instruments shall furnish -
  - (1) equipment on board the aircraft that permits the applicant to pass the areas of operation that apply to the rating sought; and
  - (2) a device that prevents the applicant from having visual reference outside the aircraft, but does not prevent the examiner from having visual reference outside the aircraft, and is otherwise acceptable to the Authority.
- (e) Aircraft with single controls. An applicant may complete a practical test in an aircraft having a single set of controls, provided the -
  - (1) examiner agrees to conduct the test;
  - (2) test does not involve a demonstration of instrument skills; and
  - (3) proficiency of the applicant can be observed by an examiner who is in a position to observe the applicant.
- (f) Aircraft with a single seat. An applicant may complete a practical test in an aircraft having a single seat provided that the practical test is conducted in an area that will allow the aircraft in flight to be observed by the examiner on the ground.

**APPENDIX 1 OF 8.125: USE OF AN APPROVED FLIGHT SIMULATOR OR AN APPROVED FLIGHT TRAINING DEVICE**

- (a) General. If an approved flight simulator or approved flight training device is used for accomplishing any of the training and the required practical test for a pilot licence for a category, class and type rating, the flight simulator or flight training device shall be used in accordance with an approved course at an FTU;
- (b) Preflight inspection demonstration. The preflight inspection shall be satisfactorily demonstrated as approved by the Authority.
- (c) Practical test demonstration.
  - (1) the applicant may be issued a rating after successful completion of the required practical tests prescribed by the Authority, if the simulator was Level D, or
  - (2) if the simulator was not Level D, the following tasks must be satisfactorily demonstrated in the aircraft in flight as prescribed by the Authority -
    - (i) normal takeoff;
    - (ii) rejected landing; and
    - (iii) three landings to include one landing with an engine out.

**APPENDIX 1 TO 8.145: INSTRUMENT RATING AERONAUTICAL KNOWLEDGE REQUIREMENTS**

In addition to the requirements of Subsection 8.145, an applicant for an Instrument Rating shall have received and logged ground training from an authorized instructor on the following aeronautical knowledge areas that apply to the Instrument Rating sought: (see Appendix 2 to 8.145 (c) for "authorized instructor") -

- (1) rules and regulations relevant to flight under IFR; related air traffic services practices and procedures;

- (2) use, limitation and serviceability of avionics and instruments necessary for the control and navigation of aeroplanes or helicopters (as appropriate) under IFR and in instrument meteorological conditions; use and limitations of an autopilot;
- (3) compasses, turning and acceleration errors; gyroscopic instruments, operational limits and precession effects; practices and procedures in the event of malfunctions of various flight instruments;
- (4) pre-flight preparations and checks appropriate to flight under IFR;
- (5) operational flight planning; preparation and filing of air traffic services flight plans under IFR; altimeter setting procedures;
- (6) human performance relevant to instrument flight in aeroplanes or helicopters (as appropriate);
- (7) aeronautical decision making and judgement;
- (8) crew resource management, including crew communication and coordination;
- (9) application of aeronautical meteorology; interpretation and use of reports, charts and forecasts; codes and abbreviations; use of, and procedures for obtaining meteorological information; altimetry;
- (10) procurement and use of aviation weather reports and forecasts and the elements of forecasting weather trends based on that information;
- (11) personal observation of weather conditions;
- (12) causes, recognition and effects of engine, propeller or rotor icing and airframe icing; frontal zone penetration procedures; hazardous weather avoidance;
- (13) recognition of critical weather situations and windshear avoidance;
- (14) practical air navigation using radio navigation aids;
- (15) use, accuracy and reliability of navigation systems used in departure, en-route, approach and landing phases of flight; identification of radio navigation aids;
- (16) 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;
- (17) precautionary and emergency procedures; safety practices associated with flight under IFR;
- (18) radiotelephony procedures and phraseology as applied to aircraft operations under IFR; action to be taken in case of communication failure;
- (19) appropriate information in advisory material published by the Authority that applies to flight operations under IFR;
- (20) air traffic control system and procedures for instrument flight operations;
- (21) IFR navigation and approaches by use of navigation systems;
- (22) use of IFR en route and instrument approach procedure charts; and
- (23) safe and efficient operation of aircraft under instrument flight rules and conditions.

#### **APPENDIX 2 TO 8.145: INSTRUMENT RATING FLIGHT INSTRUCTION REQUIREMENTS**

- (a) In addition to the requirements of Subsection 8.145, an applicant for an Instrument Rating shall receive and log training from an authorized instructor in an aircraft, or in an approved flight simulator or approved flight training device that includes the following areas of operation -
  - (1) 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;
  - (2) pre-flight inspection, use of checklists, taxiing and pre-take-off checks;
  - (3) procedures and manoeuvres for IFR operation under normal, abnormal and emergency conditions covering at least:
    - (i) transition to instrument flight on take-off;
    - (ii) standard instrument departures and arrivals;
    - (iii) enroute IFR procedures;
    - (iv) holding procedures;
    - (v) instrument approaches to specified minima;
    - (vi) missed approach procedures;
    - (vii) landings from instrument approaches; and
    - (viii) in-flight manoeuvres and particular flight characteristics.

- (4) air traffic control clearances and procedures;
  - (5) flight by reference to instruments;
  - (6) navigation systems;
  - (7) instrument approach procedures;
  - (8) emergency operations; and
  - (9) postflight procedures.
- (b) Additionally, for multi-engine aeroplanes – operation of the aeroplane or helicopter (as appropriate) solely by reference to instruments with one engine inoperative or simulated inoperative throughout an approach and landing.
- (c) An authorized instructor for Instrument Rating training purposes is -
- (i) a Flight Instructor who holds a valid Instrument Rating for the applicable aircraft category and class and in the case where the student does not hold a Multi-Engine Rating, the instructor must have at least 50 hours of multi-engine experience as pilot-in-command with at least 10 hours as pilot-in-command on the type of aeroplane used, or
  - (ii) the holder of a Commercial or higher Pilot Licence endorsed with a valid Instrument Rating for the applicable aircraft category and class provided the holder has at least 500 hours PIC experience of which at least 100 hours shall be in the applicable aircraft group and at least 10 hours as PIC on the type of aeroplane being used.

**APPENDIX 3 TO 8.145: INSTRUMENT RATING AERONAUTICAL EXPERIENCE REQUIREMENTS**

- (a) In addition to the requirements of Subsection 8.145, an applicant for an Instrument Rating shall have logged the following -
- (1) at least 50 hours of cross-country flight time as PIC, of which at least 10 hours shall be in the aircraft category for the Instrument Rating sought; and
  - (2) a total of 40 hours of actual or simulated instrument time on the areas of operation of this Subsection, to include:
    - (i) at least 10 hours of instrument flight training from an authorized instructor in the aircraft category for which the Instrument Rating is sought;
    - (ii) at least 3 hours of instrument training that is appropriate to the Instrument Rating sought from an authorized instructor in preparation for the practical test within the 60 days preceding the date of the test;
- (b) The instrument training on cross-country flight procedures specific to the category and class of aircraft shall include at least one cross-country flight in the aircraft that is performed under IFR, and consists of -
- (1) a distance, along airways or ATC-directed routing, of at least 100 nautical miles;
  - (2) an instrument approach to published minimums at each of at least two different airports; and
  - (3) three different kinds of approaches with the use of navigation systems.

**APPENDIX 1 TO 8.163: CATEGORY II OR III AUTHORIZATION GENERAL REQUIREMENTS**

- (a) An applicant for an authorization for Category II or III operations shall pass a practical test for -
- (1) issuance or renewal of a Category II or III pilot authorization; and
  - (2) the addition of another type aircraft to a Category II or III pilot authorization.
- (b) To be eligible for the practical test for an authorization under this Subsection, an applicant shall -
- (1) meet the prescribed requirements; and
  - (2) 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 prescribed requirements; 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.
- (c) An applicant shall accomplish the prescribed approaches -

- (1) under actual or simulated instrument flight conditions;
  - (2) 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;
  - (3) to the decision height authorized for Category II operations only if conducted in an approved flight simulator or an approved flight training device; and
  - (4) 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 FTU.
- (d) The flight time acquired in meeting the prescribed requirements may be used.

**APPENDIX 2 TO 8.163: CATEGORY II OR III AUTHORIZATION PRACTICAL ORAL EXAMINATION**

During the practical test, the applicant shall demonstrate knowledge requirements of Table 1-8.163 through oral questioning. An inspector or evaluator may conduct oral questioning at any time during the practical test.

<b>Table 1 - 8.163 Demonstrated Aeronautical Knowledge Requirements</b>	<b>Category II</b>	<b>Category III</b>
Required landing distance	<b>X</b>	<b>X</b>
Use and limitations of RVR, including determination of controlling RVR and required transmissometers	<b>X</b>	<b>X</b>
Characteristics and limitations of the ILS and runway lighting system	<b>X</b>	<b>X</b>
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 or III equipment	<b>X</b>	<b>X</b>
Instrument and equipment failure warning systems	<b>X</b>	<b>X</b>
Use of visual clues, their availability or limitations, and altitude at which they are normally discernible at reduced RVR readings	<b>X</b>	<b>X</b>
The expected sequence of visual cues during an approach in which visibility is at or above landing minima	<b>X</b>	<b>X</b>
Recognition of the decision height or alert height, as applicable, using a radar altimeter	<b>X</b>	<b>X</b>
Missed approach procedures and techniques using computed or fixed attitude guidance displays	<b>X</b>	<b>X</b>
Procedures and techniques related to transition from non-visual to visual flight during a final approach under reduced RVR	<b>X</b>	<b>X</b>
<b>Table 1 - 8.163 Demonstrated Aeronautical Knowledge Requirements</b>	<b>Category II</b>	<b>Category III</b>
Recognition of and proper reaction to significant failures encountered prior to and after reaching the alert height or decision height, as applicable	<b>X</b>	<b>X</b>
Recognition of the limits of acceptable aircraft position and flight path tracking during approach, flare, and, if applicable, rollout		<b>X</b>
Recognition of, and reaction to, airborne or ground system faults or abnormalities, particularly after passing alert height or decision height, as applicable		<b>X</b>
Unexpected deterioration of conditions to less than minimum RVR during approach, flare, and rollout		<b>X</b>
Assigned duties of the SIC during Category II or III operations, unless the aircraft for which authorization is sought does not require an SIC	<b>X</b>	<b>X</b>

Effects of vertical and horizontal windshear	<b>X</b>	<b>X</b>
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**APPENDIX 3 TO 8.163: CATEGORY II OR III AUTHORIZATION PRACTICAL FLIGHT EXAMINATION**

- (a) The practical flight test 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 -
  - (1) represents an aircraft of the same category and class, and type, as applicable, as the aircraft in which the authorization is sought; and
  - (2) is used in accordance with an approved course conducted by an FTU.
- (b) All approaches performed during the flight phase shall be made with the use of an approved flight control guidance system, except as noted in Table 2 - 8.163 included in this section.
- (c) 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.
- (d) An inspector or evaluator may not conduct oral questioning at any time during a practical test.
- (e) The practical tests shall include the prescribed manoeuvres and procedures:
  - (1) under actual or simulated instrument flight conditions that replicate, throughout the practical test, the minimum weather conditions for the category of approach, landing and rollout; and
  - (2) to the minimum height for the category or ILS approach in the type aircraft in which the practical test is to be conducted;

*(Note: If the practical test is conducted in the aircraft, the examining official may exercise the discretion to set a higher minimum height appropriate to the circumstances.)*

<b>Table 2 - 8.163 Demonstrated Aeronautical Skill Requirements</b>	<b>Category II</b>	<b>Category III</b>
Coupled ILS approach (transitioning to a landing)	<b>X</b>	<b>X</b>
Coupled ILS approach (transitioning to a missed approach)	<b>X</b>	<b>X</b>
Hand flown ILS approach, using the flight director commands	<b>X</b>	
Normal automatic landing and rollout		<b>X</b>
Normal autoland, with a manual rollout (CAT IIIb) after a fail-passive disconnect at touchdown		<b>X</b>
Normal hand-flown landing	<b>X</b>	
Missed approaches	<b>X</b>	<b>X</b>
Missed approach with inoperative engine (if aircraft has performance capability)	<b>X</b>	<b>X</b>

**APPENDIX 4 TO 8.163: GENERAL REQUIREMENTS FOR CATEGORY II AND CATEGORY III PILOT AUTHORIZATIONS**

- (a) 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 Licence.
- (b) 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.
- (c) 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.
- (d) 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 prescribed experience requirements or for the practical test required by this Schedule for a Category II or a Category III pilot authorization, as applicable.

**APPENDIX 1 TO 8.177: MANOEUVRES AND PROCEDURES FOR STUDENT PILOT PRE-SOLO FLIGHT TRAINING**

In addition to the requirements of Subsection 8.177, a student pilot who is receiving training for solo flight shall receive and log flight training listed in Table 1-8.177 for the following manoeuvres and procedures, as applicable, for each category and class rating:

*(Note: In the table below the abbreviations indicated the category and/or class of aircraft as follows: A=Aeroplane; RH=Rotorcraft-Helicopter; RG=Rotorcraft-Gyroplane; G=Glider; LA=Airship; FB=Free Balloon.)*

<b>Table 1 –8.177</b>						
<b>Specific Manoeuvres and Procedures</b>	<b>A</b>	<b>RH</b>	<b>RG</b>	<b>G</b>	<b>LA</b>	<b>FB</b>
(1) Proper flight preparation procedures, including preflight planning and preparation, powerplant operation, and aircraft systems	X	X	X	X	X	X
(2) Layout and assembly procedures						X
(3) Procedures for disassembly and assembly of the glider				X		
(4) Taxiing or surface operations, including runups	X	X	X	X	X	X
(5) Inspection of towline rigging and review of signals and release procedures				X		
(6) Aerotow, ground tow, or self-launch procedures				X		
(7) Hovering and hovering turns		X				
(8) Takeoffs and landings, including normal and crosswind	X	X	X	X	X	X
(9) Launches, including normal and crosswind				X		
(10) Airport traffic patterns, including entry and departure procedures	X	X	X	X	X	
(11) Collision avoidance, windshear avoidance, and wake turbulence avoidance	X	X	X	X	X	X
(12) Ascents and descents						X
(13) Climbs and climbing turns	X	X	X	X	X	X
(14) Straight and level flight, and turns in both directions	X	X	X	X	X	X
(15) Procedures and techniques for thermalling				X		



<b>Specific Manoeuvres and Procedures</b>	<b>A</b>	<b>RH</b>	<b>RG</b>	<b>G</b>	<b>LA</b>	<b>FB</b>
(16) Rigging, ballasting, and controlling pressure in the ballonets, and superheating					X	
(17) Operation of hot air or gas source, ballast, valves, vents, and rip panels, as appropriate						X
(18) Descents, with and without turns, using high and low drag configurations	X	X	X	X	X	X
(19) Flight at various airspeeds from cruise to slow flight	X	X	X	X	X	
(20) 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	X	X		X		
(21) Emergency procedures and equipment malfunctions	X	X	X	X	X	X
(22) Ground reference manoeuvres	X	X	X			
(23) Approaches to the landing area	X	X	X	X	X	X
(24) The effects of wind on climb and approach angles						X
(25) Obstruction detection and avoidance techniques						X
(26) Approaches to a landing area with simulated engine malfunctions	X	X	X		X	
(27) Simulated one-engine-inoperative approaches and landings for multiengine aircraft		X				
(28) Slips to a landing	X			X		
(29) Landings with positive and with negative static trim					X	
(30) Landing and recovery procedures						X
(31) Rapid decelerations		X				
(32) Go-arounds	X	X	X		X	
(33) Simulated emergency procedures, including autorotational descents with a power recovery and power recovery to a hover and "full on" autorotations.		X				
(34) Simulated emergency procedures, including simulated power-off landings and simulated power failure during departures			X			
(35) High rates of descent with power on and with simulated power off, and recovery from those flight configurations			X			
(36) Emergency operations, including towline break procedures				X		
(37) Use of deflation valves or rip panels for simulating an emergency						X

**APPENDIX 1 TO 8.179: MANOEUVRES AND PROCEDURES FOR STUDENT PILOT CROSS-COUNTRY FLIGHT TRAINING**

A student pilot who is receiving training for cross-country flight shall receive and log flight training in the manoeuvres and procedures listed in Table 1-8.179.

*(Note: In the table below the abbreviations indicated the category and/or class of aircraft as follows: A=Aeroplane; RH=Rotorcraft-Helicopter; RG=Rotorcraft-Gyroplane; G=Glider; LA=Airship; FB=Free Balloon.)*

<b>Table 1 – 8.179</b> <b>Specific Manoeuvres and Procedures</b>	<b>A</b>	<b>RH</b>	<b>RG</b>	<b>G</b>	<b>LA</b>	<b>FB</b>
(1) Use of aeronautical charts for VFR navigation using pilotage and dead reckoning with the aid of a magnetic compass	X	X	X	X	X	
(2) Use of aircraft performance charts pertaining to cross-country flight	X	X	X		X	
(3) Procurement and analysis of aeronautical weather reports and forecasts, including recognition of critical weather situations and estimating visibility while in flight	X	X	X	X	X	
(4) Recognition of weather and upper air conditions favourable for cross-country soaring, ascending flight, descending flight, and altitude control				X		
(5) Recognition of weather and upper air conditions conducive for the direction of cross-country flight					X	
(6) Recognition, avoidance, and operational restrictions of hazardous terrain features in the geographical area where the student pilot will conduct cross-country flight	X	X	X	X	X	
(7) Use of radios for VFR navigation and two-way communications	X	X	X		X	
(8) Climbs at best angle and best rate	X	X	X			
(9) Control of air pressure with regard to ascending and descending flight and altitude control					X	
(10) Control and manoeuvring solely by reference to flight instruments, including straight and level flight, turns, descents, climbs, use of radio aids, and ATC directives	X	X	X		X	
(11) Landings accomplished without the use of the altimeter from at least 2,000 feet above the surface				X		

#### **APPENDIX 1 TO 8.190: PRIVATE PILOT AERONAUTICAL KNOWLEDGE REQUIREMENTS**

In addition to the requirements of Subsection 8.190, the required aeronautical knowledge areas for private pilots, as appropriate to the category and class of aircraft rating sought, are provided in the following table:

*(Note: In the table below the abbreviations indicated the category and/or class of aircraft as follows: A=Aeroplane; RH=Rotorcraft-Helicopter; RG=Rotorcraft-Gyroplane; G=Glider; LA=Airship; FB=Free Balloon.)*

<b>Table 1 – 8.190</b> <b>Specific Knowledge Subjects</b>	<b>A</b>	<b>RH</b>	<b>RG</b>	<b>G</b>	<b>LA</b>	<b>FB</b>
(1) Applicable laws and regulations rules of the air, appropriate air traffic services practices and procedures; as appropriate, relevant to the holder of a private pilot licence	X	X	X	X	X	X
(2) Principles of operation of powerplants, transmissions (power train), systems and instruments including limitations, relevant to the aircraft rating sought.	X	X	X	X	X	X
(3) Operating limitations of aircraft and powerplants; relevant operational information from the flight manual or other appropriate document;	X	X	X	X	X	X
(4) Physical properties and practical application of gases used in free balloons					X	X

<b>Specific Knowledge Subjects</b>	<b>A</b>	<b>RH</b>	<b>RG</b>	<b>G</b>	<b>LA</b>	<b>FB</b>
(5) Effects of load and mass distribution on flight characteristics; mass and balance calculations	X	X	X	X	X	X
(6) Use and application of take-off (or launch, as appropriate), landing and other performance data, including the effect of temperature	X	X	X	X	X	X
(7) Different launch methods and associated procedures				X	X	X
Pre-flight and enroute flight planning appropriate to private operations under VFR including:						
(8) Preparation and filing of air traffic services flight plans	X	X	X		X	
(9) Appropriate air traffic services procedures	X	X	X	X	X	X
(10) Position reporting procedures	X	X	X		X	
(11) Altimeter setting procedures	X	X	X	X	X	X
(12) Operations in areas of high-density traffic	X	X	X	X	X	X
(13) Obtaining information on runway lengths at airports of intended use, data on takeoff and landing distances	X	X	X	X		
(14) Determining minimum fuel requirements	X	X	X		X	X
(15) Planning for alternatives if the planned flight cannot be completed or delays are encountered	X	X	X	X	X	X
(16) Human performance and limitations relevant to aeronautical decision making and judgement by a private pilot	X	X	X	X	X	X
(17) Principles of flight	X	X	X	X	X	X
(18) Radiotelephony procedures and phraseology as applied to VFR operations; action to be taken in case of communication failure	X	X	X	X	X	X
(19) Accident reporting procedures	X	X	X	X	X	X
(20) Use of the applicable portions of advisory material published by the Authority, including use of aeronautical documentation such as AIP, NOTAM, aeronautical codes and abbreviations	X	X	X	X	X	X
(21) Use of aeronautical charts for VFR navigation, including practical aspects of air navigation through pilotage and dead-reckoning techniques	X	X	X	X	X	X
(22) Altimetry	X	X	X	X	X	X
(23) Applications of elementary aeronautical meteorology; procedures and legends for obtaining, meteorological information	X	X	X	X	X	X
(24) Procurement and use of aeronautical weather reports and forecasts	X	X	X	X	X	X
(25) Recognition and avoidance of critical or hazardous weather situations from the ground and in flight	X	X	X	X	X	X
(26) Safe and efficient operation of aircraft, including collision avoidance	X	X	X	X	X	X
(27) Recognition and avoidance of wake turbulence	X	X	X	X	X	X
(28) Recognition and avoidance of windshear avoidance	X	X	X	X		
(29) Effects of density altitude on takeoff and climb performance	X	X	X	X	X	X
(30) Stall awareness, spin entry, spins, and spin recovery techniques for aeroplane and glider category ratings	X			X		
<b>Specific Knowledge Subjects</b>	<b>A</b>	<b>RH</b>	<b>RG</b>	<b>G</b>	<b>LA</b>	<b>FB</b>
(31) Appropriate precautionary and emergency actions to		X				

be take to avoid rotorcraft operating hazards, such as settling with power, ground resonance, roll-over and other operating hazards						
(32) Appropriate precautionary and emergency actions to take to avoid operating hazards specifically relevant to lighter-than-air aircraft					X	X

**APPENDIX 1 TO 8.195: PRIVATE PILOT FLIGHT INSTRUCTION REQUIREMENTS**

In addition to the requirements of Subsection 8.195, an applicant for a Private Pilot Licence shall receive and log ground and flight training listed in the following table from an authorized instructor appropriate to the category and class of aircraft.

*(Note: In the table below the abbreviations indicated the category and/or class of aircraft as follows: A=Aeroplane; RH=Rotorcraft-Helicopter; RG=Rotorcraft-Gyroplane; G=Glider; LA=Airship; FB=Free Balloon.)*

<b>Table 1 – 8.195 Specific Training Events</b>	<b>A</b>	<b>RH</b>	<b>RG</b>	<b>G</b>	<b>LA</b>	<b>FB</b>
(1) Pre-flight planning, including mass and balance determination	X	X	X	X	X	X
(2) Pre-flight operations, aircraft inspection and servicing	X	X	X	X	X	X
(3) Aircraft assembly, rigging, and inspection				X		X
(4) Inflation and mooring					X	X
(5) Ground manoeuvring and run-ups; hovering	X	X	X	X	X	X
(6) Operations from aerodrome	X	X	X	X	X	
(7) Operations to and from seaplane base	X					
(8) Operations to and from heliport		X				
(9) Traffic pattern operations,	X	X	X	X	X	
(10) Operations to, from and transitioning through controlled aerodromes, compliance with air traffic services procedures, radiotelephony procedures and phraseology	X	X	X	X	X	
(11) Collision avoidance precautions and procedures	X	X	X	X	X	
(13) Techniques and procedures for the launching and ascent method used, including appropriate airspeed limitations, emergency procedures and signals used;				X		X
(14) Normal and cross-wind take-offs (or launches)	X	X	X	X	X	
(15) Maximum performance (short field and obstacle clearance) take-offs	X	X	X			
(16) Take-offs with minimum necessary power; out of wind; sloping ground		X				
(17) Normal and cross-wind landings	X	X	X	X	X	
(18) Short field landings	X	X	X			
(19) Landings with minimum necessary power; out of wind; sloping ground		X				
(20) Go-arounds from landing approach	X	X	X		X	
(21) Restricted site operations, quick stops		X				
(22) Autorotative approaches and landings		X	X			
(23) Approaches and landings, including ground handling					X	X
(24) Control of the aircraft by external visual reference	X	X	X	X	X	X
<b>Specific Training Events</b>	<b>A</b>	<b>RH</b>	<b>RG</b>	<b>G</b>	<b>LA</b>	<b>FB</b>
(25) Flight at critically slow airspeeds	X	X	X	X		
(26) Spin avoidance; recognition of, and recovery from, incipient and full stalls	X			X		

(27) Flight throughout the flight envelope, including critically high airspeeds	X	X	X	X		
(28) Ground reference manoeuvres	X	X	X			
(29) Soaring techniques and performance speeds				X		
(30) Basic flight manoeuvres and recovery from unusual attitudes by reference solely to basic flight instruments, including the completion of a level 180° turn	X	X	X		X	
(31) Navigation during cross-country flying using visual reference, pilotage and dead reckoning	X	X	X	X	X	X
(32) Navigation during cross-country flying using radio navigation aids; diversion procedures	X	X	X		X	
(33) Abnormal and emergency procedures and manoeuvres, including simulated aircraft equipment malfunctions	X	X	X		X	
(34) Recovery at the incipient stage from settling with power; recovery techniques from low-rotor rpm within the normal range of engine rpm		X				
(35) Recognition of, and recovery from, spiral dives	X					
(36) Recognition of, and recovery from, rapid descents					X	X
(37) Cross-Country flight of more than 250 nautical miles, with takeoff and landings at three separate points.	X	X	X			
(38) Cross-Country flight of more than one hour or 100 nautical miles, with takeoff and landings at three separate points.		X	X			
(39) Night flying, including take-offs, landings and navigation.	X	X	X		X	
(40) Night flying, including take-offs, landings and navigation, if the privileges of the licence are to be exercised at night				X		X
(41) Post-flight procedures	X	X	X	X	X	X

#### APPENDIX 1 TO 8.200: PRIVATE PILOT EXPERIENCE REQUIREMENTS

The requirements specified in this table are in addition to the requirements of Subsection 8.200.

**(Note 1:** In the table below the abbreviations indicated the category and/or class of aircraft as follows: A=Aeroplane; RH=Rotorcraft-Helicopter; RG=Rotorcraft-Gyroplane; G=Glider; LA=Airship; FB=Free Balloon.)

**(Note 2:** TR=Transition from Aeroplane to Rotorcraft; TG=Transition from Aeroplane to Glider; TA=Transition from Aeroplane or Rotorcraft to Airship.)

<b>Table 1 – 8.200</b>									
<b>Specific Experience</b>	<b>A</b>	<b>TR</b>	<b>TG</b>	<b>RH</b>	<b>RG</b>	<b>G</b>	<b>TA</b>	<b>LA</b>	<b>FB</b>
<b>MINIMUM NUMBER OF FLIGHT HOURS</b>									
(1) Pilot time	45			45	45			45	
(2) Flight Instruction – Aircraft Class	20	20	2	20	20	10	20	20	16
(3) Flight Instruction - Cross-Country	3			3	3			3	
(4) Flight Instruction - Night	3			3	3			3	
(5) Flight Instruction – Instruments	3	1		2	3		1	3	

<b>Table 1 – 8.200 Specific Experience</b>	<b>A</b>	<b>TR</b>	<b>T G</b>	<b>RH</b>	<b>RG</b>	<b>G</b>	<b>T A</b>	<b>LA</b>	<b>F B</b>
(6) Flight Instruction - Preparation for practical test (in previous 60 days)	3	3		3	3		3	3	
(7) Solo Flight Time under the supervision of an instructor	12	5	2	12	12	2	5	12	
(8) Solo Flight Time - Cross-Country	5			5	5			5	
<b>NUMBER OF SPECIAL EVENTS</b>									
(9) Night takeoffs and landings to a full stop (with each landing involving a flight in the traffic pattern) at an airport with flight instructor.	10			5	5			5	
(10) Solo takeoffs and landings to a full stop (with each landing involving a flight in the traffic pattern) at an airport with an operating control tower	5			5	5			5	
(11) Solo cross-country flight (of minimum specified nautical miles), in the course of which landings at two different points shall be made	1 (150)			1 (100)	1 (100)			1 (50)	
(12) Free Balloon Ascent, if gas used, to 2000 ft AGL									1
(13) Free Balloon Ascent, if airborne heater used, to 3000 feet AGL									2
<b>NUMBER OF FLIGHTS</b>									
(14) Training Flights (Launches & Landings)			10			20			8
(15) Solo Flights			5			10			3
(16) Training Flights – Practical Test Preparation (within previous 60 days)			3			3			1

**APPENDIX 1 TO 8.205: LICENCE LIMITATIONS FOR PRIVATE PILOTS BASED ON SMALL ISLANDS**

- (a) The requirements of this Appendix are in addition to the requirements of Subsection 8.205.
- (b) Except as provided in paragraph (c) of this Subsection, an applicant located on an island from which the required cross-country flight training cannot be accomplished without flying over water for more than 10 nautical miles from the nearest shoreline need not comply with the requirements of that section.
- (c) If other airports that permit civil operations are available to which a flight may be made without flying over water for more than 10 nautical miles from the nearest shoreline, the applicant shall show completion of two round-trip solo flights between those two airports that are farthest apart, including a landing at each airport on both flights.
- (d) The Authority shall issue to an applicant who complies with paragraph (b) or paragraph (c) of this Subsection, and meets all requirements for the issuance of a Private Pilot Licence, except the cross-country training requirements of this Subpart, a pilot licence with an endorsement containing the following limitation, "Passenger carrying prohibited on flights more than 10 nautical miles from (*the appropriate island*)."

**(Note:** *The Authority may subsequently amend the limitation to include another island if the applicant complies with the requirements of paragraph (a) or paragraph (b) of this Subsection for another island.*)

- (e) Upon meeting the cross-country training requirements, an applicant may have the limitation in paragraph (d) of this Subsection removed.



<b>Specific Knowledge Subjects</b>	<b>A</b>	<b>RH</b>	<b>RG</b>	<b>G</b>	<b>LA</b>	<b>FB</b>
(10) Use and practical application of take-off, landing and other performance data	X	X	X	X	X	X
(11) Effects of loading and mass distribution (including external loads) on the handling of the aircraft, flight characteristics and performance: mass and balance calculations	X	X	X	X	X	X
(12) Interpretation and application of aeronautical meteorological reports, charts and forecasts; use of, and procedures for obtaining, meteorological information, pre-flight and in-flight	X	X	X	X	X	X
(13) 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	X	X	X	X	X	X
(14) Hazardous weather avoidance; to include recognition of critical weather situations, windshear recognition and avoidance,	X	X	X	X	X	X
(15) Air navigation, including the use of aeronautical charts a magnetic compass for pilotage and dead reckoning, instruments and navigation aids	X	X	X	X	X	X
(16) An understanding of the principles and characteristics of appropriate navigation systems; operation of airborne equipment	X	X	X	X	X	X
(17) Use of aeronautical documentation such as AIP, NOTAM, aeronautical codes and abbreviations	X	X	X	X	X	X
(18) Pre-flight and en-route flight planning appropriate to operations under VFR	X	X	X	X	X	X
(19) Preparation and filing of air traffic services flight plans; appropriate air traffic services procedures	X	X	X		X	
(20) Altimeter setting procedures	X	X	X	X	X	X
(21) Human performance, aeronautical decision making and judgement relevant to the commercial pilot	X	X	X	X	X	X
(22) Basic aerodynamics and the principles of flight relating to the aircraft	X	X	X	X	X	X
(24) Manoeuvres, procedures, and emergency operations appropriate to the aircraft	X	X	X	X	X	X
(25) Appropriate precautionary and emergency procedures; including for the helicopter; settling with power, ground resonance, roll-over and other operating hazards	X	X	X	X	X	X
(26) Operational procedures for carriage of freight (including external loads); potential hazards associated with dangerous goods;	X	X	X	X	X	X
(27) Requirements and practices for safety briefing to passengers, including precautions to be observed when embarking and disembarking from the aircraft	X	X	X	X	X	X
(28) Radiotelephony procedures and phraseology as applied to VFR operations; action to be taken in case of communication failure	X	X	X	X	X	X
<b>Specific Knowledge Subjects</b>	<b>A</b>	<b>RH</b>	<b>RG</b>	<b>G</b>	<b>LA</b>	<b>FB</b>
(29) Accident reporting requirements of the Authority	X	X	X	X	X	X



(30) Night operations	X	X	X		X	
(31) High-altitude operations	X	X	X		X	
(32) Procedures for flight and ground training for lighter-than-air ratings					X	X

**APPENDIX 1 TO 8.235: COMMERCIAL PILOT FLIGHT INSTRUCTION REQUIREMENTS**

General. In addition to the requirements of Subsection 8.235, an applicant for a Commercial Pilot Licence shall receive and log ground and flight training from an authorized instructor on the areas of operation that apply to the aircraft category and class rating sought, as shown in the table below.

*(Note: In the table below the abbreviations indicated the category and/or class of aircraft as follows: A=Aeroplane; RH=Rotorcraft-Helicopter; RG=Rotorcraft-Gyroplane; G=Glider; LA=Airship; FB=Free Balloon.)*

<b>Table 1 – 8.235 Specific Training Events</b>	<b>A</b>	<b>RH</b>	<b>RG</b>	<b>G</b>	<b>LA</b>	<b>FB</b>
(1) Pre-flight planning, including mass and balance determination	X	X	X	X	X	X
(2) Pre-flight operations, aircraft inspection and servicing	X	X	X	X	X	X
(3) Aircraft assembly, rigging, and inspection				X		X
(4) Inflation and mooring					X	X
(5) Ground manoeuvring and run-ups; hovering		X				
(6) Operations from aerodrome	X	X	X	X	X	
(7) Operations to and from seaplane	X					
(8) Operations to and from heliport		X				
(9) Traffic pattern operations,	X	X	X	X	X	
(10) Operations to, from and transitioning through controlled aerodromes, compliance with air traffic services procedures, radiotelephony procedures and phraseology	X	X	X		X	
(11) Collision avoidance precautions and procedures	X	X	X	X	X	
(13) Techniques and procedures for the launching and ascent method used, including appropriate airspeed limitations, emergency procedures and signals used;				X		X
(14) Normal and cross-wind take-offs (or launches)	X	X	X	X	X	
(15) Maximum performance (short field and obstacle clearance) take-offs	X	X	X			
(16) Take-offs with minimum necessary power; out of wind; sloping ground		X				
(17) High altitude takeoffs	X	X	X			
(18) Normal and cross-wind landings	X	X	X	X	X	
(19) Maximum performance (short field and obstacle clearance) landings	X	X	X			
(20) Landings with minimum necessary power; out of wind; sloping ground		X				
(21) High altitude landings	X	X	X			
(22) Go-arounds from landing approach	X	X	X		X	
(23) Restricted site operations, quick stops		X				
(24) Steep Approaches		X				
<b>Specific Training Events</b>	<b>A</b>	<b>RH</b>	<b>RG</b>	<b>G</b>	<b>LA</b>	<b>FB</b>
(25) Autorotative approaches and landings		X	X			
(26) Approaches and landings, including ground handling					X	X
(27) Control of the aircraft by external visual reference	X	X	X	X	X	X



(1) Pilot – All Aircraft	200			150	150			150	
(2) Pilot – Aircraft Category	100			100	100	25		100	
(3) Pilot –In-Command Aircraft Category-Night	5			5					
(4) Flight Instruction – Aircraft Class	35	20	2	20	20		20	20	16
(5) Flight Instruction - Night	5			5	5		5	5	
(6) Pilot-In-Command – All Aircraft	100			100	100			100	
(7) Pilot-In-Command – Aircraft Class	30	5		30	30	30	5	30	2
(8) Flight Instruction Instrument – Aircraft Category	20			20	20			20	
(9) Pilot-In-Command – Cross Country – Aircraft Class	20			10	10	10		10	
(10) Flight Instruction – Cross Country – Night - Aircraft Class	2	2	2	2	2		2	2	
(11) Flight Instruction - Cross-Country	3			3	3			3	
(12) Flight Instruction - Preparation for practical test (in previous 60 days)	3	3		3	3		3	3	
<b>NUMBER OF SPECIAL EVENTS</b>									
(13) Night takeoffs and landings to a full stop (with each landing involving a flight in the traffic pattern) at an airport)	10			5	5			5	
(14) Solo takeoffs and landings to a full stop (with each landing involving a flight in the traffic pattern) at an airport with an operating control tower	5			3	3			3	
(15) Solo cross-country flight (of minimum specified nautical miles), in the course of which landings at two different points shall be made	1 (300)			1 (100)	1 (100)			1 (50)	
(16) Free Balloon Ascent (if gas used) to 5000 ft AGL									1
(17) Free Balloon Ascent (if airborne heater used) to 3000 feet AGL									2
<b>NUMBER OF FLIGHTS</b>									
(18) Cross Country Flights						10			5
(19) Training Flights (Launches & Landings)			10			10			10
(20) Solo Flights – Preparation for Rating			5			10			2
(21) Training Flights – Practical Test Preparation (within previous 60 days)			3			3			2

**APPENDIX 1 TO 8.265: AIRLINE TRANSPORT PILOT AERONAUTICAL KNOWLEDGE REQUIREMENTS**

- (a) Both Aeroplane and Helicopter. In addition to the requirements of Subsection 8.265, the applicant shall have demonstrated a level of knowledge appropriate to the privileges granted to the holder of an Airline Transport Pilot Licence (aeroplane or helicopter), in at least the following subjects -
- (1) rules and regulations relevant to the holder of an Airline Transport Pilot Licence: rules of the air; appropriate air traffic services practices and procedures;
  - (2) 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;
  - (3) 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;

- (4) human performance relevant to the airline transport pilot;
  - (5) 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;
  - (6) 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;
  - (7) causes, recognition and effects of engine and airframe icing; frontal zone penetration procedures; hazardous weather avoidance;
  - (8) air navigation, including the use of aeronautical charts, radio navigation aids and area navigation systems; specific navigation requirements for long-range flights;
  - (9) use, accuracy and reliability of navigation systems used in departure, en-route, approach and landing phases of flight; identification of radio navigation aids;
  - (10) principles and characteristics of self-contained and external-referenced navigation systems; operation of airborne equipment; codes and abbreviations, and instrument procedure charts for departure, en-route, descent and approach;
  - (11) precautionary and emergency procedures; safety practices associated with flight under IFR;
  - (12) operational procedures for carriage of freight and dangerous goods;
  - (13) requirements and practices for safety briefing to passengers, including precautions to be observed when embarking and disembarking from aircraft;
  - (14) radiotelephony procedures and phraseology; action to be taken in case of communication failure;
  - (15) 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.
- (b) Additional Aeroplane Knowledge Areas. The applicant shall have demonstrated a level of knowledge appropriate to the privileges granted to the holder of an Airline Transport Pilot Licence (aeroplane or helicopter), in at least the following subjects:
- (1) general characteristics and limitations of electrical, hydraulic, pressurization and other aeroplane systems; flight control systems, including autopilot and stability augmentation;
  - (3) principles of operation, handling procedures and operating limitations of aeroplane powerplants; effects of atmospheric conditions on engine performance; relevant operational information from the flight manual or other appropriate document;
  - (4) operating procedures and limitations of appropriate aeroplanes; effects of atmospheric conditions on aeroplane performance;
  - (5) use and serviceability checks of equipment and systems of appropriate aeroplanes;
  - (6) maintenance procedures for airframes, systems and powerplants of appropriate aeroplanes;
  - (7) effects of loading and mass distribution on aeroplane handling, flight characteristics and performance; mass and balance calculations;
  - (8) use and practical application of take-off, landing and other performance data, including procedures for cruise control;
  - (9) practical high altitude meteorology, including interpretation and use of weather reports, charts and forecasts; jetstreams;
  - (10) use, limitation and serviceability of avionics and instruments necessary for the control and navigation of aeroplanes;
  - (11) principles of flight relating to aeroplanes; subsonic aerodynamics; compressibility effects, manoeuvre boundary limits, wing design characteristics, effects of supplementary lift and drag devices; relationships between lift, drag and thrust at various airspeeds and in different flight configurations;
- (c) Additional Helicopter Knowledge Areas. The applicant shall have demonstrated a level of knowledge appropriate to the privileges granted to the holder of an Airline Transport Pilot Licence, in at least the following subjects:
- (1) general characteristics and limitations of electrical, hydraulic, and other helicopter systems; flight control systems, including autopilot and stability augmentation;

- (2) principles of operation, handling procedures and operating limitations of helicopter powerplants; transmission (power-trains); effects of atmospheric conditions on engine performance; relevant operational information from the flight manual;
- (3) operating procedures and limitations of appropriate helicopters; effects of atmospheric conditions on helicopter performance; relevant operational information from the flight manual;
- (4) use and serviceability checks of equipment and systems of appropriate helicopters;
- (5) maintenance procedures for airframes, systems and powerplants of appropriate helicopters;
- (6) effects of loading and mass distribution, including external loads, on helicopter handling, flight characteristics and performance; mass and balance calculations;
- (7) use and practical application of take-off, landing and other performance data, including procedures for cruise control;
- (8) causes, recognition and effects of engine, airframe and rotor icing; hazardous weather avoidance;
- (9) use, limitation and serviceability of avionics and instruments necessary for the control and navigation of helicopters;
- (10) precautionary and emergency procedures; settling with power, ground resonance, retreating blade stall, dynamic roll-over and other operating hazards; safety practices associated with flight under VFR;
- (11) operational procedures for carriage of freight, including external loads, and dangerous goods;
- (12) requirements and practices for safety briefing to passengers, including precautions to be observed when embarking and disembarking from helicopters;
- (13) principles of flight relating to helicopters;
- (14) radiotelephony procedures and phraseology as applied to VFR operations; action to be taken in case of communication failure.

#### **APPENDIX 1 TO 8.270: AIRLINE TRANSPORT PILOT FLIGHT PROFICIENCY REQUIREMENTS**

- (a) In addition to the requirements of Subsection 8.270, the applicant shall have demonstrated the ability to perform, as PIC of a multi-engine aeroplane required to be operated with a SIC, the procedures and manoeuvres prescribed by the Authority, including at a minimum--
  - (1) Pre-flight procedures, including the preparation of the operational flight plan and filing of the air traffic services flight plan;
  - (2) Normal flight procedures and manoeuvres during all phases of flight;
  - (3) Procedures and manoeuvres for IFR operations under normal, abnormal and emergency conditions, including simulated engine failure, and covering at least the following:
    - (i) Transition to instrument flight on take-off;
    - (ii) Standard instrument departures and arrivals;
    - (iii) En-route IFR procedures and navigation;
    - (iv) Holding procedures;
    - (v) Instrument approaches to specified minima;
    - (vi) Missed approach procedures;
    - (vii) Landings from instrument approaches;
  - (4) Abnormal and emergency procedures and manoeuvres related to failures and malfunctions of equipment, such as powerplant, systems and airframe; and
  - (5) Procedures for crew incapacitation and crew coordination, including allocation of pilot tasks, crew cooperation and use of checklists.
- (b) For all other eligible category and class of aircraft, the applicant shall have demonstrated the ability to perform, as pilot-in-command, the procedures and manoeuvres of (a), except for (a)(5) as prescribed by the Authority in the Practical Test Standards.

#### **APPENDIX 1 TO 8.275: AIRLINE TRANSPORT PILOT AERONAUTICAL EXPERIENCE**

- (a) In addition to the requirements of Subsection 8.275 and, an applicant for an Airline Transport Pilot Licence shall have at least the experience listed for that category of aircraft in the following table—

**(Note 1:** In the table below the abbreviations indicated the category and/or class of aircraft as follows: A=Aeroplane; RH=Rotorcraft-Helicopter; RG=Rotorcraft-Gyroplane; G=Glider; LA=Airship; FB=Free Balloon.)

**(Note 2:** TR=Transition from Aeroplane to Rotorcraft and Rotorcraft to Aeroplane; TG=Transition from Aeroplane to Glider; TA=Transition from Aeroplane or Rotorcraft to Airship).

<b>Table 1 – 8.275 Specific Experience</b>	<b>A</b>	<b>TR</b>	<b>TG</b>	<b>RH</b>	<b>RG</b>	<b>G</b>	<b>TLA</b>	<b>LA</b>	<b>FB</b>
<b>MINIMUM NUMBER OF FLIGHT HOURS</b>									
(1) Pilot – All Aircraft	1500			1000					
(2) Pilot – Cross Country	200			200					
(3) Pilot – Night	100			50					
(4) Pilot – Aircraft Category	900			600					
(5) Pilot – Instruments (Actual or Simulated) – Aircraft Category	75			50					
(6) Pilot – Night - Aircraft Category	30			15					
(7) Pilot – Instruments (Maximum simulated instrument time) in Aircraft Class	25			25					
(8) Pilot-In-Command – Cross Country – Aircraft Category	100			100					
(9) Pilot-In-Command – Aircraft Category (or a SIC performing the duties and functions of a PIC while under the supervision of a PIC)	250			250					
(10) Flight In preparation for practical test (in previous 60 days)	3			3					

- (b) A pilot who has performed at least 20 night takeoffs and landings to a full stop may substitute each additional night takeoff and landing to a full stop for 1 hour of night flight time to satisfy the requirements of night flight time of this table, not to exceed 25 hours of night flight time.
- (c) A commercial pilot applicant may credit pilot-in-command under supervision flight time toward the 250 hours of pilot-in-command time as required by paragraph (a) of this Subsection.

*(See the Tenth Schedule, Subsection 10.102 for crediting of flight time guidance)*

- (d) A commercial pilot applicant may credit the following flight engineer flight time toward the 1,500 hours of total time as a pilot required by paragraph (a) of this Subsection -
  - (1) flight-engineer time acquired —
    - (i) in an aeroplane required to have a flight engineer by the aeroplane’s flight manual or type certificate;
    - (ii) while engaged in operations under the Twelfth Schedule for which a flight engineer is required;
    - (iii) while the pilot is participating in a pilot training program approved under the Twelfth Schedule; and
    - (iv) that does not exceed 1 hour for each 3 hours of flight engineer flight time for a total credited time of no more than 500 hours.

**APPENDIX 1 TO 8.310: FLIGHT INSTRUCTOR KNOWLEDGE REQUIREMENTS**

- (a) In addition to the requirements of Subsection 8.310, an applicant for a Class 2 Flight Instructor Rating shall receive and log a minimum of 40 hours of ground training from an instructor who is authorized to give instructor training. The ground training shall cover instruction in, and applicant’s practice of —
  - (1) except as provided in paragraph (b) of this Subsection, the fundamentals of instructing, including —

- (i) the learning process;
  - (ii) elements of effective teaching;
  - (iii) course development;
  - (iv) lesson planning;
  - (v) use of training aids;
  - (vi) classroom instructional techniques;
  - (vii) techniques of applied instruction;
  - (viii) training programme development;
  - (ix) human performance relevant to flight instruction; and
  - (x) analysis and correction of student errors;
  - (xi) assessment of student performance in those subjects in which ground instruction is given;
  - (xii) student evaluation and testing, training philosophies;
- (2) The aeronautical knowledge areas for a Private and Commercial Pilot Licence applicable to the aircraft category for which flight instructor privileges are sought; and
  - (3) The aeronautical knowledge areas for the Instrument Rating applicable to the category for which instrument flight instructor privileges are sought.
- (b) The following applicants do not need to comply with paragraph (a)(1) of this Subsection —
    - (1) The holder of a current teacher's certificate issued by a national or local authority that authorizes the person to teach at an educational level of the 7th grade or higher; or
    - (2) A person employed as a teacher at an accredited college or university.

**APPENDIX 1 TO 8.315: CLASS 2 FLIGHT INSTRUCTOR FLIGHT INSTRUCTION REQUIREMENTS**

- (a) This Appendix contains requirements in addition to the requirements of Subsection 8.315.
- (b) The applicant for a Class 2 Flight Instructor Rating shall have received a minimum of 20 hours of dual flight instruction (or 25 hours if a night instruction endorsement is sought) in flight instructional techniques including demonstration, student practices, recognition and correction of common student errors from an instructor who is authorized to give instructor training.
- (c) The applicant shall have practised instructional techniques in those flight manoeuvres and procedures in which it is intended to provide flight instruction
- (d) The applicant for a Class 2 Flight Instructor Rating shall receive and log flight and ground training in accordance with an approved syllabus and shall obtain an endorsement from the instructor trainer that the applicant is proficient to pass a practical test on the following areas of operation that apply to the Flight Instructor Rating sought.

**(Note:** In the table below the abbreviations indicated the category and/or class of aircraft as follows: A=Aeroplane; RH=Rotorcraft-Helicopter; RG=Rotorcraft-Gyroplane; G=Glider; LA=Airship; FB=Free Balloon.)

<b>Table 1 – 8.315 Specific Training Events</b>	<b>A</b>	<b>RH</b>	<b>RG</b>	<b>G</b>	<b>LA</b>	<b>FB</b>
(1) Fundamentals of instructing	X	X	X	X		
(2) Technical subject areas	X	X	X	X		
(3) Preflight preparation	X	X	X	X		
(4) Preflight lesson on a manoeuvre to be performed in flight	X	X	X	X		
(5) Airport and seaplane base operations	X	X	X	X		
(6) Heliport operations		X				
(7) Gliderport operations				X		
(8) Hovering manoeuvres		X				
(9) Takeoffs, landings, and go-arounds	X	X	X	X		
(10) Launches and landings				X		

(11) Performance speeds				X		
(12) Fundamentals of flight	X	X	X	X		
(13) Flight at slow airspeeds	X	X	X	X		
(14) Stalls and spins	X			X		
(15) Performance manoeuvres	X	X	X	X		
(16) Soaring techniques				X		
(17) Multiengine operations	X	X				
(18) Special operations		X				
(19) Ground reference manoeuvres	X	X	X	X		
(20) Basic instrument manoeuvres	X	X	X	X		
(21) Flight by reference to instruments	X	X	X			
(22) Air traffic control clearances and procedures	X	X	X			
(23) Flight by reference to instruments	X	X	X			
(24) Use of Navigation aids	X	X	X			
(25) Emergency operations	X	X	X	X		
(26) Postflight procedures	X	X	X	X		
(27) Instrument departures	X	X				
(28) Instrument basic flight fundamentals	X	X				
(29) Instrument enroute and arrival procedures	X	X				
(30) Instrument approach procedures	X	X				

**APPENDIX 1 TO 8.330: FLIGHT INSTRUCTOR LIMITATIONS AND QUALIFICATIONS**

- (a) Each holder of any Flight Instructor Rating shall observe the following limitations and qualifications-
- (1) Hours of training. In any 24 consecutive hour period, a flight instructor may not conduct more than 9 hours of flight training, ground training or a combination of both;
  - (2) Required ratings. A Flight Instructor may not conduct flight training in any aircraft for which the Flight Instructor does not hold-
    - (i) a pilot licence with the applicable category and class and a Flight Instructor Rating; and
    - (ii) if appropriate, a Type Rating; and
    - (iii) for advanced training, an endorsement to the instructor rating as required below.
  - (3) Instrument Instruction Endorsement. A holder of any Flight Instructor rating may apply for the instrument instruction endorsement provided that -
    - (i) the applicant shall have logged not less than 150 hours PIC flight time;
    - (ii) the applicant shall have logged not less than 100 hours of flight instruction; and
    - (iii) the applicant shall have completed not less than 15 hours of ground training in the theory of instrument flight and not less than 5 hours of dual flight instruction in instrument flying techniques from the holder of an instructor rating endorsed for instrument flight instruction and instructor training.
    - (iv) the holder of the instrument instruction endorsement may conduct instrument flight training for a Private or Commercial Licence. To conduct instrument training for an Instrument Rating, the applicant must also hold an Instrument Rating in the category of aircraft for which the instructor rating is held.
  - (4) Night Flying Instruction Endorsement. A holder of any Flight Instructor Rating may apply for the Night Flying Instruction endorsement provided that -
    - (i) the applicant shall hold a Night Rating on his or her licence;
    - (ii) the applicant shall have logged not less than 150 hours PIC flight time;
    - (iii) the applicant shall have logged not less than 100 hours of flight instruction; and
    - (iv) the applicant shall have completed not less than 5 hours of ground training which shall include night flying techniques, night flying instructional techniques, sensory illusions of night flying, aerodrome lighting, aircraft lighting and night visual navigation techniques. The applicant shall



also complete not less than 3 hours of dual night flight instruction in these subjects from the holder of a Flight Instructor Rating endorsed for night flying and instructor training.

- (v) the holder of the Night Flying Instruction endorsement may conduct night flying training for the issue of a Night Rating to a licence.
- (5) Seaplane Flying Instruction Endorsement. A holder of any aeroplane Flight Instructor Rating may apply for the Seaplane Flying Instruction endorsement provided that:
- (i) the applicant shall hold a Seaplane class rating on his or her licence;
  - (ii) the applicant shall have logged not less than 100 hours PIC flight time in seaplanes;
  - (iii) the applicant shall have logged not less than 100 hours of flight instruction; and
  - (iv) the applicant shall have completed not less than 5 hours of ground training which shall include water taxiing, sailing, docking, takeoffs, landings, and operations on glassy water, rough water and crosswind conditions. The applicant shall also complete not less than 5 hours of dual flight training in a seaplane from the holder of a Flight Instructor Rating endorsed for seaplanes and instructor training.
  - (v) the holder of the Seaplane Flying Instruction endorsement may conduct seaplane training for the issue of a Seaplane class rating to a licence.
- (6) Multi-Engine Rating.
- (i) a holder of any aeroplane Flight Instructor Rating may conduct flight training in multi-engine aeroplanes to train licensed and unlicensed pilots, who may or may not be endorsed for aeroplanes, toward the qualifications for a Multi-Engine Rating provided that the instructor is endorsed for the type of aeroplane and has logged at least 50 hours of multi-engine PIC flight time with at least 10 hours as PIC on the type of aeroplane used.
  - (ii) a holder of a valid Commercial Pilot Licence or higher, may conduct flight training in multi-engine aeroplanes to train licensed pilots who are endorsed for aeroplanes, toward the qualifications for a Multi-Engine Rating provided that the person conducting the flight training is endorsed for the type of aeroplane used and has logged at least 50 hours of multi-engine experience as PIC flight time with at least 10 hours as PIC on the type of aeroplane used.
- (b) Limitations on endorsements. A Flight Instructor may not endorse a -
- (1) student pilot's licence or logbook for solo flight privileges, unless that Flight Instructor has —
    - (i) given that student the flight training required for solo flight privileges required by this Subpart;
    - (ii) determined that the student is prepared to conduct the flight safely under known circumstances, subject to any limitations listed in the student's logbook that the instructor considers necessary for the safety of the flight;
    - (iii) given 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
    - (iv) endorsed the student pilot's logbook for the specific make and model aircraft to be flown.
  - (2) student pilot's licence and logbook for a solo cross-country flight, unless that Flight Instructor has determined that—
    - (i) the student's flight preparation, planning, equipment, and proposed procedures are adequate for the proposed flight under the existing conditions and within any limitations listed in the logbook that the instructor considers necessary for the safety of the flight; and
    - (ii) the student has the appropriate solo cross-country endorsement for the make and model of aircraft to be flown.
  - (3) 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—
    - (i) given that student ground and flight training in that Class B airspace or at that airport; and
    - (ii) determined that the student is proficient to operate the aircraft safely.
  - (4) logbook of a pilot for a flight review, unless that instructor has conducted a review of that pilot in accordance with the requirements; or
  - (5) logbook of a pilot for an instrument proficiency check, unless that instructor has tested that pilot in accordance with the requirements.

*(Note: A Class 2 Flight Instructor may not recommend a student pilot for a flight test or authorize a student pilot for solo flight until after he/she has given at least 100 hours of flight instruction to student pilots.)*

- (c) Training first-time flight instructors. No Flight Instructor may apply for a Flight Instructor Flight Instruction Authorization unless that Flight Instructor —
  - (1) holds a current Flight Instructor Rating, has held that rating for at least 24 months and has given at least 100 hours of ground training in a course which has been approved by the Authority;
  - (2) meets the prescribed eligibility requirements;
  - (3) for training in preparation for an aeroplane or rotorcraft, has given at least 500 hours of flight training as a Flight Instructor; and
  - (4) for training in preparation for a glider rating, has given at least 100 hours of flight training as a Flight Instructor.
- (d) Prohibition against self-endorsements. A Flight Instructor may not make any self-endorsement for a licence, rating, flight review, authorization, operating privilege, practical test, or knowledge test that is required by this Schedule.
- (e) 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.

#### **APPENDIX 1 TO 8.420: FLIGHT ENGINEER AERONAUTICAL KNOWLEDGE REQUIREMENTS**

- (a) In addition to the requirements of Subsection 8.420, an applicant for a Flight Engineer Licence shall have demonstrated a basic level of knowledge appropriate to the privileges granted to the holder of a flight engineer licence, in at least the following subjects -
  - (1) rules and regulations relevant to the holder of a Flight Engineer Licence; rules and regulations governing the operation of civil aircraft pertinent to the duties of a flight engineer;
  - (2) fundamentals of aerodynamics;
  - (3) operational aspects of meteorology.
  - (4) effects of loading and mass distribution on aircraft handling, flight characteristics and performance; mass and balance calculations;
- (b) To complete the aeronautical knowledge portion of the Flight Engineer Licence, the applicant shall have demonstrated a level of knowledge appropriate to the privileges granted to the holder of a Flight Engineer Licence, in at least the following subjects:
  - (1) 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;
  - (2) principles of operation, handling procedures and operating limitations of aircraft powerplants; effects of atmospheric conditions on engine performance;
  - (3) airframes, flight controls, structures, wheel assemblies, brakes and anti-skid units, corrosion and fatigue life; identification of structural damage and defects;
  - (4) ice and rain protection systems;
  - (5) pressurization and air-conditioning systems, oxygen systems;
  - (6) hydraulic and pneumatic systems;
  - (7) basic electrical theory, electric systems (AC and DC), aircraft wiring systems, bonding and screening;
  - (8) principles of operation of instruments, compasses, autopilots, radio communication equipment, radio and radar navigation aids, flight management systems, displays and avionics;
  - (9) limitations of appropriate aircraft;
  - (10) fire protection, detection, suppression and extinguishing systems;
  - (11) use and serviceability checks of equipment and systems of appropriate aircraft;
  - (12) use and practical application of performance data including procedures for cruise control;
  - (13) human performance relevant to the flight engineer;

- (14) 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;
- (15) normal, abnormal and emergency procedures;
- (16) operational procedures for carriage of freight and dangerous goods;
- (17) radiotelephony procedures and phraseology;
- (18) fundamentals of navigation; principles and operation of self-contained systems; and

**APPENDIX 1 TO 8.425: FLIGHT ENGINEER AERONAUTICAL EXPERIENCE REQUIREMENTS**

In addition to the requirements of Subsection 8.425, an applicant for a Flight Engineer Licence with a class rating shall present, for the rating sought, satisfactory evidence of one of the following—

- (1) at least 3 years of practical experience in aircraft and aircraft engine maintenance and at least 5 hours of flight training in the duties of a flight engineer; or
- (2) graduation from at least a 2-year specialized aeronautical training course in maintaining aircraft and aircraft engines and at least 5 hours of flight training in the duties of a flight engineer; or
- (3) experience as a pilot of an aircraft certificated for 20 or more passengers and at least 5 hours of flight training in the duties of a flight engineer; and
- (4) at least 100 hours of flight time as a flight engineer of which not more than 50 hours may have been acquired in a flight simulator; and
- (5) within the 90-day period before application, successful completion of an approved flight engineer ground and flight course of instruction.

**APPENDIX 1 TO 8.427: FLIGHT ENGINEER OPERATIONAL EXPERIENCE REQUIREMENTS**

In addition to the requirements of Subsection 8.427 an applicant for a Flight Engineer Licence with a class rating shall present, for the aircraft to be used for the rating sought, satisfactory evidence of 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—

- (1) Normal procedures:
  - (i) pre-flight inspections;
  - (ii) Fuelling procedures, fuel management;
  - (iii) inspection of maintenance documents;
  - (iv) normal flight deck procedures during all phases of flight;
  - (v) crew co-ordination and procedures in case of crew incapacitation; and
  - (vi) defect reporting;
- (2) Abnormal and alternate (standby) procedures:
  - (i) recognition of abnormal functioning of aircraft systems; and
  - (ii) use of abnormal and alternate (standby) procedures; and
- (3) Emergency procedures:
  - (i) recognition of emergency conditions; and
  - (ii) use of appropriate emergency procedures.

**APPENDIX 1 TO 8.430: FLIGHT ENGINEER AERONAUTICAL SKILL REQUIREMENTS**

In addition to the requirements of Subsection 8.430, an applicant shall —

- (1) show satisfactorily performance in preflight inspection, servicing, starting, pre-takeoff, and post-landing procedures;
- (2) in flight, show satisfactorily performance of the normal duties and procedures relating to the aeroplane, aeroplane engines, propellers (if appropriate), systems, and appliances;
- (3) in flight, in an aeroplane simulator, or in an approved training device, show satisfactorily performance on emergency duties and procedures and recognize and take appropriate action for malfunctions of the aeroplane, engines, propellers (if appropriate), systems and appliances.
- (4) use aircraft systems within the aircraft's capabilities and limitations;
- (5) exercise good judgement and airmanship;

- (6) apply aeronautical knowledge;
- (7) perform all the duties as part of an integrated crew with the successful outcome never in doubt; and
- (8) communicate effectively with the other flight crewmembers.

**APPENDIX 1 TO 8.490: FLIGHT DISPATCHER KNOWLEDGE REQUIREMENTS**

In addition to the requirements of Subsection 8.490, the applicant shall have demonstrated a level of knowledge appropriate to the privileges granted to the holder of a Flight Dispatcher Licence, in at least the following subjects -

- (1) rules and regulations relevant to the holder of a Flight Dispatcher Licence; appropriate air traffic services practices and procedures;
- (2) principles of operation of aeroplane powerplants, systems and instruments;
- (3) operating limitations of aeroplanes and powerplants;
- (4) application of minimum equipment lists;
- (5) flight performance calculation and planning procedures;
- (6) effects of loading and mass distribution on aircraft performance and flight characteristics; mass and balance calculations;
- (7) operational flight planning; fuel consumption and endurance calculations; alternate airport selection procedures; en-route cruise control; extended range operation;
- (8) preparation and filing of air traffic services flight plans;
- (9) basic principles of computer-assisted planning systems;
- (10) human performance relevant to dispatch duties;
- (11) aeronautical meteorology; the movement of pressure systems; the structure of fronts, and the origin and characteristics of significant weather phenomena which affect take-off, en-route and landing conditions;
- (12) interpretation and application of aeronautical meteorological reports, charts and forecasts; codes and abbreviations; use of, and procedures for obtaining, meteorological information;
- (13) principles of air navigation with particular reference to instrument flight;
- (14) use of aeronautical documentation;
- (15) operational procedures for the carriage of freight and dangerous goods;
- (16) procedures relating to aircraft accidents and incidents; emergency flight procedures;
- (17) procedures relating to unlawful interference and sabotage of aircraft;
- (18) principles of flight relating to the appropriate category of aircraft;
- (19) radio communication; and
- (20) procedures for communicating with aircraft and relevant ground stations.

**APPENDIX 1 TO 8.495: FLIGHT DISPATCHER AERONAUTICAL EXPERIENCE REQUIREMENTS**

- (a) The applicant shall have satisfactorily completed a course of training approved by the Authority; or
- (b) In addition to the requirements of Subsection 8.495, must be able to show a total experience of at least —
  - (1) one year as an assistant in the dispatching of commercial air transport; or
  - (2) at least two years' service in any one or in any combination of the capacities specified in (i) to (iv) inclusive, provided that in any combination of experience the period serviced in any capacity shall be at least one year:
    - (i) a flight crewmember in commercial air transport;
    - (ii) a meteorologist in an organization dispatching aircraft in commercial air transport;
    - (iii) an air traffic controller; or a technical supervisor of flight dispatchers or commercial air transport flight operations systems; or
    - (iv) other duty that the Authority determines to provide equivalent experience.

**APPENDIX 1 TO 8.500: FLIGHT DISPATCHER SKILL REQUIREMENTS**

In addition to the requirements of Subsection 8.500, the applicant shall have demonstrated the ability to —

- (1) 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;
- (2) determine the optimum flight path for a given segment and create accurate manual and/or computer generated flight plans; and
- (3) 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 Dispatcher Licence.

#### **APPENDIX 1 TO 8.520: AIRCRAFT MAINTENANCE ENGINEER KNOWLEDGE AREAS**

In keeping with the requirements of Subsection 8.520, the applicant shall have demonstrated a level of knowledge relevant to the privileges to be granted and appropriate to the responsibilities of an Aircraft Maintenance Engineer Licence holder, in at least the following subjects—

- (1) rules and regulations relevant to an aircraft maintenance licence holder including applicable airworthiness requirements governing certification and continuing airworthiness of aircraft and approved aircraft maintenance organizations and procedures;
- (2) basic mathematics; units of measurement; fundamental principles and theory of physics and chemistry applicable to aircraft maintenance;
- (3) characteristics and applications of the materials of aircraft construction including principles of construction and functioning of aircraft structures, fastening techniques; power plants and their associated systems; mechanical, fluid, electrical and electronic power sources; aircraft instrument and display systems; aircraft control systems; and airborne navigation and communication systems;
- (4) tasks required to ensure the continuing airworthiness of an aircraft including methods and procedures for the overhaul, repair, inspection, replacement, modification or defect rectification of aircraft structures, components and systems in accordance with the methods prescribed in the relevant Maintenance Manuals and the applicable Standards of airworthiness; and
- (5) human performance and limitations relevant to the duties of an aircraft maintenance licence holder.

*(Note: A more detailed breakdown of the technical areas to be covered may be found in the Ninth Schedule, Subsection 9.260.)*

#### **APPENDIX 1 TO 8.525: AME BASIC MAINTENANCE TRAINING COURSE APPROVAL**

- (a) **Applicability:** This requirement applies to courses conducted by aircraft maintenance training institutions for persons wishing to apply for Aircraft Maintenance Engineer Licences.
- (b) **Course Guidelines:** No credit will be given to any candidate for training or experience received while attending a course that has not been approved by the Authority. Such approval will only be given to basic aircraft maintenance courses that meet the following criteria;
  - (1) Instruction shall be given by trained instructors, assisted if and when necessary, by licensed aircraft maintenance engineers.
  - (2) Classroom time must be spent in an enclosed, climate-controlled, well-lit environment, with no distraction, and suitable seating and writing facilities must be available to each student.
  - (3) Training manuals and handouts shall be made available to each student, sufficient to allow each student to study on his/her own time.
  - (4) A complete set of course material, including the syllabus and lesson plans, course time allocation, and instructor's credentials, shall be made available to the authority at least 60 days in advance of the planned starting date of the course.
  - (5) "Closed Book" written and/or multi-choice examinations shall be held at the end of each module, with an invigilator in attendance and with a passing grade of not less than 80%.
  - (6) The final examination results of each course, as well as a copy of the attendance records, and the certificate issued to each successful student, must be retained on file.
- (c) **Minimum Time Requirements:** In order for an aircraft maintenance training course to be accepted by the Authority, the following time requirements must be met:

- (1) time allocated to classroom (theory) and time allocated to practical work (workshop & hangar) shall be equal, with the total hours being not less than 1800.
  - (2) the maximum time that must be allocated for instruction in any one day must not exceed 8 hours, and at least one day in every seven must be allocated as a day "off".
  - (3) no student shall be allowed to graduate with a certificate unless he/she has completed at least 85% of the total required hours.
- (d) Basic Training Syllabus: the training organization may obtain a recommended list of topics from the Authority, or may submit its own syllabus for review and approval.

#### **APPENDIX 1 TO 8.535: AME TYPE TRAINING COURSE APPROVAL**

- (a) Applicability: This requirement applies to courses conducted by aircraft maintenance training institutions, air operators, or maintenance organizations, either in-house or contracted out, that are training maintenance personnel either as a prerequisite to issuing company approvals that include Certificates of Release to Service for aircraft, or are preparing them to sit the Authority's type rating endorsement examinations. Applications for type ratings, for aircraft other than piston-engine, un-pressurized aircraft, with an MCTOW of 5700 kg or less, will not be considered unless the applicant provides documentary evidence of having completed a type course meeting the requirements detailed in this appendix.
- (b) Standards and Objectives: The ATA 104 specification is used as the reference for setting the standard acceptable for aircraft Type Endorsement training courses. For a course to be approved by the Authority, for the purpose of the students subsequently certifying the aircraft, the course must meet the Level III standard of ATA 104. The course objectives must prepare the student to:
- (1) carry out functional and operational checks on the aircraft's systems, power plants, and components, as specified in the aircraft maintenance manual, including engine ground runs and all associated system checks.
  - (2) interpret readings and indications provided by Built-in Test Equipment (BITE) and other information systems.
  - (3) correlate information for the purpose of making decisions in respect to fault diagnosis and rectification.
  - (4) recall the safety precautions to be observed when working on, or near, the aircraft and its systems.
  - (5) be familiar with the normal functions, indications and maintenance procedures associated with, each aircraft and power plant system.
  - (6) recall the location of all principal components and the procedures for replacement of components peculiar to the aircraft type.
  - (7) be familiar with, and able to carry out, all emergency procedures that may be required during the operation of the aircraft, its power plant(s) and its systems.
  - (8) identify and use the family of ATA 100 reference manuals.
- (c) Course Guidelines: Each course submitted for approval by an Operator, Training Organization, or Maintenance Organization, will be treated individually on its own merit. The following basic guidelines must however, be first satisfied before approval can be considered -
- (1) the duration of the course must satisfy the time indicated in Table 1 of this Appendix.
  - (2) time allocated to visits to the actual aircraft, or system mock-ups, should be no less than one (1) hour per each seven (7) hours of classroom time.
  - (3) instruction must be given by trained instructors, however, assistance may be provided by an AME licensed on the type as necessary.
  - (4) classroom time must be spent in an enclosed, adequately lit, climate-controlled or well ventilated area, free from distraction, with suitable seating and writing facilities available.
  - (5) "Closed Book" examinations must be held at the end of each section of the course, with an invigilator in attendance and with a pass mark of not less than eighty (80) percent.
  - (6) training manuals and handouts must be available for each student, sufficient to allow the student to study each section on his own time.
  - (7) a complete set of course material, including the syllabus, course time allocation, and credentials of the Instructors (or the organization) must be provided to the Authority.

- (8) the final examination results of each course, as well as a copy of the Certificate issued to each successful candidate must be retained by the operator on the student's training record file.
  - (9) persons requesting licence endorsements must submit certified copies of the above results to the Authority.
  - (10) space for one representative from the Authority must be made available on the first course, should this be thought necessary by the Authority.
- (d) Minimum Type Course Time Requirements:

**Table 1**

<b><u>Representative Aircraft Types</u></b>	<b><u>Hours Recommended (Minimum)</u></b>
Britten-Norman Islander (or similar type)	40 hours
Dornier 228/Twin Otter/ Shorts 360	80-120 hours
De Havilland DHC8	120-160 hours
Boeing B727/Douglas DC9	160-200 hours
Airbus A320/A340	200-280 hours

*(Note 1: Some aircraft type courses include airframe and engine interface only, with engine courses being required on a supplemental basis, relative to the individual student's previous experience and qualifications. Other courses may include Avionics Modules that may add up to two weeks, or eighty (80) hours, to the basic airframe and power plant course. Each course, therefore, needs to be assessed on an individual basis.)*

*(Note 2: Once a course has been approved, as many repeat courses as the Operator requires may be held without consultation with the Authority, provided that the same standards are maintained and that there is no change in content, time or instruction.)*

- (e) Minimum Experience Requirements for Type Endorsement: An applicant for an aircraft type rating endorsement shall be required to produce documentary evidence that he/she has obtained a level of experience working on the aircraft that meets or exceeds the standard indicated in Table 2 below.

**Table 2**

<b><u>Aircraft Group Classification</u></b>	<b><u>Experience Required</u></b>	<b><u>Calendar Time</u></b>
<b>M – Aeroplanes</b>	Aircraft maintenance experience	48 months
	Fixed wing experience	12 months
	Experience on the type	6 months
<b>R – Rotorcraft</b>	Aircraft maintenance experience	48 months
	Rotary wing experience	12 months
	Experience on the type	6 months
<b>E – Avionics</b>	Aircraft maintenance experience	48 months
	Experience on avionics systems	24 months
	Experience on Auto-flight /IRS/FMS	12 months

**APPENDIX 1 TO 8.540: COMPASS COMPENSATION**

- (a) “Compass Compensation” is a rating that may be added by the Authority to either an “M” or an “E” Licence, provided that the holder of the Licence has met the following criteria -
- (1) Satisfactorily completed a course of training, which has been approved by the Authority, with a passing grade of 80% or higher, on the installation, adjustment and compensation of Direct Reading Compasses.
  - (2) Provided documentary evidence to the Authority verifying that the applicant has satisfactorily completed a minimum of three compass swings on at least two different aircraft, during the preceding six months, under the supervision of an AME holding a Compass Compensation Rating.
  - (3) Provided a completed “application for rating addition” form to the Authority, certified by the AME referred to in (2), along with the applicable fee for the issue of the rating.
- (b) The rating entitles the holder to certify for the removal and replacement of, adjustment to, and compensation computation for, Direct Reading Compasses.

**APPENDIX 1 TO 8.630: AERONAUTICAL STATION OPERATOR KNOWLEDGE REQUIREMENTS**

In addition to the requirements of Subsection 8.630, the applicant shall have demonstrated a level of knowledge appropriate to the holder of an Aeronautical Station Operator Authorization, in at least the following subjects -

- (1) air traffic services provided within the State;
- (2) the language or languages nationally designated for use in air-ground communications
- (3) ability to speak such language or languages without accent or impediment which would adversely affect radio communication;
- (4) radiotelephony procedures; phraseology; telecommunication network;
- (5) rules and regulations applicable to the aeronautical station operator; and
- (6) principles, use and limitations of telecommunication equipment in an aeronautical station.

**APPENDIX 1 TO 8.635: AERONAUTICAL STATION OPERATOR EXPERIENCE REQUIREMENTS**

In addition to the requirements of Subsection 8.635, the applicant shall have -

- (1) 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 two months; or
- (2) satisfactorily served under a qualified Aeronautical Station Operator for not less than six months during the 12-month period immediately preceding application.

**APPENDIX 1 TO 8.640: AERONAUTICAL STATION OPERATOR SKILL REQUIREMENTS**

In addition to the requirements of Subsection 8.640, the applicant shall demonstrate, or have demonstrated, competency in -

- (1) operating the telecommunication equipment in use; and
- (2) transmitting and receiving radiotelephony messages with efficiency and accuracy.